



भारतीय दिवाला और शोधन अक्षमता बोर्ड
Insolvency and Bankruptcy Board of India

STUDY MATERIAL FOR THE EXAMINATION IN THE DISCIPLINE OF LAND AND BUILDING

PREPARED BY:

**CENTRE FOR VALUATION STUDIES,
RESEARCH AND TRAINING ASSOCIATION
(CVSRTA)**





सत्यमेव जयते

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Dr. M. S. Sahoo
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Preface

19th November, 2018

Institutions are the foundations of a well-functioning market economy. Professions constitute a key element of the institutional framework. The nature and extent of professionalisation, to a large extent, determines the competitive edge of nations and sustainability of prosperity.

2. In a market economy, market discovers price, which usually reflects the worth of an asset (or a liability). It discovers different prices for the same asset in different contexts. Thus, price is not absolute; it is context specific. Often it is neither feasible nor desirable to go through the market to discover the worth of an asset. In such cases, worth of an asset is estimated by a professional outside the market. The worth so estimated is 'value', which is what the price ought to be in the same context. If value of an asset is equal to its price, the valuation or value estimated is considered perfect. It requires specialised knowledge, considerable dexterity and the highest integrity on the part of a professional to take the asset through a simulated market in the given context to estimate its value, which is very close, if not equal, to the price. A market economy needs a cadre of such professionals for valuations of for a variety of purposes.

3. The valuation profession has a long history in India. Different statutes and authorities require valuation for different purposes and often prescribe the manner of such valuation. There have been several attempts in the past to develop holistically an institutional arrangement that develops and regulates the profession of valuers who can estimate the value of any asset with full responsibility. It took a concrete shape with enactment of the Companies Act, 2013. Section 247 of the Act provides that where valuation is required to be done under the provisions of the Act, it shall be valued by a person who, having the necessary qualifications and experience, and being a valuer member of a registered valuer organisation (RVO), is registered as a valuer.

4. The Central Government notified the commencement of section 247 of the Companies Act, 2013 with effect from 18th October, 2017. It also notified the Companies (Registered Valuers and Valuation) Rules, 2017 (Rules), which provide for a complete framework for development and regulation of the profession of valuers and the manner of valuation, including valuation standards and Code of Conduct for registered valuers. The Central Government delegated its powers and functions under section 247 of the Act to the Insolvency and Bankruptcy Board of India (IBBI) and specified the IBBI as the Authority under the said Rules.

5. Subject to meeting other requirements, an individual is eligible to be a registered valuer, if he (i) is a fit and proper person, (ii) has the necessary qualification and experience, (iii) is a valuer member of an RVO, (iv) has completed a recognised educational course as member of an RVO, (v) has passed the valuation examination conducted by the IBBI, and (vi) is recommended by the RVO for registration as a valuer. A partnership entity or a company is also eligible for registration subject to meeting the requirements. The Rules prescribe that with effect from 1st February, 2019, every valuation required under the Companies Act, 2013

and the Insolvency and Bankruptcy Code, 2016 needs to be conducted by valuers registered with the IBBI.

6. The IBBI performs the functions of the Authority under the Companies (Registered Valuers and Valuation) Rules, 2017. It recognises RVOs and registers valuers and exercises oversight over them. It has published the syllabus, format and frequency of the valuation examination for all three Asset Classes, namely, (a) Land and Building, (b) Plant and Machinery, and (c) Securities or Financial Assets, in consultation with the stakeholders. It conducts computer-based online valuation examinations every day from several locations across the country for all three Asset Classes. It has specified the details of educational course for the three Asset Classes, which a member of an RVO is required to complete before taking the valuation examination.

7. The international market is offering a large variety of books and training programmes for individuals wishing to become valuation professionals or provide any service in the valuation chain. However, there is a dearth of quality study material and faculty in Indian context. It is necessary to supplement the efforts of RVOs and the registered valuers - existing and prospective - by making available quality study material relevant to Indian context.

8. The Centre for Valuation Studies, Research and Training Association (CVSRTA) has developed this study material as per syllabus of the valuation examinations for two Asset Classes, namely, Land and Building and Plant and Machinery. I compliment the CVSRTA, and the Authors, Subject Editors and Language Editors for putting in very hard work to prepare such comprehensive study material for the benefit of valuation profession. I thank the CVSRTA for its offer to place this study material on the website of the IBBI for free download by users. I am sure, this study material will greatly support development of the fledgling valuation profession in the country and will be useful to those who wish to learn the subject, practise as a professional valuer or provide any other service in the valuation chain. It will motivate more inquisitive minds to delve deeper into various aspects from an interdisciplinary perspective, enriching the Indian literature on valuation in the days ahead.

9. The IBBI, however, does not recommend any reader to use this study material for any purpose, including preparation for valuation examinations, or any person to take any action or decision, commercial or otherwise, by using this study material. It urges the reader to do her own research and / or seek professional guidance as she may consider necessary for her purpose, while using this study material.

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Centre for Valuation Studies, Research and Training Association (CVSRTA) considers itself privileged to prepare the study material for the examinations in the disciplines of Land and Building as well as Plant and Machinery conducted by the Insolvency and Bankruptcy Board of India (IBBI) which will be beneficial to professionals in India.

CVSRTA is thankful to IBBI for giving an opportunity to prepare the material.

Kirit P. Budhbhatti
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LAND AND BUILDING

SUBJECTS PRESCRIBED

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- BOOK KEEPING AND ACCOUNTANCY (322) **
- LAW – GENERAL(439)**
- INTRODUCTION TO STATISTICS (757) **
- ENVIRONMENTAL ISSUES IN VALUATION (856)**
- PROFESSIONAL ETHICS AND STANDARDS (933) **
- PRINCIPLES OF INSURANCE AND LOSS ASSESSMENT (939)**
- LAW- REAL ESTATE (1007)
- VALUATION OF REAL ESTATE (1279)
- REPORT WRITING (1834)
- CASE STUDIES (1854)

NOTE: ** This indicates the subjects common to both the disciplines Land & Building and Plant & Machinery and the study material for these subjects will be found along with the study material of Plant & Machinery.

CVSRTA considers itself lucky to do pioneering work in introducing the valuation courses in the disciplines of real estate and plant & machinery in India under full time as well as distance learning and developing the course material since 1994 by the outstanding valuers from length and breadth of India. This study material also the result of the efforts by the experts.

PRINCIPLES OF ECONOMICS

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Kirit P. Budhbhatti

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UNIT – I

DEFINITIONS AND CONNOTATIONS

1.1 INTRODUCTION

Economics can be divided into three parts, namely, descriptive economics, economic theory, and applied economics. In descriptive economics one collects together all the relevant facts about a particular phenomenon. While economic theory or analysis gives a simplified version of the way in which an economic system functions. Applied economics takes the framework of analysis provided by economic theory.

There are three broad assumptions namely assumptions regarding behaviour of individual. Economists are concerned with people as consumers and as businessmen. When economists discuss the actions of consumers, they assume that they behave rationally. It means that they try to maximize their satisfaction with minimum possible expenditure. In the same manner, economic theories assume that the businessmen try to maximize their profits. It is their economic rationality.

The second group of assumptions is about the physical structure of the world i.e. natural conditions. They always remain to be given. It is these conditions give rise to economic problem because resources are limited in relation to their demand. Therefore, goods and services are scarce in supply. The scarcity of resources leads to economic system and economic problem. What is worse is that the scarce resources have alternative uses. This makes all the more difficult for human being to solve economic problems.

The third group of assumptions relates to social and economic institutions. Under this group of assumptions, comes political stability. Without which neither consumers nor producers attain their goals. For economic prosperity, political stability is a must. Applied economists are often concerned with 'test' theory studying statistical and other evidence to discover if it appears to support particular economic theory. Hence, economics is concerned with a study of one of the aspects of human beings. It enquires into how a human being gets his income to satisfy his unlimited wants with limited means. It deals with day-to-day activities of human being relating to his efforts of maximizing his satisfaction. Therefore scope of economics centers around wants – efforts – satisfaction.

Economic problem begins with human wants and ends with satisfaction of those wants. Economics is concerned with every human being poor as well as rich. In nutshell it could be deduced that science of economics enquires into how a consumer attains his income and spends it in order to achieve maximum satisfaction with minimum efforts or expenses.

1.2 DEFINITION OF ECONOMICS

A good number of definitions of economics have been numerated but we shall be dealing with three main definitions given by Adam Smith who is considered to be the father of economics, Dr. Alfred Marshall and Prof. L. Robbins.

Adam Smith called economics as “Science of Wealth”. He emphasized wealth because in days of Adam Smith monarchy was in existence. The kings were interested in amassing wealth for their military operations. Hence, Adam Smith emphasized wealth. He paid attention exclusively to wealth. He totally neglected role played by man. Wealth has no significance if there is no man to make use of it. Wealth attains importance if it is considered in relation to man because wealth is not be all and end all of human life. It is simply a means to end and the end being the maximum welfare of the society.

According to Dr. Alfred Marshall “Economic is a study of man’s actions in the ordinary business of life; it enquires how he gets his income and how he uses it – Thus it is on one side a study of wealth and on the other, and more important side a part of the study of man.”

Dr. Marshall in his definition of economics makes it clear that in economics how human being earns his living by earning income and spending it for maximization of his welfare. Marshall shifted emphasis from wealth to man. Production of wealth and using it for his welfare is stressed by Marshall. Thus Marshall’s definition covers consumption, production, exchange and distribution. Marshall pays more attention to material welfare of man which is obtained by using economic resources rationally. Thus, Marshall accords secondary position to wealth. Economics concerns with ordinary men and women who are motivated by maximum advantages that is welfare. He holds that it is a social science which studies individual behaviour also. It is therefore economics ignores non-material aspects.

However, Marshall's definition is criticized by Prof. Lionel Robbins on the following grounds:

1. It is classificatory.
2. It is concerned with material welfare alone narrowing the scope of economics.
3. Marshall's definition totally neglects the non-material services.
4. No clear-cut distinction is made between ordinary business of life and extraordinary life.

Wealth and welfare cannot go together. Wealth like poison does not increase the welfare. Non-material things like love and affection also raises the human welfare, which Marshall totally neglected. Moreover concept of welfare is subjective. It varies from person to person, time to time and place to place. The term welfare may land us in the domain of ethics. Prof. Lionel Robbin held that economics is neutral between wants. Economics is not concerned with the causes of material welfare as such. It is for this reason Robbins held that Marshall's definition is narrow, classificatory and unscientific.

1.2.1 LIONEL ROBBIN'S DEFINITION

"Economics is a science that studies human behaviour as a relationship between ends and scarce means which have alternative uses."

The following are the four pillars of Robbin's definition:

1. Economic is a science that studies economic aspect of man's life. From the social point of view, it is a normative science but from individual point of view, it is positive science.
2. **Wants unlimited**
Human wants are unlimited. It is not possible to satisfy them all because means are limited. If one want is satisfied another crops up. Man is such an animal that he is never satisfied. He tries for variety and plenty. This applies to his all wants. Besides his basic wants, he wants to have a number of things such as comforts and luxuries. Since human wants are countless, as a rational being he or she has to be selective ones. He chooses to satisfy most urgent wants first postponing the satisfaction of less urgent wants. Hence, human wants are be all and end of all of economic activities.

3. **Limited means**

Though wants are unlimited, means to satisfy them are limited. Moreover they have alternative uses. That is why economic problem arises, because all goods are not free goods. That is why goods are paid to obtain them. Scarcity of resources gives rise to economic problem because these resources have alternative uses either for this or that. But one must know that it is not the absolute scarcity. It is in light of demand for it, is to be considered. For example rotten egg may be scarce in supply but since nobody demands it, it is plentiful in supply. Hence scarcity be considered in relation to demand only.

4. **Alternative uses of resources**

Means or resources are not only limited but they have alternative uses also. It means that they can be put to number of uses. Had they possessed fixed and specified use, economic problems would not have arisen. But multiplicity of uses of scarce means makes things all the more difficult. Hence, scale of preference of uses is to be made. Most urgent wants are to be satisfied first. In case of less urgent wants, satisfaction is postponed. This means that a rational choice is to be made between wants. Hence multiplicity of wants, scarcity of means and their alternative uses give rise to economic problem. Thus, L. Robbins held that economics tells us how a man makes use of his scarce resources having alternative uses for the satisfaction of his countless ends. Hence it involves choice making it all the more difficult that is why economics is called as a science of choice.

1.2.2 **Superiority of Robbin's Definitions**

Prof. L. Robbins definition of economic preferred to all other definitions. It is called as scarcity definition. It is considered to be scientific definition because it is independent of any classification. Secondly, all types of wants social as well as individual fall within the domain of economics. Thirdly, it has a widened the scope. Marshall had restricted it only to wealth and activities related to the material welfare of man. Fourthly, Robbins held that economics is only science and not arts. Lastly it is also held that economics is neutral between wants. It does not consider moral – immoral consideration. It is for the consumer to make rational choice between wants. This makes economics is a positive science.

Limitations

Robbins definition though it is widely accepted and more scientific yet it is considered to be colourless, impersonal and neutral between wants. However, from the social point of view, economics cannot keep aside its normative appearance. The job of economics is also to advocate and condemn.

It also appears that L. Robbins has reduced economics only to valuation theory. Economics not only touches upon resource allocation or price determination but also study how the national income and employment are determined. Thirdly, Robbins definition does not cover theory of economic growth or development which has become an important branch of economics. The theory of economic growth deals with growth of economy but according to Robbins resources are given. He only discusses their allocation. Further more, Robbins definition does not deal with problem of plenty and also of unemployment. According to Robbins economics studies only the problem of scarcity. It also lacks human touch. L. Robbins made economics more abstract and complex making it more difficult. Hence it goes away from its utility for the common man because it must be concrete and realistic study.

1.2.3 Modern Views

Of late economic thinking has gone a long way. Lionel Robbins held that economics is concerned with multiplicity of wants and scarcity of resources having alternative uses. But in modern times, it is held that economics is much more than merely a theory of value and allocation of resources. It was Lord J.M. Keynes who brought about a change in economic thinking by advocating government participation in economic development of the country. Now economics is looked upon as the study of the administration of limited resources and of the determinant of employment and income. Thus, besides, theory of value, it studies how the levels of income and employment are determined. It means that modern economics studies the causes of economic fluctuations in order to achieve economic stability. In other words economics studies the factors affecting the size, distribution and stability of country's national income.

Second half of the twentieth century, saw growth theories occupying important place in the study of economics particularly with reference to poor countries. Therefore, one can conclude that a satisfactory definition of economics is one which includes in it theory of income, employment and growth in addition to theory of value or resource allocation.

1.3 Scope of Economics

Scope of economics as stated earlier is wants, efforts and satisfaction. Economics begins with human wants and ends with satisfaction of those wants. Man undertakes efforts to satisfy his innumerable wants. It studies only one aspect of man's life. All activities of man are centred around the satisfaction of his wants. Economics is concerned with satisfaction of wants. It is a social science and therefore tries to find out solutions to social problems like unemployment of natural resources, raising national income through planned economic development. Acceleration of economic growth has become main thrust of economic development in these days.

Economic is a science. Science is defined as a systematized body of knowledge. Economics, too, has its rules, regulations and laws in which it binds itself. Now, the question is whether economics is a positive or normative science. Positive science is one which deals with the facts as they are while normative science is one which deals with the facts as they should be or ought to be. Positive economics attempts to describe and analyze the existing situation rather than suggesting how to change it. But many times economists do often make normative statements. Instead of explaining how the economy actually operates, they suggest, how it should operate. Especially, where problems of the economy are concerned, economists abandon the objectivity of positive economics and make normative statements. It is in this context, that we suggest what the government's economic policy ought to be. How government should act to raise the level of employment etc. Physics, chemistry, geology and biology are the positive sciences as they deal with the facts as they are while social sciences like economics, psychology, sociology, political science etc. deal with the facts as they should be. Thus, economics is both positive as well as normative science. While dealing with individual economic problems, it is a positive science and while dealing with social problem it becomes normative science.

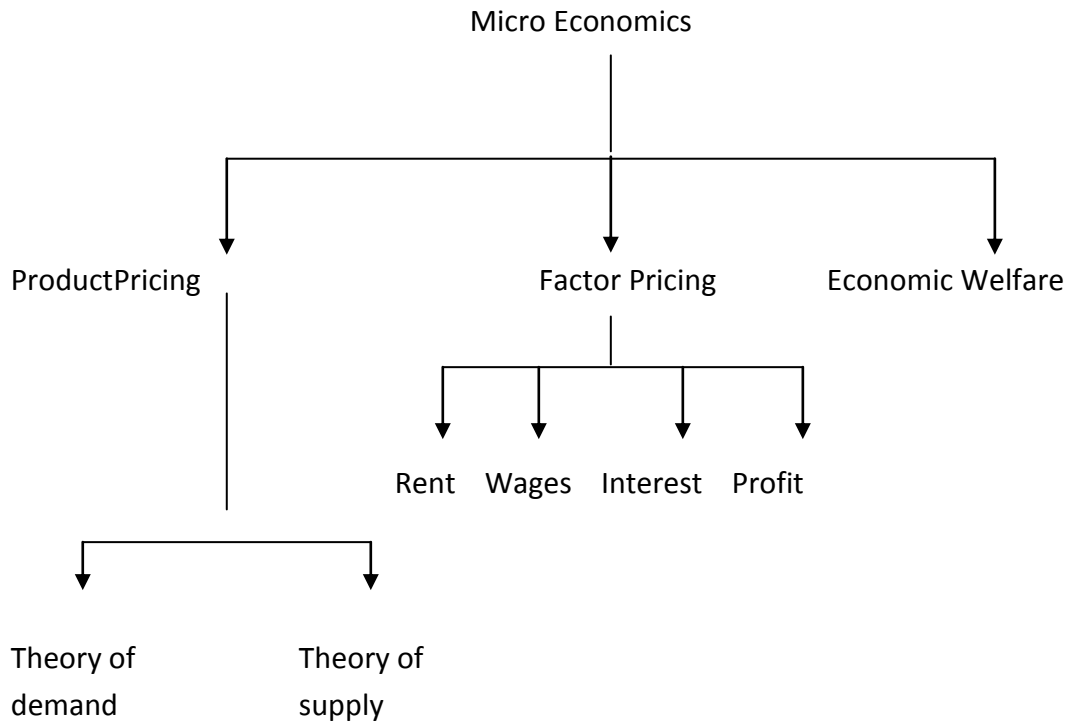
The study of economics incorporates it in its scope, consumption, production, exchange and distribution of natural resources. It concerns with economic growth leading to raising national income and its equitable distribution along with balanced economic development. Now-a-days economics' scope is widened so much that maximization of economic welfare has become the main goal of the economic activities.

The knowledge of economics has gone so far that it reached a stage when its facts have been collected and carefully analyzed and laws or general principles explaining to facts have been laid down. This makes economics a positive science.

It is also considered an Art because it lays down and formulates to guide people who want to achieve a certain aim. The aim may be removal of poverty or raising production of goods and services in the country. Economics does help us in solving many day-to-day practical problems. It is not mere a theory. It has great practical use. Therefore, one can conclude that economics is both a science and an art also.

1.4 Micro-Economics

British Economist named Adam Smith is the founder of micro-economics which deals with individual behaviour such as markets, firms and households. According to Smith, economic benefit comes from the self-interested actions of individuals. K.E. Boulding holds, “Micro-economics is the study of particular firms, households, prices, wages, incomes, industries and commodities, etc.”. In micro-economic, we study how the various cells of economics organism namely individual consumers and producers reach their equilibrium positions. In other words, in micro-economics, we make microscopic study of the entire economy. However, it must be noted that the micro-economics does not study the economy in its entirety, instead under this branch of economics, we study equilibria of thousands of units of the economy. Prof. Lerner rightly observes, “Micro-economics consists of looking at the economy through a microscope as it were to see how millions of cells in the body of economics viz. individuals or the firms as producers play their part in the working of the whole economic organization.



The scope of micro-economics includes in it production, consumption and distribution or any other activity tends to be carried out with the highest efficiency so as to maximize social welfare. It also studies every constituents of the circular flow of income. In other words micro-economics is the application of partial equilibrium analysis to economic problems. Micro-analysis are useful for price determination and allocation of resources, determination of economic policies, international trade, linear programming and optimum utilization of resources.

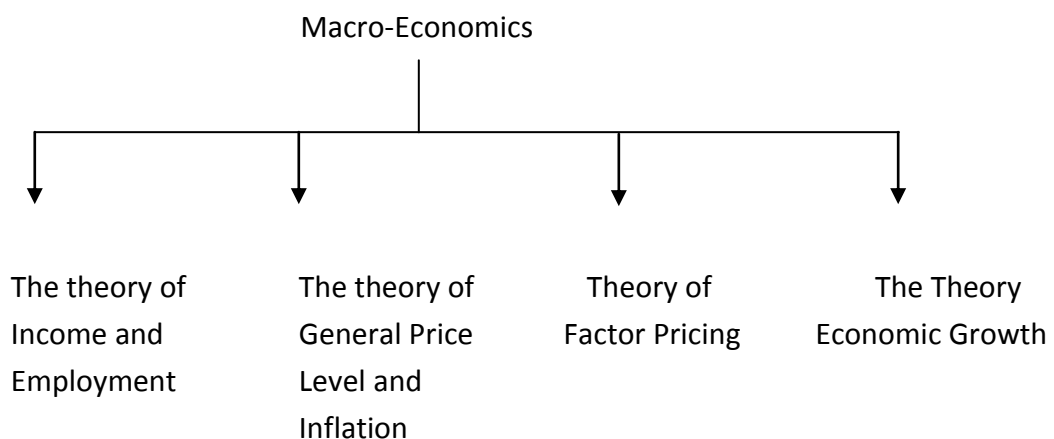
Limitations of micro-economics – it does not throw any light on the collective activity. The analysis is based on unrealistic assumptions which may result into doubtful conclusions.

1.5 Macro-Economics

It deals with aggregates. It is concerned with total demand, supply, output, income and so on. Hence macro-economics is a study of aggregates and averages. It is the study of economic system as a whole. It directly concerns with relations among large aggregate such as national income, general price level, total output, consumption, employment, savings, investment, demand and supply. These relations indicate the behaviour of economic system as a whole. J.M. Keynes holds that macro-economics concerns itself with those aggregates which relate to the whole economy.

Prof. Paul Samuelson rightly remarks, "There is really no opposition between micro and macro economics. Both are absolutely vital; and you are only half educated if you understand one while being ignorant of the other."

The scope of macro-economics is very wide and it assumed added importance since the publication of J.M. Keynes, General Theory of Employment, Interest and Money in 1936. It is considered to be policy making economics. The study of macro-economics includes, the theory of income, employment, general price level, theory of factor pricing, economic growth and inflation and deflation.



Importance of Macro-Economics

1. The study of macro-economics enables the government to frame the correct and effective economic policy.
2. It proves to be more helpful in economic planning.
3. It helps developing micro-economic theories.
4. It also enables one to have international comparison.
5. Lastly it is absolutely essential to have knowledge of macro-economics to make correct decisions.

Limitations

Use of macro-economics analysis complicates the process of the study of prices, savings, investment, factor pricing etc. Secondly all aggregates are not identical and therefore macro-study will become rather difficult. Thirdly, statistical data and techniques are the soul of the study of macro-variables. Therefore, if reliable data is not available decisions based on such data proved to be wrong. In the fourth place, it cannot be said that only one variable is affected from the changes leaving all other variables unaffected.

According to Prof. K.E. Boulding, “Micro-economics follows the method of slicing whereas macro-economics uses the method of humping.”

1.6 Connotations

If we probe a little deeper, however, we find that economics is really not so much about money as about some things which are implied in the use of money. Three of these – exchange, scarcity, and choice are of special importance. Let us take them in turn.

1.6.1 Exchange

Money implies exchange. It is in fact the medium of exchange. In a primitive community, where exchanges are rare, we can dispense with money and resort to direct barter. Money is unnecessary so long as we are at the stage of trying to satisfy all our wants by our own efforts, growing our own wheat, milling our own flour, baking our own bread, and only now and again exchanging, say, wheat for a ploughshare or a calf for a millstone. But immediately we begin to specialize, and cease to produce goods for our own use, money becomes indispensable if exchanges are to take place smoothly. Exchange becomes triangular – we convert goods into money and money into other goods, instead of simply bartering goods for goods. If exchanges did not take place in this apparently circuitous way, no one who specialized in making bricks or bowler hats would relish a morning's shopping. The grocer might have no use for bricks, and match-sellers would hesitate to accept the hundredth part of a bowler hat. A walletful of money goes so much further than other walletfuls!

Nowadays, therefore, exchange rarely takes the form of direct barter. Instead, we do business with money. We buy what we want with money, sell for money, fix prices in terms of money, are paid our wages, salaries, or dividends in money, save money, and measure our wealth in money. But the problems which present themselves to us in terms of money are exactly similar to the problems raised by direct barter. There is a surface difference between money-exchange and barter-exchange, but no difference in principle. Economics, therefore, does not limit itself only to money-problems but studies exchange-problems of all kinds. It is, in fact, about exchange rather than about money, for exchange underlies the use of money.

Exchange Implies Interdependence

When one exchange, we have stopped being self-sufficing and have become dependent in those from whom we buy and to whom we sell. Our fortunes are linked with theirs. If they are poor or unemployed then we are likely to be in danger of poverty and unemployment ourselves. Famine and flood in one part of the world can create scarcity and distress thousands of miles away by cutting off supplies of foodstuffs and raw materials. We are all within the circle of exchange. Yet this interdependence rarely occurs to us : it is so easy to overlook the implications of exchange.

Consider, for example, some everyday event like the purchase of a packet of cigarettes. I take from my pocket a small piece of metal – probably Mexican silver alloyed with Canadian nickel – and offer it to a total stranger who accepts it with alacrity. In exchange, I receive a cardboard packet whose contents are the product of workers from all over the globe – Norwegian lumbermen, Turkish peasants, Malayan tin-miners, American inventors. I draw also on the services of British workers scattered over the country. The packing of the cigarettes has been done in Bristol; the cellophane wrapper and silver paper come from London; the paper round the cigarettes from Swindon; the stiffener, or cigarette card, from Glasgow. But about all these workers, through whose efforts I am able to smoke my cigarettes, I am amazingly ignorant. I do not trouble to inquire whether they include cannibals, racketeers, Jew-baiters; whether they are mean, grasping, or dissolute; or whether their daily earnings are less than 1d or over £100. Their creed, their way of living, their income, the colour of their skin, do not interest me. I can drive my bargain with them without even knowing that they exist. The cash-nexus that binds us is the loosest of bonds. It leaves me free to pursue my own interest, undeterred by any sense of moral obligation to other workers as fellow-citizens. They satisfy my wants and earn the means of satisfying theirs. And that, to most of us, might seem to be the end of the matter.

But not to the economist. It is precisely these exchange-bargains which he sets out to investigate. Why, he asks, do people exchange at all? What advantages does society reap from leaving people free to satisfy their wants by exchange? When exchange is fair and when unfair? Is it in the social interest that exchanges dictated by mutual self-interest should be left unregulated by the State? Or, if regulation is desirable, on what principles should the State intervene?

1.6.2 Scarcity

The use of money implies scarcity. Money itself must be scarce or it will cease to be used. If the supply of money is increased without limit it will soon lose value and in the end no one will accept it. Whatever passes as money, therefore, must necessarily be scarce. So also – and this is the important point – must be the things that money will buy. We only exchange one scarce thing for another. We do not pay for air and earth and water unless somehow they are stinted just as the supply of money is stinted.

The fact of scarcity makes it necessary for us to economise, i.e., to make the most of what we have. We have constantly to be counting the cost, weighing up alternatives, and going without one thing so as to be able to buy more of another. Nominally it is money that we economise, for what we have to decide is whether to spend money on this or on that. What we are really doing, however, is to economise the things that money will buy. We try to buy, with our limited income, the collection of goods and services which gives us most satisfaction. We are faced with the fact that these goods and services are scarce, and we have to accommodate this scarcity as best we can to our wants and needs. Similarly, in earning money we have to husband our scarce time and energy in order to obtain as large a return as possible (in money or in amenities and personal satisfaction) for our efforts. On some men, of course, the pressure of scarcity and want bears harder than on others. On the millionaire, for example, the pressure is negligible; he can almost always neglect considerations of cost. But for others the necessity of making ends meet enforces constant self-denial.

1.6.3 The Economic Problem

What is true of each of us is true also of society as a whole. There is an economic problem of making the *social* income go as far as possible. The goods produced and services rendered in any country in the course, say, of a year, are limited in amount and insufficient to maintain a standard of more than moderate comfort if equally distributed amongst the inhabitants of the country. The goods and services at the disposal of the country in other words, are scarce in relation to the demand for them. There are very few things that can be provided free of charge, even in a rich country. We can make as much use as we like of public libraries and parks and roads. But we cannot help ourselves to books and motor-cars, much less to food and clothing. The more of one thing is offered to us, the less can we have of other things. We cannot have more of all simultaneously. If A is free, B will be all the dearer. The provision of free motor-cars, - for example, would lead to an expansion of the automobile industry and the transference to it of engineers, materials, and machinery from a host of other industries. Motor-cars would be more abundant; but other things would be scarcer. Only if we set a very high value on motor-cars (like the value which we set on good roads, or schooling, or health services) will we be prepared to face the cost of offering them free.

This balance between value and cost is forced on us wherever we are faced with a shortage of supplies relatively to our wants. The things which we value highly and which cost little to produce will be provided first and in large quantities. What costs a great deal and is of comparatively little value will not be produced at all. We have to decide what commodities, and how much of each, to produce; and our decision will rest upon our estimates of cost and value. The decision is one that must be taken in every society, whether it be Russia or the United States, Italy or Malaysia. The way in which the decision is taken, and the kind of people who take it, are, of course, very different in different countries. The responsibility may rest with a bureaucracy or with the mass of “consumers.” One country may have a State Planning Commission; another may rely on the laws of supply and demand. Whatever the economic system, the decision is one that cannot be avoided. There is an economic problem which has to be solved by dictatorships and democracies, “planned” and “unplanned” societies alike. Want and scarcity are universal, and so, too, is the problem of accommodating the one to the other.

In some countries the problem may be solved more satisfactorily than in others. But there is no question of one social system bringing plenty and another condemning us to scarcity. Man’s wants are insatiable, and there would continue to be scarcity under any social system. If, for example, we all had twice as large an income as at present – an advance which could not be brought about immediately by any conceivable change in our social system – the annual income of the average British worker would still be under £600, and from this sum a large slice would be taken in taxation, and a further slice would have to be put aside as savings. Such an income would probably fall short of the aspirations of most people and could be reached only by exertions which would be decidedly irksome. The conflict between scarcity and want would continue to be felt.

Scarcity, like exchange, raises problems for the economist. He tries to formulate the principles on which our limited productive resources can be used to the fullest advantage. He studies how unemployment, for example – an obvious waste of labour power – can be reduced or eliminated; how the community’s savings can be made to find their way into productive investments, how the land can be cultivated in the best interests of society. He studies; too, on what principles we should allocate resources between different industries so as to produce a maximum of all commodities in the right proportion of each; and how the output of commodities should be distributed between those who help to make them.

These are problems which cannot be confined within the narrow bounds of pure economics. They extend into politics, ethics, and even religion. But we can get a better view of them from the heights of economic theory than from any other standpoint. Since this better view will still be coloured by our personal convictions, it will not of itself remove differences in outlook. But it will give us a wider perspective and open our eyes to the more remote implications of our problems.

1.6.4 Choice

The use of money also implies choice. We have to choose between the many claims on our purse when we spend money, and between the many uses to which we might put our time and energy in earning it. We cannot spend the same evening in the cinema and in the theatre. We must choose one form of entertainment or the other. We may have to choose, also, between spending an extra shilling or so on a seat and spending the same shilling later on cigarettes.

Our choice, of course, is not always made rationally. That is, we do not always weigh up carefully the possible ways in which we might spend our money. We are much more lighthearted and irrational in buying sweets, for example, than we are in renting a house. We buy, very, often, impulsively or through habit or force of example. Or we may buy because our “sales resistance” has crumpled at the sounding of some advertiser’s trumpet. It is irrational to pay more than is necessary for a thing; and yet hardly a day passes but we buy goods without asking their price, or cannot be bothered to look for cheaper brands. We do not take the trouble to find out where prices are lowest; or we take excessive trouble to save a trifling sum, like the wealthy man who walks to save a penny fare. We do not budget for so much on clothes, so much on amusements, so much on food, so much on our savings account, and so on, but spend haphazard so long as the money lasts. Or at least that is what large numbers of us do.

Perhaps, however, the careful housewife – and the tradition amongst economists are to think of housewives, as the persons who hold the purse-strings – is more rational in her buying. The economic woman may be less of an abstraction than the economic man!

The way in which we make a choice is of great importance to the economist. For he cannot tell how much weight to place on the preferences expressed in the spending and earning of money until he knows how far these preferences are *rational* (i.e., based on full knowledge and formed after reflection). If for instance, people persist in buying an expensive brand of cigarette it is important to know whether they buy it out of a liking for that particular brand or because they are ignorant of cheaper brands with the same flavour or because of snob-appeal in the advertisements. Until the psychology of cigarette-smokers is explained to us, we cannot say whether the production and the sale of these high-priced cigarettes involve a social waste. If smokers are rational there *may* still be a waste (for instance the price may be kept high by a monopoly). But if they are irrational, there is certainly a waste; they are paying more than they would if they were in possession of all the facts.

In economics we begin by assuming that choice is rational. The so-called “economic man” is simply one who is completely “rational” in satisfying his wants, and pays no regard to the interests of others. It is, of course, an abstraction from the facts to assume that men are self-interested and rational. But to make this kind of abstraction is the only satisfactory procedure open to us. If we assume that people are self-interested and rational, we can predict how they will behave given a certain monetary inducement, and we can work out an analysis of action and reaction.

For instance, if similar goods are on sale at different prices, or similar jobs advertised at different rates of pay, we know that men will, other things being equal, purchase the cheaper goods, and apply for the better-paid job. If we could not make such generalizations, if men were quite irrational, then we should never “get anywhere” in economics. So we begin by assuming that choice is deliberate and rational, without, however, overlooking the part played by impulse, custom, and inertia. Later, we may study the psychology of choice more closely; analyzing what shapes our expectations and desires, and sifting what is basic in our wants from what is superficial or conventional. But to begin with, we ignore these difficulties, take people’s desires for granted, and assume that choice is rational.

In the economic system as we know it, choice rests largely with the individual. His preferences go to determine what is to be produced and what is not. Every penny spent on A is a vote in favour of the production of A; every refusal to buy B is a vote against the production of B. It is the free choice of individual consumers between the goods, competing on the market that determines what industries can carry on at a profit. The industries that cannot show a profit are not carried on at all. Those that show excessive profits attract competition and expand until people's wants – as indicated by the price which they are prepared to pay – are more adequately met.

That is, if competition is possible and effective. But if some commodity is monopolized, consumers may be powerless to get what they want (and will pay for) in the proper quantity. They show their readiness to cast votes for more of the commodity by offering high prices for it. But the election is disregarded. No one is willing to stand against the monopolist. So he is able to preserve an excessive scarcity by keeping people out of his line of business. He makes things scarcer than people want them to be and earns high profits by doing so.

Thus a country like ours does not deliberately decide what industries fit best with its advantages and needs and on what scale they should be carried on. The decisions that might otherwise rest with a central planning authority take shape instead in the market. One industry expands and another contracts as consumers alter their preferences and purchases. The scarce productive resources of the community are not always rationed between the different industries by some Planning Commission. They flow into the channels lubricated by the expenditure consumers.

But is it desirable that the individual should retain so much freedom of choice? What if consumers are irrational or incapable of judging between competing goods? Would it be better to appoint a State Planning Commission with power to decide what kind of goods should be produced and what kind of jobs workers should be encouraged to take up? Should each man's daily rations be assigned to him as the average man's daily work is at present? With whom should choice rest, and through what agencies is it best exercised? Here is another batch of problems for the economist.

Now it is clear that scarcity is more fundamental than exchange. It is, in fact, as a result of our efforts to deal with scarcity (i.e. to economise) that exchange arises. We try to ration our limited means among the innumerable wants that compete for satisfaction and find that we can make our limited means go farther by striking bargains with our neighbours. We give what we have in relative abundance – muscle or brain, professional knowledge or organizing ability – for what is comparatively scarce, what we could not do, or could not afford to do, ourselves. We sell our time and energies and spend our earnings on what others have laboured to produce.

In doing so, we are offering goods or services in which our talents show to greatest advantage (or least disadvantage) for the goods or services which others are specially fitted to produce. We are supplementing our deficiencies – our imperfect versatility, for instance – our of the proficiencies of others.

Not only are we able to draw on the skill of others – skill which we may not possess at all – but we are also able to give our whole energies to a single task – one to which, either through practice or natural bent, we are far more fitted than those who engage in it only intermittently. By exchanging, we are making our efforts go further towards meeting our wants. We are reducing the pressure of scarcity and achieving economy.

1.7 SOCIETY'S TECHNOLOGICAL POSSIBILITIES

Each economy has a stock of limited resources – labour, technical knowledge, factories and tools, land, energy. In deciding *what* and *how* things be produced, the economy is in reality deciding how to allocate its resources among the thousands of different possible commodities and services. How much land will go into growing wheat? Or into housing the population? How many factories will produce computers? How many will make pizzas? How many children will grow up to play professional sports or to be professional economists or to program computers?

Faced with the undeniable fact that goods are scarce relative to wants, an economy must decide how to cope with limited resources. It must choose among different potential bundles of goods (the *what*), select from different techniques of production (the *how*), and decide in the end who will consume the goods (the *for whom*).

1.7.1 Inputs and Outputs

The answer these three questions, every society must make choices about the economy's inputs and outputs. **Inputs** are commodities or services that are used to produce goods and services. An economy uses its existing *technology* to combine inputs to produce outputs. **Outputs** are the various useful goods or services that result from the production process and are either consumed or employed in further production. Consider the "production" of pizza. We say that the eggs, flour, heat, pizza oven, and chef's skilled labour are the inputs. The tasty pizza is the output. In education, the inputs are the time of the faculty, the laboratories and classrooms, the textbooks, and so on, while the outputs are educated and informed citizens.

Another term for inputs is **factors of production**. These can be classified into three broad categories: land, labour, and capital.

- **Land** – or, more generally, natural resources – represents the gift of nature to our productive processes. It consists of the land used for farming or for underpinning houses, factories, and roads; the energy resources that fuel our cars and heat our homes; and the non-energy resources like copper and iron ore and sand. In today's congested world, we must broaden the scope of natural resources to include our environmental resources, such as clean air and drinkable water.
- **Labour** – consists of the human time spent in production – working in automobile factories, tilling the land, teaching school, or baking pizzas. Thousands of occupation and tasks, at all skill levels, are performed by labour. It is at once the most familiar and the most crucial input for an advanced industrial economy.
- **Capital resources** form the durable goods of an economy, produced in order to produce yet other goods. Capital goods include machines, roads, computers, hammers, trucks, steel mills, automobiles, washing machines, and buildings. As we will later see, the accumulation of specialized capital goods is essential to the task of economic development.

Restating the three economic problems in terms of inputs and outputs, a society must decide –

- (1) *what* outputs to produce, and in what quantity;
- (2) *how* to produce them – that is, by what techniques inputs should be combined to produce the desired outputs; and
- (3) *for whom* the outputs should be produced and distributed.

1.8 The Production-Possibility Frontier

Societies cannot have everything they want. They are limited by the resources and the technology available to them. Take defense spending as an example.

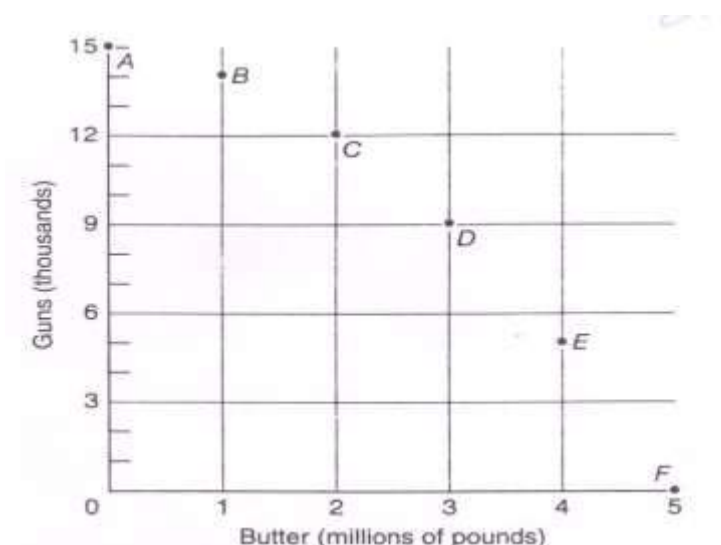


Figure 1 : The Production Possibilities in a Graph

This figure displays the alternative combinations of production pairs from **Table 1**.

Alternative Production Possibilities

Possibilities	Butter (millions of pounds)	Guns (Thousands)
A	0	15
B	1	14
C	2	12
D	3	9
E	4	5
F	5	0

Table 1 : Limitation of Scarce Resources Implies the Guns-Butter Tradeoff

Scarce inputs and technology imply that the production of guns and butter is limited. As we go from A to B ... to F, we are transferring labour, machines, and land from the gun industry to butter and can thereby increase butter production.

Countries are always being forced to decide how much of their limited resources go to their military and how much goes into other activities (such as new factories or education). Some countries, like Japan allocate about 1% of their national output to their military. The United States spends 5% of its national output on defense, while a fortress economy like North Korea spends up to 20% of its national output on the military. The more output that goes for defense, the less there is available for consumption and investment.

Let us dramatize this choice by considering an economy which produces only to economic goods, guns and butter. The guns, of course, represent military spending, and the butter stands for civilian spending. Suppose that our economy decides to throw all its energy into producing the civilian good, butter. There is a maximum amount of butter that can be produced per year. The maximal amount of butter depends on the quantity and quality of the economy's resources and the productive efficiency with which they are used. Suppose 5 million pounds of butter is the maximum amount that can be produced with the existing technology and resources.

At the other extreme, imagine that all resources are instead devoted to the production of guns. Again, because of resource limitations, the economy can produce only a limited quantity of guns. For this example, assume that the economy can produce 15,000 guns of a certain kind if no butter is produced.

There are two extreme possibilities. In between are many others. If we are willing to give up some butter, we can have some guns. If we are willing to give up still more butter, we can have still more guns.

A schedule of possibilities is given in **Table 1**. Combination F shows the extreme where all butter and no guns are produced, while A depicts the opposite extreme where all resources go into guns. In between – at E, D, C, and B – increasing amounts of butter are given up in return for more guns.

How, you might well ask, can a nation turn butter into guns? Butter is transformed into guns not physically but by the alchemy of diverting the economy's resources from one use to the other.

We can represent our economy's production possibilities more vividly in the diagram shown in **Figure 1**. This diagram measures butter along the horizontal axis and guns along the vertical one. We plot point *F* in **Figure 1** from the data in **Table 1** by counting over 5 butter units to the right on the horizontal axis and going up 0 gun units on the vertical axis; similarly, *E* is obtained by going 4 butter units to the right and going up 5 gun units; and finally, we get *A* by going over 0 butter units and up 15 gun units.

If we fill in all intermediate positions with new rust-colored points representing all the different combinations of guns and butter, we have the continuous rust curve shown as the *production-possibility frontier*, or *PPF*, in **Figure 2**.

The **production-possibility frontier** (or *PPF*) shows the maximum amounts of production that can be obtained by an economy, given its technological knowledge and quantity of inputs available. The *PPF* represents the menu of goods and services available to society.

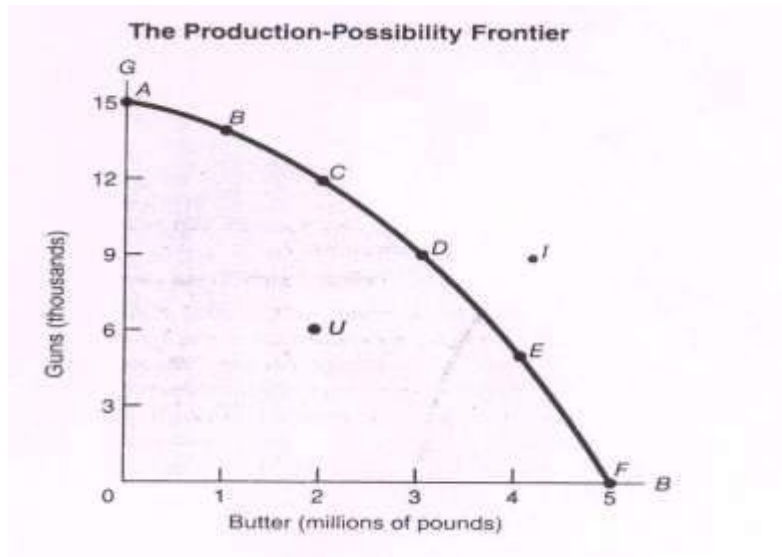
Putting the *PPF* to Work

The *PPF* in **Figure 2** was drawn for guns and butter, but the same analysis applies to any choice of goods. Thus, the more resources the government uses to build public goods like highways, the less will be left to produce private goods like houses; the more we choose to consume of food, the less we can consume of clothing; the more society decides to consume today, the less can be its production of capital goods to turn out more consumption goods in the future.

Figure 2 : A Smooth Curve Connects the Plotted Points of the Numerical Production Possibilities

This frontier shows the schedule along which society can choose to substitute guns for butter. It assumes a given state of technology and a given quantity of inputs. Points outside the frontier (such as point *I*) are infeasible or unattainable. Any point inside the curve, such as *U*, indicates that the economy has not attained productive efficiency, as occurs when unemployment is high during severe business cycles.

1.9



Exercise :

1. How would you define Economics? How it is related to human wants?
2. How would you differentiate between Micro-economics and Macro-economics?
3. What do you understand by Production Possibility Frontier? Explain with diagram.
4. Explain the role of exchange, scarcity and choice as issues in economics.

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UNIT – II

CONSUMPTION

2.1 INDIFFERENCE CURVES ANALYSIS

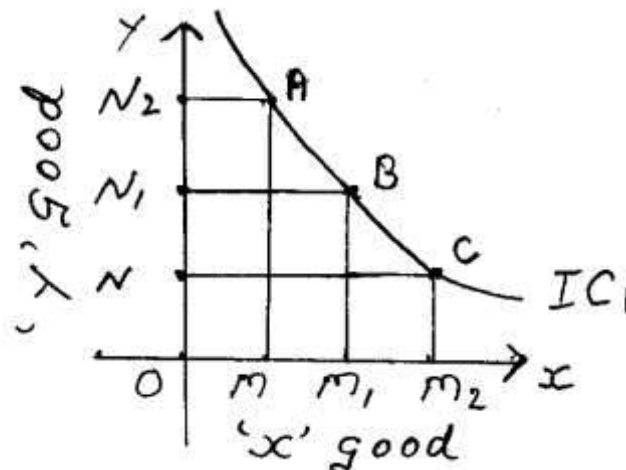
The technique of indifference curves was first used by Prof. Edgeworth, but he used it only to show the possibilities of exchange between the two persons. A decade later Prof. Irvin Fisher of America tried to develop a theory of consumer's equilibrium based on ICs analysis but he did not go beyond substitutes and complementary goods. It is so because they believed in cardinal measurement of utility. Then Prof. Pareto developed his theory of demand based on ordinal measurement of utility. But credit goes to Prof. J.R. Hicks and Dr. R.G.D. Allen of Great Britain of introducing ICs technique in demand analysis. Prof. J.R. Hicks published a book named 'Value and Capital (1939) in which he made use of ICs techniques. This technique is developed to mark an improvement over utility approach. It is based on new assumptions. After having criticized Marshall, J.R. Hicks stated ICs approach based on ordinal measurement of utility. Since, utility is psychic and cannot be measured in cardinal numbers such as 1, 2, 3, 4 etc., Prof. J.R. Hicks and Dr. R.G.D. Allen made use of ordinal numbers like 1st, 2nd, 3rd, 4th etc. to measure the level of satisfaction since utility is subjective and state of mind.

2.2 What is an IC?

The indifference curve is a conceptual curve at which every point represent the combination of goods at x-axis and y-axis, which would place a consumer at a point of indifference as to which combination to choose. Every combination at each point of the curve gives him the equal satisfaction. That is why he is indifferent to any particular choice and the curve is called indifference curve.

An IC is defined as one which joins all those combinations of two goods such as 'x' and 'y' goods which yield same level of satisfaction to the consumer or which occupy the same position in the consumer's scale of preference. In other words, it is a curve which joins all those combinations of two goods yielding same level or equal level of satisfaction to the consumer. The curve which represents all those points on it which yield equal level of satisfaction is called IC because the consumer is indifferent between the combinations of two goods since they yield him the same level of satisfaction.

The Figure given below depicts the ICs curve yielding equal level of satisfaction from combinations of 'x' and 'y' goods.



The combinations of 'x' and 'y' goods A, B, and C lie on IC, yielding the equal level of satisfaction to the consumer. Though they yield same level of satisfaction the quantity of 'x' and 'y' goods differ at each combinations. As the consumer moves from A to C combination, he consumes more of 'x' and less and less of 'y'. Similarly, when he moves from C to A combination he prefers 'y' to 'x'. It all depends upon his tastes and preferences as to which good is to be consumed more or less.

2.3 Assumptions of ICs Analysis

ICs approach is based on following assumptions:

1. Like Marshallian approach the ICs approach also takes the assumption of rationality. Rationality implies that the consumer possesses all the relevant information to make his rational decision of maximization of satisfaction.
2. Ordinal measurement of utility is the second important assumption of ICs. Since utility cannot be measured in objective cardinal numbers like 1, 2, 3, 4 .. 5 etc. because it is psychic, it is to be measured in ordinal numbers such as 1st, 2nd, 3rd, 4th, etc.

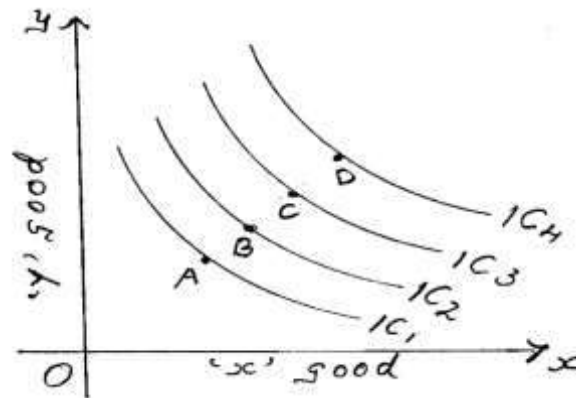
3. Assumption of continuity - This assumption falls under the domain of geometry, yet it forms core of ICs analysis. Continuity implies the consumer is capable of ordering or ranking all the possible combinations of two goods in accordance with satisfaction they yield to him. He can move from low level of satisfaction to a high level of satisfaction provided his money income permits him to do so.
4. Assumptions of transitivity - It implies that if the consumer prefers 'A' combination of two goods to B and B to C it means he prefers A to C. Similarly if he is indifferent between A and B. B and C, it means that he is indifferent between A and C. In other words under this approach, the consumer's preference is valid for every successive pairs in the curve.
5. The ICs approach is based on weak ordering form of preference hypothesis. Thus, the weak ordering form of hypothesis recognizes the relation of preference as well as indifference. Strong ordering believes in only one relationship and that is preference.

2.4 The Scale of Preference

The rational consumer always makes his purchases in the light of his scale of preferences. It refers to valuation of goods and services independent of their market prices. In short it involves choices of buying goods and services. Each consumer develops his own scale of preference independent of others. It differs from person to person based on everybody's level of income and tastes and preferences.

2.5 IC's Map

An IC's map is an important tool of this approach. It represents complete description of the consumer's tastes and preferences. As long as consumer's tastes and preferences remain constant, IC's map also remain constant. It refers to a set of ICs or a family of ICs representing different levels of satisfaction. Each IC represents different level of satisfaction. A higher IC represents a higher level of satisfaction and a lower IC represents a lower level of satisfaction, but how much higher or lower is not indicated because ICs approach is based on ordinal measurement of utility. The scale of preference of the ICs analysis replaces the utility schedules of Marshall's approach. The following ICs map is drawn based on hypothetical tastes and preferences.



ICs No.1, 2, 3 and 4 represent different levels of satisfaction. Hence combination 'A' represents the lowest level of satisfaction while 'D' represents the highest level of satisfaction.

2.6 Price Line or Budget Line

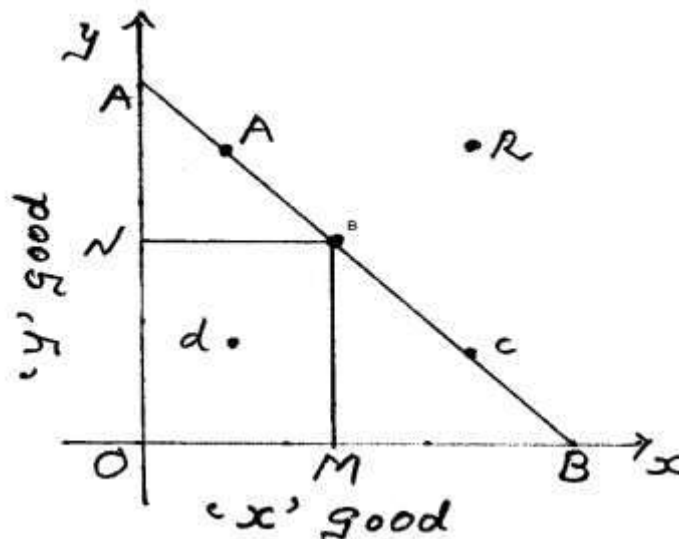
Price line represents the money income of the consumer given the prices of goods and services. Prices of goods and money income are the two constraints of the price line. If the money income changes (rise or fall), prices remaining constant price line shifts upward or downward as the case may be. If the prices change, money income remaining constant, price line still changes. Price line is also called as the budget line because it provides various opportunities to the consumer costing the same money expenditure.

Assumptions of Budget Line

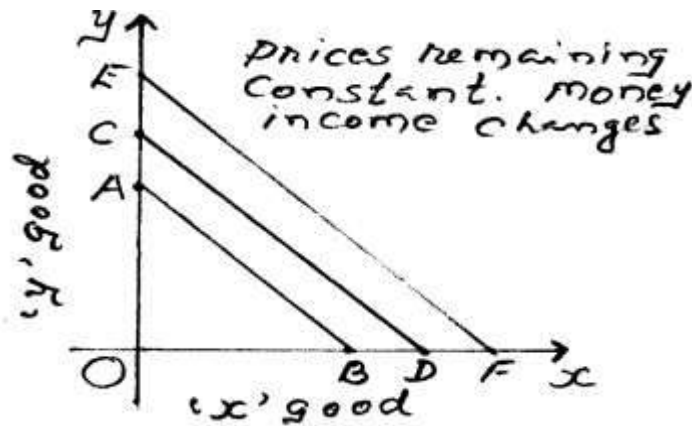
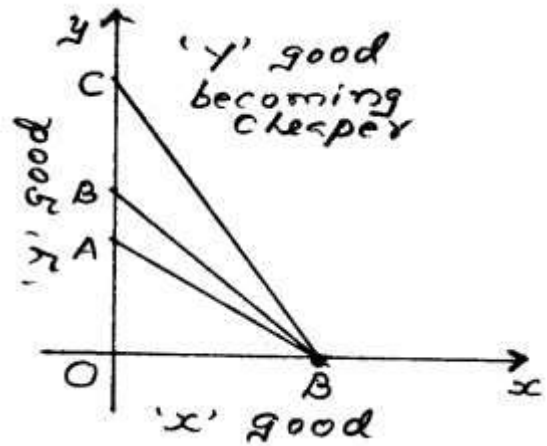
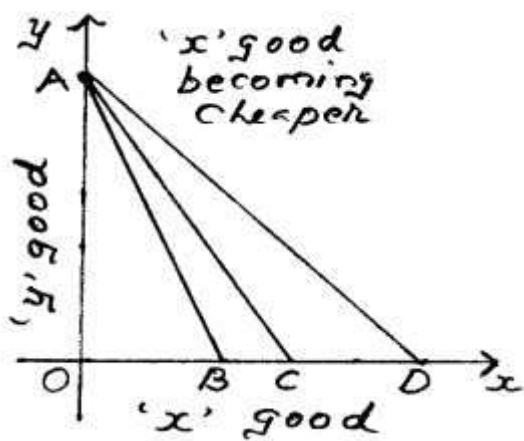
1. Prices of goods and services are given and remain constant through out.
2. The consumer tries to maximize his satisfaction with given money income and set of prices of 'x' and 'y' goods.
3. He has limited income which he spends on 'x' and 'y'.
4. Tastes and preferences of the consumer remain constant.
5. Goods are divisible and their units are homogeneous.

Given the above assumptions, the consumer has to choose that combination of 'x' and 'y' goods which will lie on the given price line. Any combinations lying on the same price line, will cost the consumer the same money expenditure though quantity of 'x' and 'y' goods is different at different combinations.

The consumer cannot choose any combination beyond AB price line because his limited money income does not permit him to do so nor he would choose any combinations inside the $\triangle AOB$ because in that case he may not be spending his entire money income. Therefore, he would choose that combination which would lie only on price line AB. In the graph, it is shown the consumer chooses B combination which gives him maximum satisfaction with the given money income. He does not choose either A or C combinations because in that case he may not be spending his entire income. At the same time combination R is beyond reach of the consumer. 'd' combination does not allow him to spend his entire income. Hence, it is out of question. That is why he chooses B combination which gives him maximum satisfaction and permits him to spend his entire income on 'x' and 'y' goods.



The price line shifts if prices of goods change or money income changes prices remaining constant. The following three diagrams depicts the position of the price line.



The slope of the price line is measured and always equal to price ratio of both the goods.

$$\text{The slope of price line AB} = \frac{AO}{OB} = \frac{P_x}{P_y}$$

2.7 Consumer's Equilibrium

A consumer is said to be in equilibrium when he is buying such a combination of two goods as leaves him with no tendency to rearrange his purchases. In other words, he would choose that combination which would give him the maximum satisfaction with the given money income and prices of goods and services.

Assumptions

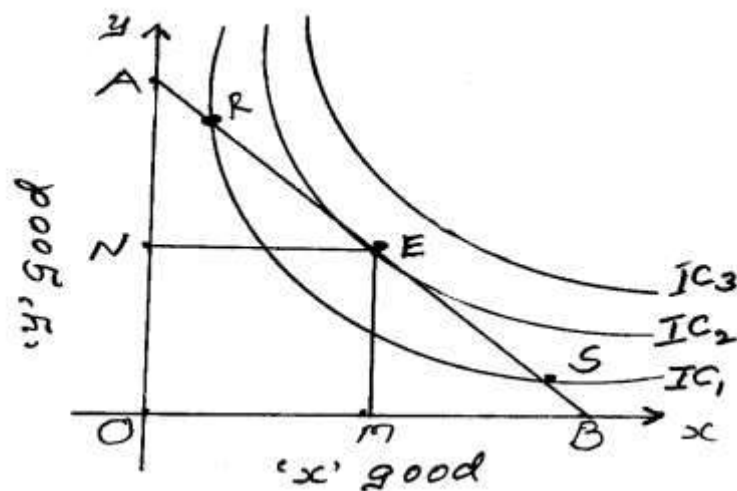
1. The consumer has his IC map exhibiting his scale of preference
2. The consumer has limited money income which he spends on 'x' and 'y' goods.
3. The consumer is rational. It means that he knows market conditions. He tries to maximize his satisfaction.
4. Goods are divisible and their units are identical.
5. Prices of goods are given and they remain constant.

Conditions for Equilibrium

1. The consumer would attain his equilibrium at a point where price line is tangent to the highest possible IC. In other words, the slope of the price line and IC curve must be the same at the point of equilibrium. The slope of the price line is represented by the ratio of prices of goods i.e. $\frac{P_x}{P_y}$ while slope of the IC is represented by MRS_{xy} .

Thus at the point of equilibrium
$$= \frac{P_x}{P_y} = MRS_{xy} \text{ or } MRS_{xy} = \frac{P_x}{P_y}$$

2. The second condition is that IC curve must be convex at the point of equilibrium, then only satisfaction of the consumer would be maximum. This is depicted in the following diagram:



Marginal Rate of Substitution (MRS_{xy})

MRS between two goods is an important tool of ICs analysis. It refers to the rate at which one good is substituted for another at margin without altering the level of satisfaction. Thus, MRS_{xy} represents the amount of 'y' good which the consumer has to give up for the gain of one more unit of 'x' good so that his level of satisfaction remains the same. The MRS between two goods always falls as the quantity of one good is increased.

The consumer is in equilibrium at 'E' point where IC₂ is tangent to the price line AB. The consumer buys ON quantity of 'y' good and OM quantity of 'x' good maximizes his satisfaction. At 'E' point both conditions of equilibrium are fulfilled i.e. $MRS_{xy} = \frac{P_x}{P_y}$ and also MRS_{xy} is declining or IC₂ is convex to the origin. That is why the consumer is in equilibrium at 'E' combination. He is not in equilibrium at 'R' point because it is here $MRS_{xy} > \frac{P_x}{P_y}$ and in case of 'S' combination $MRS_{xy} < \frac{P_x}{P_y}$.

Combinations 'R' and 'S' place him on lower IC. Therefore, the consumer is permanently in equilibrium at 'E' point where both the conditions of equilibrium are fulfilled.

The equality between $MRS_{xy} = \frac{P_x}{P_y}$ is essential condition for equilibrium but not sufficient condition. The sufficient condition is that at the point of equilibrium MRS_{xy} must be falling or IC must be convex to the origin. Then only the consumer would be maximizing his satisfaction.

2.8 Income Effect

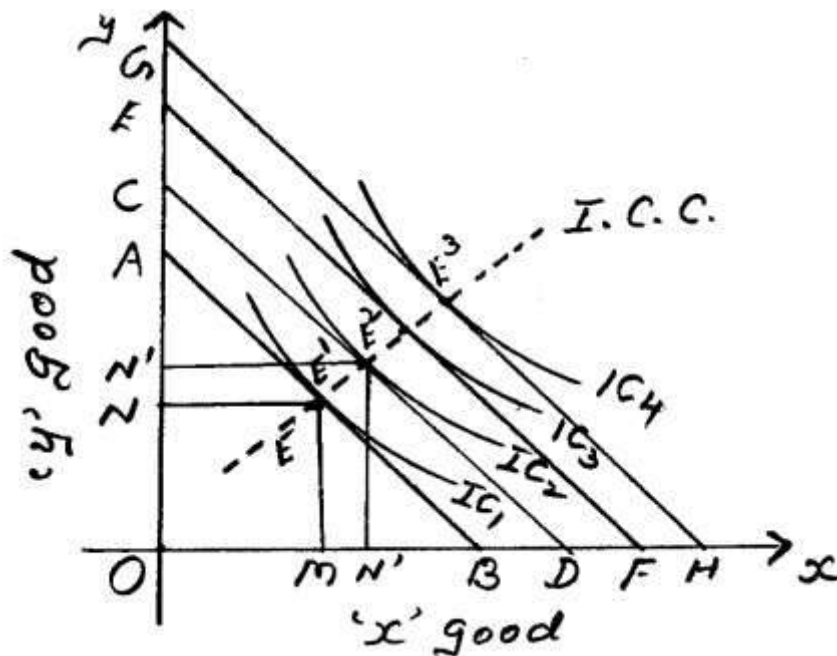
The consumer may become better off or worse off because of a change in his money income. Prices of goods and services remaining constant. His satisfaction will either increase or decrease based on larger or smaller size of money income at his disposal. The result of this type is called as income effect. In other words, it refers to a change in his level of satisfaction on account of a change in his money income. Under income effect consumer is allowed to become either better off or worse off as the case may be. If the income increases he will buy more of both the goods and thus will become better off. In the same manner his income may fall, as result of which he would buy less of both the goods, which would reduce his level of satisfaction making him worse off prices remaining constant. When he becomes better off, he will reach on higher IC and when he becomes worse off he will be placed on lower IC.

Income effect can be negative also if the commodity is inferior. Even after increase in income he may buy less quantity of the commodity, which is inferior. However it is difficult to name certain goods to be inferior. What is inferior to one person may not be inferior to other person. Therefore, taste and preferences along with size of money income label certain goods as inferior one.

Assumption of Income Effect

1. Money income alone changes; rise or fall.
2. Prices of goods and services remain constant throughout.
3. Consumer is rational and tries to maximize his satisfaction.
4. Tastes and preferences remain constant.
5. The consumer has no control on market conditions.

In the light of the above assumptions let us examine the income effect in case of normal good with a diagram below:



I.C.C. = Income
Consumption
Curve

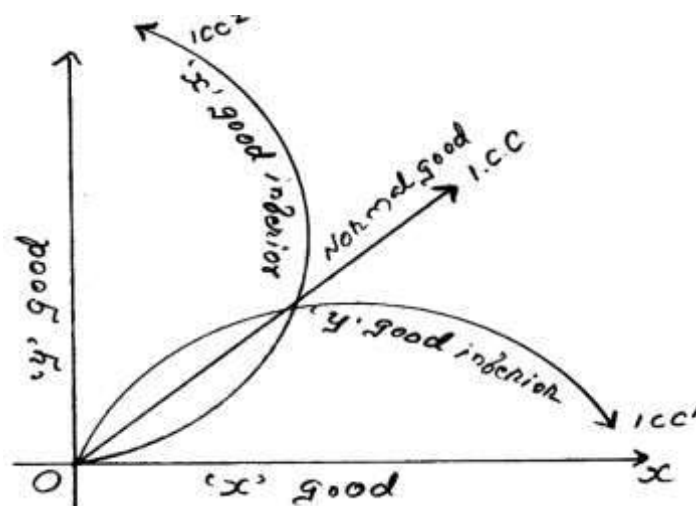
Income effect is to be studied with the help of ICs' map and price line. ICs number one to four represents consumer's ICs map highlighting his tastes and preferences whereas price lines AB, CD, EF and GH present different levels of money income. As the money income of the consumer increases, he moves from IC₁ to IC₄ consuming more of both the goods and becoming better off. And when his money income falls from GH to AB price line he is shunted to lower and lower ICs, thus making him worse off as he buys less and less of both the goods. The consumer attains equilibrium at E, E¹, E² and E³ tangency points on AB, CD, EF, GH price lines as his money income goes on increasing. He becomes better and better off. When his money income falls he becomes worse off when he becomes better off, he is placed on higher ICs and in case of worse he is placed on lower ICs. Thus under income effect the consumer is allowed to become either better off or worse off.

2.9 Income Consumption Curve (I.C.C.)

Since, the price line represents the money income of the consumer or in other words, his purchasing power, the price line in its each point represents the affordability of the limited purchasing power within which the means of income. The combination of goods at E point will give him the maximum satisfaction because, it is at this point it will touch the indifference curve.

The other points of which are beyond his reach with his limited income. The combination of 'X' and 'Y' goods at point E will be his obvious choice because it satisfies both his affordability as well as preference. Similar points of intersection can be considered at the successive price line.

A line which is drawn through all the equilibrium points such as E, E^1 , E^2 and E^3 is called as income consumption curve. It shows how the consumer's purchases react to change in money income when prices remain constant. If the prices were different the ICC would take different shape and position. It is also defined as the locus of equilibrium points at different levels of consumer's money income. It traces out income effect on the quantity of goods purchased. I.C.C. can be positive or negative. It is positive when an increase in money income is accompanied by increase in consumption of goods and services and negative when an increase in money income is accompanied by reduction in consumption of goods. If I.C.C. slopes backwards towards 'y' axis, then 'x' good is inferior good and if it slopes towards 'x' axis, 'y' good is inferior. In case of normal goods it slopes upwards. The following diagram depicts the shapes of I.C.C.



One thing must be noted that IC approach does not tell which goods are inferior. It merely describe the phenomenon.

2.10 Substitution Effect

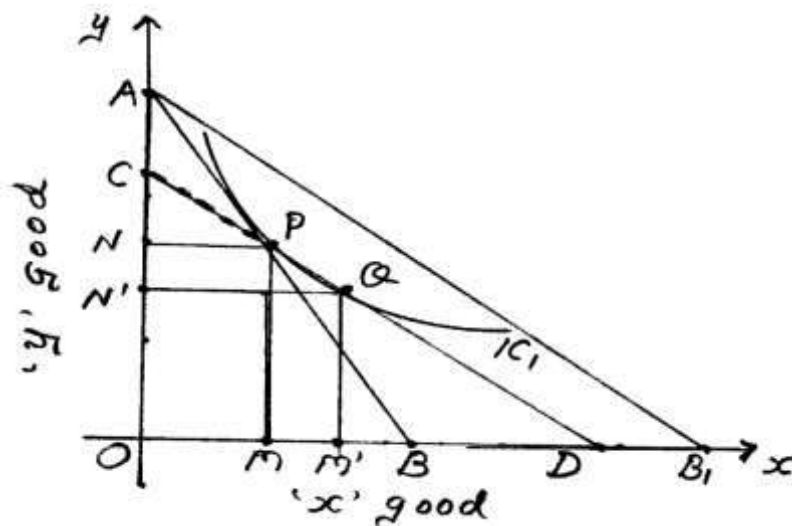
While explaining income effect, we held that prices remain constant but it is not a realistic assumption. Prices always change and therefore consumer's real income undergoes changes. It may rise or fall. When prices rise, real income of the consumer falls, money income remaining constant.

Likewise when prices fall, real income of the consumer rises. But under substitution effect we shall be analyzing the effect of fall in price of one of the goods, real income of the consumer keeping it constant. In other words when prices rise or fall, the consumer's money income is also changed in such a way that he is neither better off nor worse off than before so he will find it worth his while to buy more of that good which has become relatively cheaper.

He will substitute relatively cheaper good for relatively costlier good. The result of this type is known as a substitution effect.

In substitution effect, the consumer's real income remains the same but he rearranges his purchases in such a way that he is neither better off nor worse off than before as a result of change in price of one of the goods. The following diagram illustrates the phenomenon.

In the above figure, AB is the original price line. IC is tangent at 'P' point so the consumer is in equilibrium at 'P' point where both the conditions of equilibrium are fulfilled. The consumer consumes ON quantity of 'y' good and OM quantity of 'x' good. Now we suppose the price of 'x' falls and 'y' remains constant. That is why AB, new price line is drawn to show fall in price of 'x' good. Now 'x' has become relatively cheaper and 'y' good relatively costlier. If his money income kept intact, he will become better off.



But under substitution effect consumer is not allowed to become better off. Therefore, his money income is cut in such a way that his real income remains the same. So that he is neither better off nor worse off. To show cut in money income, a new price line CD is drawn parallel to AB, price line to keep his real income intact. Now he will choose that combination which will lie on CD price line.

Since 'x' has become relatively cheaper he will buy more of 'x' good and less of 'y' good. In other words, he will substitute relatively cheaper good for relatively costlier good by rearranging his purchases in accordance with change in prices. Thus, he substitutes MM' quantity of 'x' good for NN' quantity of 'y' good and attains his new equilibrium at Q point on CD price line and on the same IC curve. He moves from 'P' equilibrium to 'Q' equilibrium in favour of 'x' good.

The amount by which his money income is changed so that he is neither better off nor worse off than before is called as the compensating variation in income. In other words, it is a change in money income of the consumer which is just sufficient to compensate him for a change in the price of 'x' good. Hicks Allen substitution effect takes place on the same IC whereas Slutsky's substitution effect takes place on a different IC. Substitution effect is always positive. It is positive because general tendency of the people is that to buy that good more which is relatively cheaper and that good less which is relatively costlier.

2.11 Price Effect

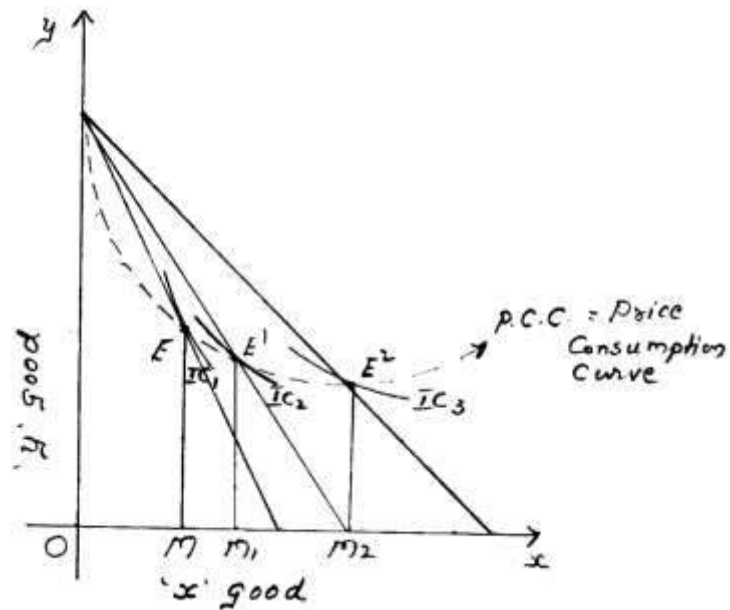
Price effect studies the effect of a change in real income of the consumer on his purchases. A change in real income may be either an increase or a decrease in the real income of the consumer due to fall or rise in prices of goods. Therefore, under price effect the consumer is allowed to become either better off or worse off as the case may be.

Assumptions

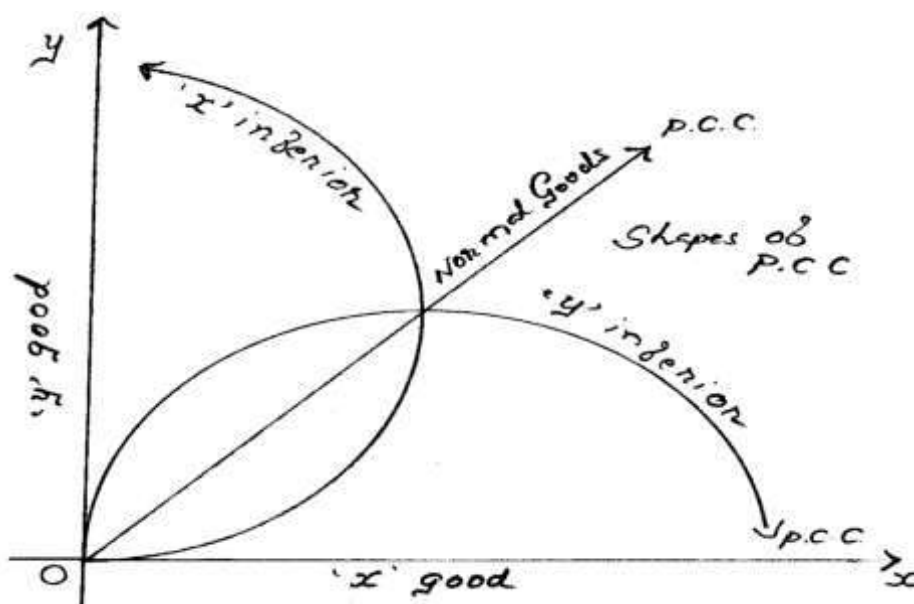
1. Money income remains constant
2. Prices rise or fall; as result of which real income of the consumer rises or falls
3. The consumer spends his entire money income
4. The consumer is rational
5. Price of 'x' falls and price of 'y' remain

When price of 'x' falls, real income of the consumer rises. This means that with the same money income he can buy more of both the goods and becomes better off. An increase in real income produces two effect simultaneously viz. income effect and substitution effect. Thus the price effect is the combination of income effect and substitution effect. Under price effect, the consumer is allowed to become either better off or worse off as the case may be.

We suppose price of 'x' falls and price of 'y' remains constant. Therefore 'x' becomes relatively cheaper in terms of 'y' and 'y' costlier in terms of 'x'. Since substitution effect is always positive, the consumer will buy more and more of 'x' good as price continues to fall. Price lines AB, AB₁, AB₂, AB₃ show fall in price of 'x' good. Therefore, the consumer becomes better and better off and reaches higher and higher ICs. The following diagram illustrates the phenomenon.



The curve which passes through all the equilibrium points such as E , E^1 and E^2 is called as price consumption curve. It traces out the price effect on the purchase of the consumer. It shows how changes in price of 'x' good will affect the consumer's purchases of 'x', price of 'y', tastes and preferences and money income remaining constant. It is locus of equilibrium points at different levels of prices or real income. The P.C.C. may shift backward towards 'y' axis if 'x' good becomes inferior or it may slope downward towards 'x' axis if 'y' good is inferior and it may slope upward if both the goods are normal goods.



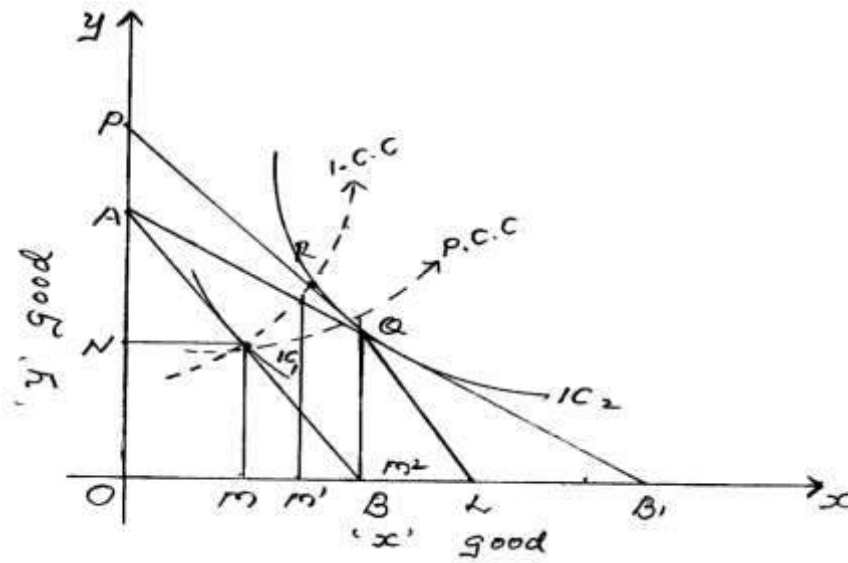
2.12 Breaking up Price Effect

Price effect is combination of income effect and substitution effect. Substitution effect is always positive but nothing can be said about income effect. It can be negative also. Therefore, it is necessary to decompose price effect into income effect and substitution effect. When price of 'x' falls, the consumer's real income increase, money income remains constant. Therefore, the consumer either buys more quantity of both the goods or relatively cheaper good and will become better off. When he becomes better off I.C.C. curve takes him on a higher IC. This shows income effect is positive. Now, he buys more of both the goods. He reaches second IC. His movement from IC to IC₂ is due to positive income effect. However, he won't be at 'R' point in equilibrium permanently as $MRS_{xy} > \frac{P_x}{P_y}$ at 'R' equilibrium. Moreover, substitution

effect is stronger than income effect. Therefore, he substitutes some units of 'x' good for some units of 'y' good. It is done because 'x' has become relatively cheaper and 'y' relatively costlier as a result of fall in price of 'x' good. It is a general tendency of the consumer to buy that commodity more which is relatively cheaper. That is why he slides down along the IC₂ towards right. Now he moves from 'R' equilibrium to 'Q' equilibrium point on IC₂. the movement from 'R' to 'Q' is due to positive substitution effect. Thus, price effect is made of income effect and substitution effect.

$$\text{Price} = \text{Income effect} + \text{Substitution effect}$$

This phenomenon is illustrated in the following diagram:

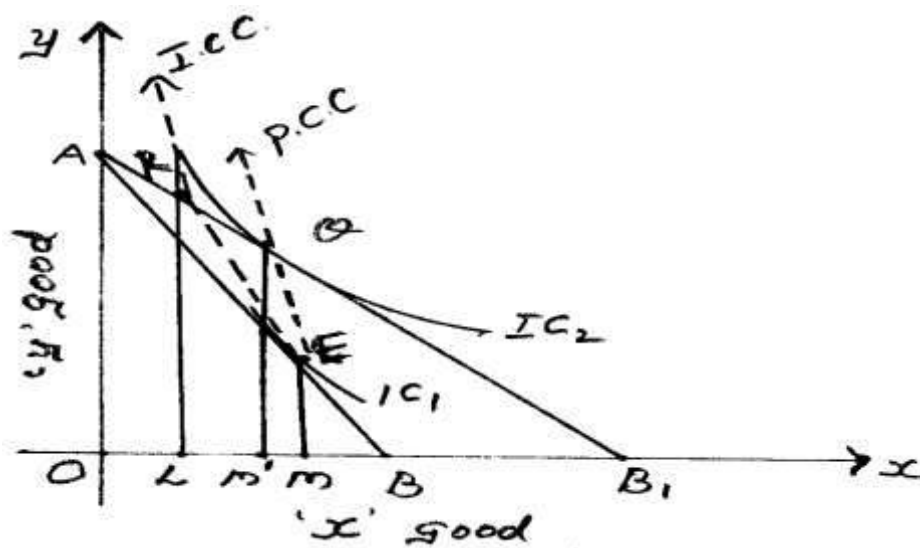


Price effect = I.E. + S.E.

$$MM_2 = M M_1 + M' M^2$$

2.13 Giffen's Good

In case of Giffen's good negative income effect is so large that it outweighs completely positive substitution effect as a result of which consumer buys less than before. The following diagram depicts the phenomenon.



P

$$\begin{aligned}
 E &= \text{Strong negative I.E.} + \text{P.S.E.} \\
 &= -LM + LM' \\
 &= -M'M
 \end{aligned}$$

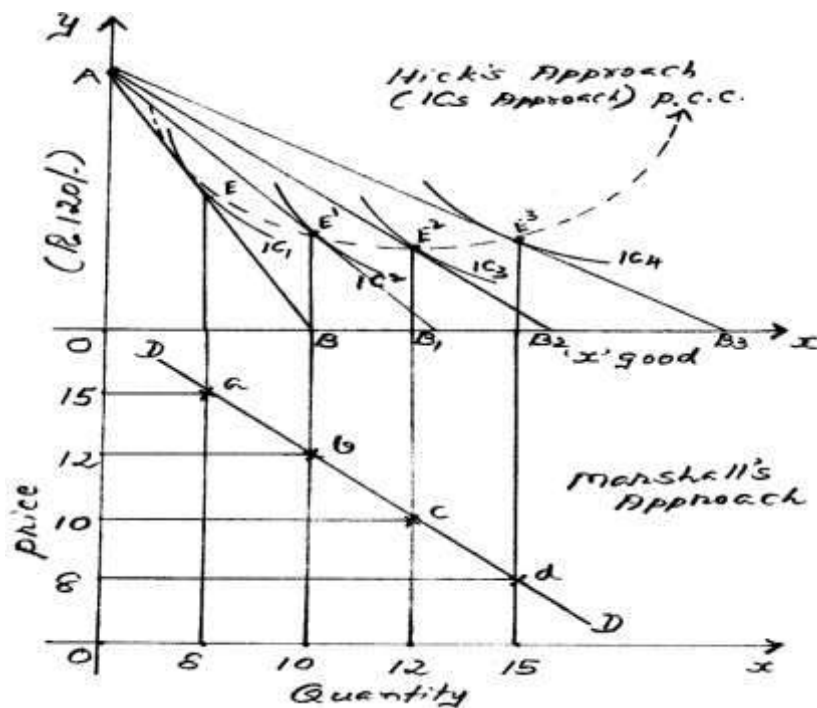
2.14 Derivation of Demand Curve from the P.C.C.

The P.C.C. of the indifference curve approach does not directly relate price with quantity demanded. It does not explicitly express price in money terms. It is so because in the IC analysis price is not explicitly shown on 'y' axis. On the other hand Marshall's demand curve explicitly relates price with quantity demanded. Thus, the demand curve showing the relationship between quantity demanded of a good at its various alternative prices can be derived from the P.C.C. of the indifference curves approach. Instead of price of a good being measured in terms of money, it is measured in terms of a good. For example we measure price of 'x' good in terms of 'y' good and price of 'y' in terms of 'x' good.

Thus the P.C.C. also expresses the same relationship i.e. inverse between price and quantity demanded in case of normal good and direct in case of inferior and Giffen's goods. The following diagram depicts the derivation of demand curve from the P.C.C.

Assumptions

1. The consumer possesses Rs.120/- as his money income
2. Price lines AB, AB₁, AB₂, AB₃ are different alternative price lines representing Rs.15/-, Rs.12/-, Rs.10/- and Rs.8/- per unit.



The above graph shows that the P.C.C. curve of the IC analysis is the same as Marshall's demand curve. Normally demand curve slopes downward from left to right due to positive income effect. Both the positive effect extend demand for the good.

Limitations of ICs Analysis

1. Unrealistic assumptions
2. Combination of two goods may lead to absurdity like shoes and shirts.
3. In case of more than two goods, IC analysis cannot be put to use.
4. The assumption of continuity is also not true.
5. No provision for uncertainty.
6. The approach is highly introspective rather than behavioural.
7. Prof. Robertson calls the IC approach as old wine in new bottle!

2.15 CONSUMER SURPLUS

2.15.1 Law of diminishing utility:

The concept of consumer surplus is based on theory of diminishing utility. The law of diminishing utility means that total utility increases at the decreasing rate after a point is reached in the consumption level. As we consume glasses of water when we are thirsty, the total utility from consuming second or the third glass of water may reflect in increase in total utility at an increasing rate. But after point, we are less inclined to take more water. The fourth glass of water may, therefore, add to our total utility only at decreased rate. That is what we call the marginal utility is less as we consume fourth one. The fifth glass of water correspondingly may yield a still less marginal utility. If we project the rate of decreasing utility in a geometrical curve, it represents the law of diminishing utility.

The idea of consumer's surplus was developed by French engineer economist A.J. Dupuit in 1844. But it was improved and popularized by English economist Dr. Alfred Marshall in 1879 in his book named "Pure theory of Domestic Values".

2.15.2 Meaning and Definition of Consumer's Surplus

We buy goods and services because they give us utility. But at the same time we lose some utility in terms of money. Payment of prices means parting with money in exchange of goods and services. This causes disutility to the consumer. In the beginning utility gained is higher than the utility lost. Since the consumer being rational goes on buying units of the commodity as long as utility gained is higher than utility lost. In terms money paid. Utility goes on falling, as more units of the same commodity are consumed but utility of units of money remains constant. Thus a point will reach when utility gained is equal to utility lost in terms of price. At this point, the consumer stops purchasing additional units of that commodity. Beyond this point utility lost is greater than utility gained. In other words, a rational consumer buys the commodity only if he expects a surplus of utility and this surplus is called consumer's surplus. It is defined as the difference between the satisfaction gained and satisfaction lost. The satisfaction that the consumer obtains from the consumption of a commodity is measured by the price he would pay for it rather than go without it. While satisfaction he loses in procuring that commodity is measured in terms of price he actually pays for it. According to Dr. Alfred Marshall, "the excess of the price which he would be willing to pay rather than go without the thing over that which he actually does pay, is the economic measure of this surplus satisfaction. It may be called consumer's surplus." In other words, it can be called as the difference between the expected price for a commodity in terms of price and the actual price that the consumer pay for it rather than go without it.

2.15.3 Measurement of Consumer's Surplus

It is derived from the demand curve or the marginal utility curve. The following diagram and table illustrate the concept. Let us suppose that our consumer has only five rupees to spend on apples. Price of apple is hundred paise per unit which remains constant. As the consumer goes on buying units of apple his utility gained is much more than the utility lost. At the 5th unit of apple, utility lost (100) becomes equals to utility gained (100 units). It is at this point he would stop buying further as beyond 5th unit, the utility lost would be greater than utility gained.

The following table explains the whole thing.

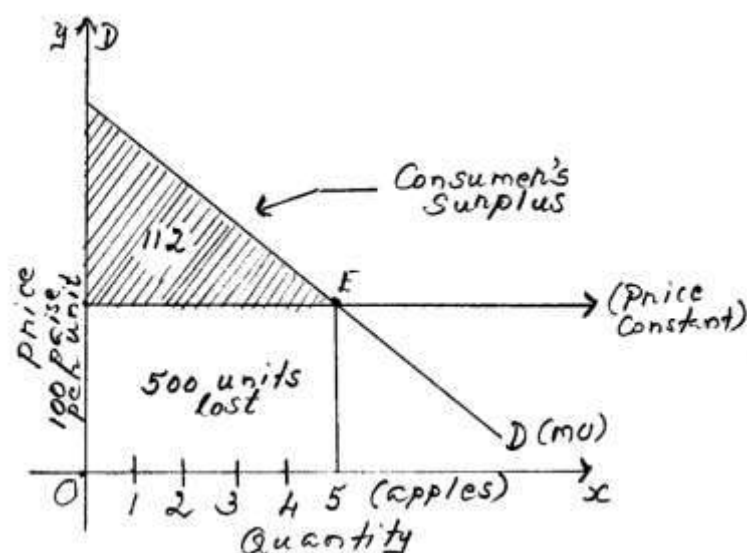
Units of Apple	No.	Price in Paise	Consumer's Surplus
1	150	100	50
2	130	100	30
3	120	100	20
4	112	100	12
5	100	100	0

Total - 5 Units - 612 - 500 = 112 Consumer's surplus

The surplus derived by him from five units of apple is 112. The total utility derived is 612 units and utility lost in buying five units is 500. Thus, total consumer's surplus is 612 - 500 = 112 units.

$$\begin{aligned}
 \text{C.S.} &= \text{Total utility gained} - \text{Total utility lost} \\
 &= 612 - 500 \\
 &= 112 \text{ units}
 \end{aligned}$$

But one must keep in mind the consumer's surplus derived from different commodities is different. Some commodities yield higher surplus than others. For instance, salt, match box, newspapers etc. People enjoy greater surplus on these commodities than luxury goods. The concept of individual consumer's surplus can very well be applied to the society as a whole.



Price is measured along 'ox' axis which is hundred paise per unit that remains constant and quantity demanded along 'oy' axis. Demand curve DD is based on MU schedule. The price of apples assumed to be fixed and remains constant for all units. Therefore, the consumer loses $100 \times 5 = 500$ units whereas he gains $150 + 130 + 120 + 112 + 100 = 612$ units. Hence consumer's surplus = Total satisfaction (u) - Total satisfaction sacrificed (DO) in buying apples $\therefore 612 - 500 = 112$ units c.s.

Assumptions

1. The fixed relationship between utility and satisfaction, but utility is different from satisfaction.
2. MU of money remains constant through out the process of exchange. No comparison is made in the absence of this assumption and it becomes difficult to measure the consumer's surplus.
3. The concept of consumer's surplus is based on cardinal measurement of utility which is not true.
4. DD schedule and MU schedule are assumed to be the same but they are not.
5. The concept ignores the differences in incomes, fashions, tastes and preferences between consumers.

Importance

1. The concept is made use of public finance in the matter of taxation. Taxes are imposed on those commodities on which people enjoy very high consumer's surplus.
2. It helps producers to decide upon pricing policies.
3. It is also helpful to international trade.
4. International comparison of economic welfare can also be possible through consumer is surplus.

Limitations

1. It is based on certain assumptions which are not tenable in actual life. Therefore, it is said that the concept is based on unrealistic assumptions.
2. Cardinal measurement of utility is not possible. Utility is psychic and hence cannot be quantified.
3. Marginal utility of money cannot remain constant.
4. It is also said utility is not independent. It is inter-dependent.
5. Differences in income, tastes and preferences cannot be ignored.
6. There is no definite relationship between utility and satisfaction as visualized by Marshall.

UNIT III

DEMAND AND SUPPLY

3.1 DEMAND

In economics, demand has a distinct meaning. Supposing, you desire to have a car, but you do not have enough money to buy it. Then desire will remain just a wishful thinking; it will not be called demand. If you have enough money, you do not want to spend it on car, demand does not emerge. The desire becomes demand only when you are ready to spend money to buy the car. Thus, Demand for a commodity refers to the desire to buy a commodity backed with sufficient purchasing power and willingness to spend. Hence demand is equal to desire plus purchasing power plus willingness to pay. Demand for a commodity is always refers to price. At higher price quantity demanded will be low, and at lower price quantity demanded will be high.

Demand schedule:

It is a numerical tabulation, showing the quantity that is demanded at different prices. It expresses the relation between price and demand of a commodity. A demand schedule can be of two types –

- Individual Demand Schedule
- Market Demand Schedule

Individual Demand Schedule:

Individual demand schedule is defined as the quantity of a given commodity which a consumer will buy at all, possible price, at a particular period of time.

Table 3.1-Individual demand schedule for Apples

Price of Apples (Rs.)	Quantity demanded (Kg)
10	4
20	3
30	2
40	1

In the above table we can see that as the price of apples increases, quantity demanded is decreases.

Market demand Schedule

In every market, there are several consumer of a commodity. Market demand schedule is one that shows total demand of all the consumers in the market at different price of the commodity.

Table 3.2 - Market demand schedule for Apples

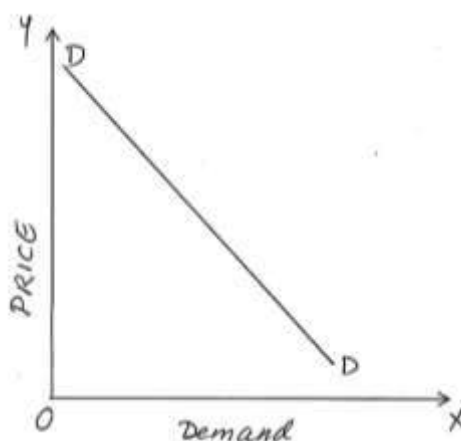
Price (Rs.)	Ravi's Demand	Sahil's Demand	Market Demand
10	4	5	4+5=9
20	3	4	3+4=7
30	2	3	2+3=5
40	1	2	1+2=3

Table 3.2 shows that with the rise in the price of apples the market demand for apples is decreasing.

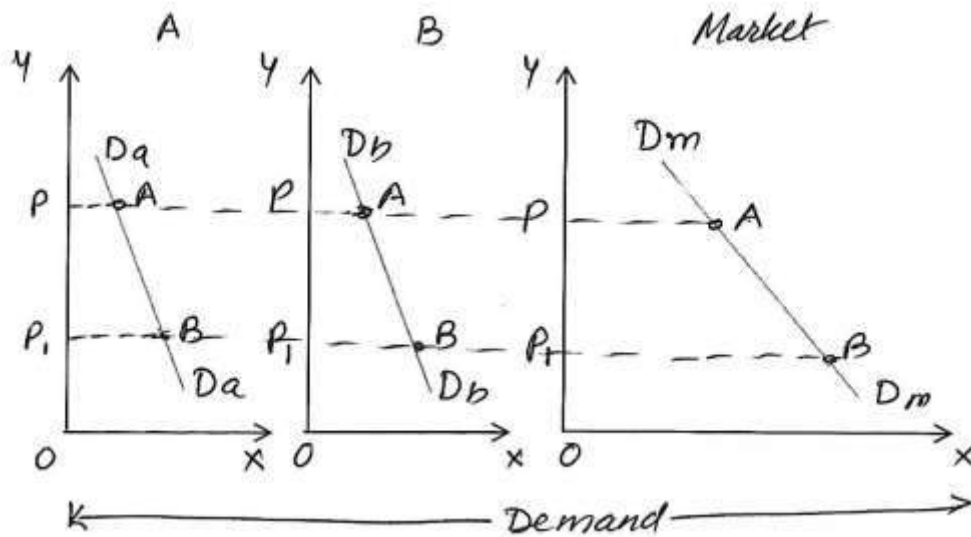
Demand Curve

Demand Curve is the graphical representation of demand schedule expressing the relation between different quantities demanded at different possible prices of the commodity. There are two type of demand curve:

- Individual Demand Curve: It is a curve showing different quantities of a commodity that one particular buyer is ready to buy at different possible price of the commodity at a point of time. Individual demand curve is shown in figure 3.1-



- Market demand Curve: The market demand consists of the total quantity demanded by each individual in the market. The market demand curve is formed by computing the horizontal summation of the individual demand curves for all consumers. This process is illustrated in Figure 3.2.
- We take a hypothetical case in which there are only two consumers in the market



namely, Mr Ravi and Mr Sahil. The total quantity demanded in the market is just the sum of the quantities demanded by each individual. The market demand curve is derived by adding together the quantities demanded by all consumers at each and every possible price.

Both individual and market demand curves slope downward from left to right indicating an inverse relationship between price and quantity demanded of goods.

Determinants of demand:

Demand function is show the relation between demand for a commodity and its various determinants. The determinants are also known as the factors which affect demand of a commodity. It shows how demand is related to different factors like price, income etc. the demand function can be expressed as follows-

$$D = f(P, P_r, Y, T, FE, S, W, \dots)$$

where,

P – Price of the commodity

P_r – Price of related goods

Y – Income of the consumer

T – Taste and preference

FE – Future expectations of the consumers

S – Size and composition of the population

W – Weather condition

The determinants are explain below -

- i) **Price of the Commodity:** Quantity demanded and the price of the commodity is inversely related. It means that with the rise in the price of commodity, quantity demanded decreases and with the fall in the prices there is a rise in the quantity demanded.

- ii) **Price of the related goods:** Demand for a commodity is also influenced by change in the price of related goods. There are two types of related goods - Substitutes and Complements. **Substitute Goods** are those goods which can be the goods which can be used in place of each other, such as tea and coffee. If an increase in the price of one causes a rise in the demand for the other then the two goods are substitutes. On the other hand the complementary goods are those goods which are consumed together.

If an increase in the price of one goods causes the reduction in the demand for the other then the two goods are complementary goods. Car and petrol are complimentary goods.

iii) Income of the consumers: Normally there is a direct relationship between the income of the consumer and his demand for the commodity. For a **normal good** with the rise in consumer's income demand will rise and vice versa. Goods like television sets, cars, clothes etc are considered normal goods. If the demand for a goods decreases with the rise in consumers income then that goods are known as **Inferior Goods**. For e.g. coarse grain like Jowar, Bajra, Maize, etc. If the income of the consumer rises she will reduce the consumption of these goods.

If the demand increases with an increase in income and thereafter it remains constant irrespective of the level of income then the goods in question are known as **necessities** for example salt, match box, etc.

iv) Consumer's Taste and Preference: Consumer's demand for the goods is greatly influenced by the taste and preferences which in turn depend on social customs, habits, fashion, etc.

Consumer's Expectation: If a consumer expects a fall in the price of a commodity in a near future, then he will postpone his present demand and if he anticipates a rise in price then he will increase his current demand. For instance if you are thinking about purchasing a computer and you obtain information that may lead to a rise in the future price then you will buy the computer today itself. However, a reduction in the expected future price will result in a reduction in current demand.

If expected future income rises, demand for many goods today is likely to rise. On the other hand, if expected future income falls, individuals may reduce their current demand for goods so that they can save more today in anticipation of the lower future income.

v) Size and Composition of Population: Larger the population, larger is likely to be the number of consumers thus greater will be the demand. The composition of population refers to number of children, adults, males, females, etc. in the population. If the number of children are more in the population then more of baby products will be demanded whereas in an education township like Vallabh Vidya nagar in Anand district of Gujarat where 50 to 60 per cent of the population is of students (between the age group of 18 to 24 years) more of stationary, hostels, fast foods etc will be demanded. The type of people inhabiting the country will also influence the consumer demand. Since the market demand curve consists of the horizontal summation of the demand curves of all buyers in the market, an increase in the number of buyers would cause demand to increase. As the population increases, the demand for food, houses, cars and virtually all other commodities, is expected to increase. A decline in population will result in a reduction in demand.

vi) Weather condition: Another factor which affects demand is the weather conditions. For example during summer there will be greater demand for sun glasses, cotton wears, ice creams etc, whereas during rainy season the demand for umbrellas and raincoats will increase.

Law of Demand: Law of demand expresses the functional relationship between the price of commodity and its quantity demanded. It states that the demand for a commodity is inversely related to its price, other things remaining constant. In other words a fall in price of a commodity will lead to a rise in demand of that commodity and a rise in price will lead to fall in demand. Thus there is an inverse relationship between the price of a good and the quantity demanded in a given time period, ceteris paribus.

Assumption:

The law of demand is based on certain assumptions. These are as follows -

- a. There is no change in the Income of the people.
- b. Taste, preference and habits of consumers unchanged.
- c. Prices of related goods i.e., substitute and complementary goods remaining unchanged
- d. There is no expectation of future change in price of the commodity.
- e. The commodity in question is not consumed for its prestige value.

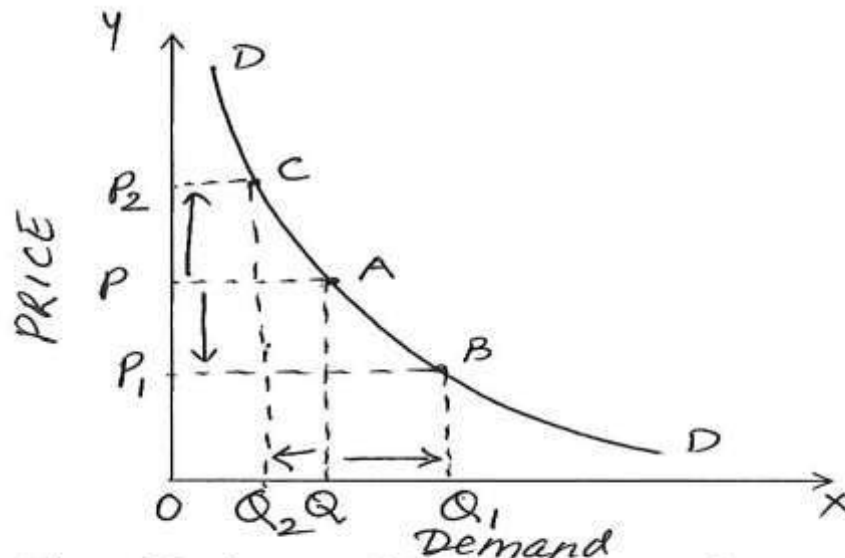


Figure 3.3 – inverse relationship between price and quantity demanded

As shown in figure 3.3 the relationship between price and quantity demanded is represented by a demand curve. At price OP the quantity demanded is OQ when the price increase from OP to OP_1 quantity demanded decreases from OQ to OQ_1 . Thus when the price increases, demand decreases and vice versa. Demand curve slopes down ward from left to right showing inverse relationship between price and quantity demanded. This downward slope of demand curve is expression of law of demand.

Reasons for downward slope of demand curve:

Downward slope of demand curve indicates that consumers buy more of a commodity at lower prices and vice versa. Thus, there is Negative relationship between price and quantity demanded. The reasons for downward slope of demand curve are –

(i) Law of Diminishing Marginal Utility: This law states that when a consumer buyers moreunits of same commodity, the marginal utility of that commodity continues to decline. The consumer will buy more of that commodity when price falls. When lessunits are available the utility will be high and consumer will prefer to pay more for that commodity.Thus the demand would be more at lower prices and less at a higher price and so thedemand curve is downward sloping.

(ii) Income effect: As the price of the commodity falls the real income of the consumer will increase and consumer can increase his consumption. He will spend less to buy the same quantity of goods. On the other hand, with a rise in price of the commodities the real income of the consumer will reduce and consumer will buy less of that good.

(iii) Substitution Effect: When the price of a commodity falls, the price of its substitutes remaining the same, the consumer will buy more of that commodity and this is called the substitution effect. The consumer will like to substitute cheaper good for the relatively expensive good. On the other hand, with a rise in price the demand falls due to unfavorable substitution effect. It is because the commodity has now become relatively expensive which forces the consumer's to buy less.

iv) Number of uses of a Good: Goods which can be put to a number of uses like milk which can be used for making tea, curd, cold drinks, paneer etc. When the price of milk commodity is higher, it will sparingly used. On the other hand, if the price of milk decreases consumer will use it for a variety of purposes leading to a rise in demand. Thus the demand for the product with the change in price is determined by the number of uses of a commodity.

v) Change in number of buyers: Lower price will attract new buyers and higher price reduces the buyers. Such buyers are known as marginal buyers.

Owing to the above mentioned reasons the demand falls when price rises and so the demand curve is downward sloping.

Exceptions to the law of demand:

Law of demand has some exceptions as well. There are some goods whose demand increases when price rises and decrease when price falls. They are –

- i) Conspicuous Goods** These are the goods which are purchased by the consumers to project their status and prestige. Expensive cars, diamond jewellery, etc. are such goods. The conspicuous goods are purchased more at a higher price and less at a lower price.
- ii) Giffen Goods :** Giffen goods named after Sir Robert Giffen. These are inferior goods whose demand increases even if there is a rise in price. For e.g.: - coarse grain, clothes, etc.
- iii) Share's speculative Market :** It is often found that people buy shares of those companies whose price is rising in anticipation of further rise in price. Whereas, they buy less shares in case the prices are falling as they expect a further fall in price of such shares. Here the law of demand fails to apply.
- iv) Bandwagon effect:** Here the consumer demand of a commodity is affected by the taste and preference of the social class to which he belongs to. If sports car fashionable among business community, then as the price of sports cars rises, these consumers may increase the demand for such goods to project their position in the society.
- v) Veblen Effect:** Many a times consumer judge the quality of a product by its price. Consumer feels that a higher price means better quality and lower price means poor quality. So the demand goes up with the rise in price for example branded consumer goods.

3.2 Change in Quantity Demanded and Change in Demand

A change in **quantity demanded** refers to increase or decreases in quantity purchased of a commodity in response to decrease or increase in its price, other things remain constant. It is expressed through movement along the demand curve. On the other hand a **change in demand**, refers to increase or decrease in quantity demanded of a commodity in response to change in factors other than price. It is expressed through shift in demand curve-forward shift or backward shift.

(a) Movement of Demand curve or Extension and Contraction of Demand or change in quantity demanded.

With the change in the price of a commodity the quantity demanded will increase or decrease depending upon the fall or rise in the price of a commodity alone, *ceteris paribus*. This is called movement along the demand curve or extension or contraction of Demand. As shown in figure 3.4, when the price increases, other factors affecting demand remain constant, the quantity demanded will decrease and vice versa

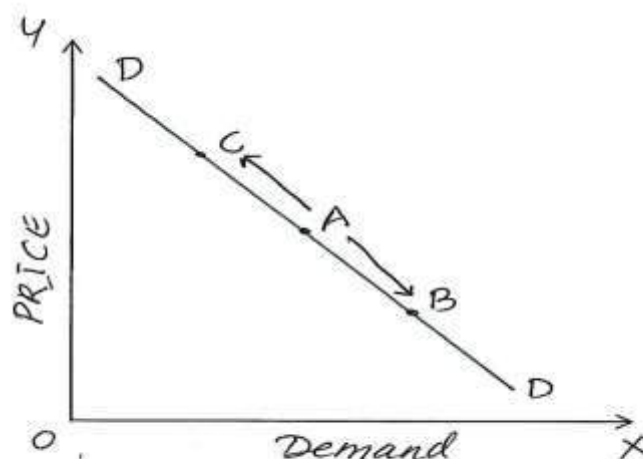


Figure 3.4: Change in quantity demanded

The figure 3.4 show that when price increases from OP to OP_1 the demand decreases from OQ to OQ_1 . Thus with the fall in price there is a movement on the demand curve from point A to point B . Similarly with the rise in price from OP to OP_2 the quantity demanded decreases from OQ to OQ_2 causing a shift from point A to point C on the demand curve. The increase in demand due to fall in price is also called extension of demand. The reduction in quantity demanded due to increase in price is known as contraction.

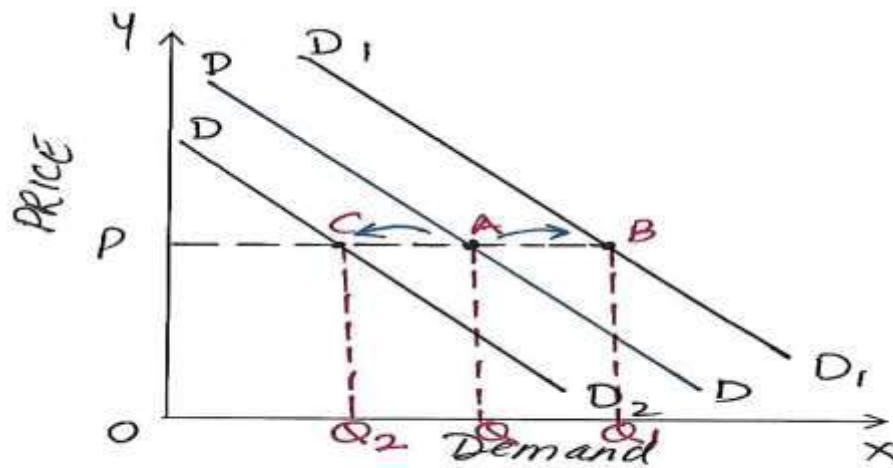


Figure 3.5: Shift in Demand

Change in Demand or shift of demand or Increase and Decrease in demand:

When the quantity demanded a commodity increases or decreases due to change in factors other than price of the product like income of the consumer, price of related goods, etc. it is known as change in demand or shift in demand.

In Figure 3.5 DD is the original demand curve and the consumer in buying OQ units of the commodity at price OP. For example with an increase in the income of the consumer, price of the product remains constant, the demand increases the new demand curve is D_1D_1 . This new curve is an outward shift in the demand curve and shows an increase in the demand for the product from OQ to OQ_1 . Similarly due to the fall in the income of the consumer, the demand curve will shift inward from DD to D_2D_2 . Quantity of good purchased will reduce from OQ to OQ_2 . This is called decrease in demand.

Thus in the above figure quantity demanded has increased from OQ to OQ_1 , the price of commodity remaining constant at OP. This is shown by a right ward shift of the Original demand curve to form new demand curve D_1D_1 . This is called increase in demand. The left ward shift from the original demand curve DD to D_2D_2 is known as decrease in demand, price of the product remains same at OP.

3.3 THEORY OF SUPPLY

Supply is defined as a quantity of a commodity offered by the producer to be supplied at a particular price and at a certain time. Same as demand supply has three elements namely quantity of commodity, particular price and particular time.

The term 'supply' is different from 'stock' of a commodity. The total amount of the commodity which a seller can bring out for sale in the market is his stock. However, producer often does not offer his entire stock for sale in the market. Supply has been defined as that part of the stock of a commodity which is offered for sale at a particular price during a period of time. For example a farmer produces 500 tons of potatoes during a given period. He may offer only 300 tones for sale at Rs 1000 per ton. In this case the stock of potatoes is 500 tons but supply is only 300 tones at a given price.

Individual Supply and Market Supply

Individual supply refers to the quantity of a commodity which a producer is willing to produce and offer for sale. On the other hand, the quantity which all producers are willing to produce and sell is known as market supply. If, at a given price, producer A is willing to sell 200 units of a commodity and producer B is willing to sell 500 units, and then if there are only two firms producing this particular commodity, market supply will be 700 units.

Law of supply

Law of supply states that, other things remaining constant, as the price increases quantity supplied will increase and with the decrease in price the supply will reduce. Thus there is a positive relationship between price of a commodity and its quantity supplied. More is supplied at higher price and less at the lower price. The law of supply is based on following assumptions -

Assumption of the law of supply

- (1) Prices of the factors of production are constant.
- (2) Price of the related goods remain constant
- (3) Technique of production is constant.
- (4) No change in the Objectives of the firm
- (5) Producers do not expect any change in the future price of the product.

The law can be explained with the help of following supply schedule and supply curve.

Supply Schedule

Supply schedule is a table which shows various quantities of a commodity offered for sale at different possible prices of that commodity. There are two types of supply schedule –

- (i) Individual supply schedule, and
- (ii) Market supply schedule.

- (iii) An individual supply schedule shows the different quantities of a commodity that a producer would offer for sale at different prices.

Table 3.3 shows a hypothetical individual supply schedule of apples. When the price of apples is Rs 10 per Kg the producer is interested in selling only 1 kg of apples. As the price rises, supply increases. Thus higher the price higher is the supply.

Table 3.3. Individual supply schedule of Apples

Price of Apples (Rs.)	Quantity supplied (Kg)
10	1
20	2
30	3
40	4

Market supply schedule: Market supply refers to supply of all the producers in the market producing a particular commodity. Firm is an individual unit producing a commodity. A group of firms producing a similar good is called an Industry. Thus, market supply schedule is also referred to supply of the industry as whole.

Table 3.4: Market Supply schedule.

Price of Apples (Rs.)	Supply by Producer 'A' (Units)	Supply by Producer 'B' (Units)	Market supply
10	1	0	1+0=1
20	2	5	2+5=7
30	3	10	3+10=13
40	4	15	4+15=19

From the above table we see that when price of apples is Rs.10 per Kg, then the producer A will supply only 1 kg of apples whereas producer B is not interested any quantity. When price increase to Rs.20, producer 'A' supplies 2 kg and producer 'B' supplies 5 units.

Thus the market supply is $2 + 5 = 7$ Kg of apples. When the price rises to Rs 30 per kg of apples, market supply increases to 13 kg. Thus at higher price the market supply will increase.

Supply curve: Supply curve is a graphic presentation of supply schedule. Supply curve has positive slope which indicates positive relationship between price of a commodity and its quantity supplied.

Same as the supply schedule, supply curve can be divided into

- (i) Individual supply schedule and
- (ii) Market supply schedule.

An individual supply curve is a graphical representation of supply schedule of an individual producer in the market. It slopes upwards indicating positive relationship between price of a product and its quantity supplied. The individual supply curve is given in figure 3.6

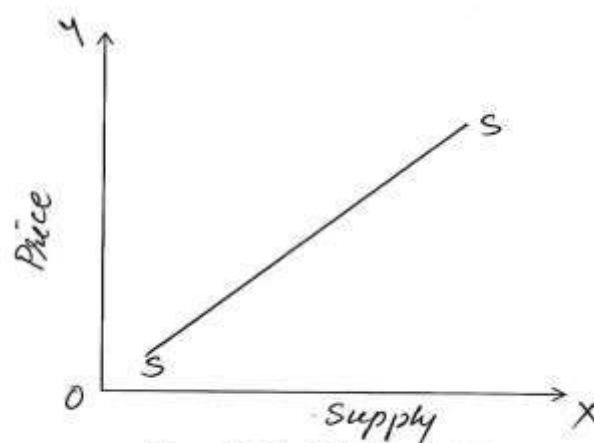
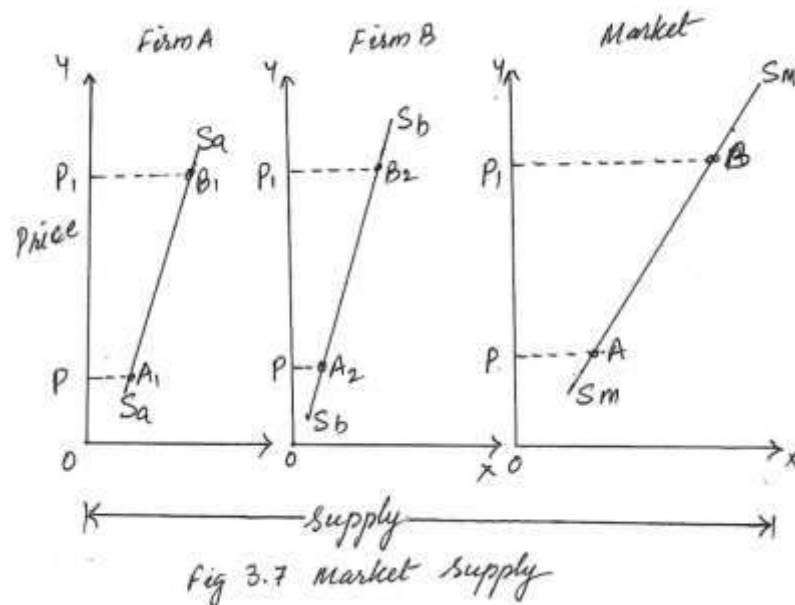


Figure 3.6: Individual Supply Curve

In the above figure SS is the supply curve which has positive slope. It shows that more of a commodity is supplied at a higher price.

Market supply curve as shown in figure 3.7 is the horizontal summation of all individual supply curves. This is also known as the supply curve of the industry as a whole. Supply curve SS is of producer A and S1S1 is the supply curve of producer B.



For deriving the market supply curve, same as the market demand curve explained earlier in this chapter we add the individual supply curves horizontally.

Factor Determining supply or supply function

Supply function represents the functional relationship between supply of a commodity and its various determinants. The supply of a commodity mainly depend on the objective of the firm, price of the commodity, price of related goods, price of factors of production and the state of technology.

Supply function can be written as –

$$S = f(P, O, Pr, F, T, G, \dots)$$

Where

P- Price of the commodity

O – Objectives of the firm

Pr – Price of related goods

I – Input Prices

T – State of Technology

G – Government Policies

E- Future expectation of the prices

F – Number of sellers in the market

N – Natural Factors

The above mentioned determinants of supply are explained below –

- (i) Price of the commodity (P):** With change in the price of the product the supply changes. When the price increases, producer increase the supply and vice versa. With no change in cost of production, higher the price, higher will be the profit margin. This will encourage the producers to supply larger quantity at higher prices. When the price decline the supply will also decline.
- (ii) Objectives of the firm (O):** Firms have several objectives such as profit maximization, sales maximization, employee satisfaction maximization etc. If the objective is to maximize profit, then higher the profit from the sale of a commodity, the higher will be the quantity supplied by the firm and vice-versa. Thus, the supply of goods will also depend upon the priority of the firm regarding these goals and the extent to which it is prepared to sacrifice one goal to the other.
- (iii) Expectation about future prices (E):** If the producer expects an increase in the future price of a commodity, then the present supply will reduce as producer will stock the goods to sell in future at higher prices. On the contrary if he expects a fall in future prices then he will increase the present supply.
- (iv) Input Prices (I):** Supply depends upon the prices of inputs like raw materials, labour and other inputs. Any rise in the input cost will reduce the profit margin and ultimately lead to a lower supply. However, with the fall in input prices, profit margin will increase and the supply will also increase.

- (v) State of Technology (T):**An improved and advanced technology is used for the production of a commodity will reduce its cost of production and increases the supply. On the contrary, outdated and old technology will increase the cost of production and reduced supply.
- (vi) Government policies (G):**Policies of Government such as fiscal policy which leads to imposition of taxes, excise duty, sales tax etc will affect the production of commodities and supply adversely. Any reduction in the taxes will increase the supply. Subsidy policy also influences the supply of a commodity. When government increase the subsidy the profit margin will increase and supply will increase.
- (vii) Prices of the related goods (Pr):**An increase in the prices of related goods other commodities makes the production of that commodity whose price has not risen relatively less attractive we thus, expect that other things remaining the same, the supply of one good falls as the price of other goods rises. For instance a farmer produces bananas as well as potatoes his farm. If the price of potatoes increases he will grow more of potatoes and less of bananas. Hence the supply of bananas will reduce.
- (viii) Number of Sellers in the market (F):**Market supply is the sum total of the supply by number of individual suppliers. Larger the number of the firms in the market the greater will be the supply. A decrease in the number of firms reduces the supply and vice versa.
- (ix) Natural factor (N):**Natural factors too affect the supply. In case of natural calamities like flood, drought, earthquake etc. the supply of a commodity especially of agricultural products is adversely affected.

Exceptions to the Law of Supply

- (i) **Agricultural Goods:** For agricultural goods it is not possible for the supply to be adjusted to market conditions. As the production and supply of agricultural goods is largely dependent on natural factors like rainfall, temperature etc. and it is mostly seasonal in nature it cannot be increased with a rise in price.
- (ii) **Rare Objects:** The supply of certain commodities like rare coins, classical paintings, old manuscripts, etc. cannot be increased or decreased with the change in price. Therefore, such goods have inelastic supply.
- (iii) **Labour Market:** with a rise in wages workers will work for less number of hours, and will prefer leisure over work. Thus the labour market, the behavior of the supply of labour goes against the law of supply.

Change in Quantity Supplied and Change in Supply

A change in **quantity supplied** refers to change in quantity purchased of a commodity in response to change in price, other things remain constant. It is expressed through movement along the Supply curve. On the other hand a **change in Supply** refers to change in quantity supplied of a commodity in response to change in factors other than price of the commodity. It is expressed through shift in Supply curve-forward shift or backward shift.

(a) Movement of Supply curve or Extension and Contraction of Supply or change in quantity Supplied.

With the change in the price of a commodity the quantity supplied will increase or decrease depending upon the rise or fall in the price of a commodity alone, ceteris paribus. This is called movement along the Supply curve or extension or contraction of Supply. As shown in figure 3.4, when the price increases, other factors affecting Supply remain constant, the quantity supplied will decrease and vice versa.

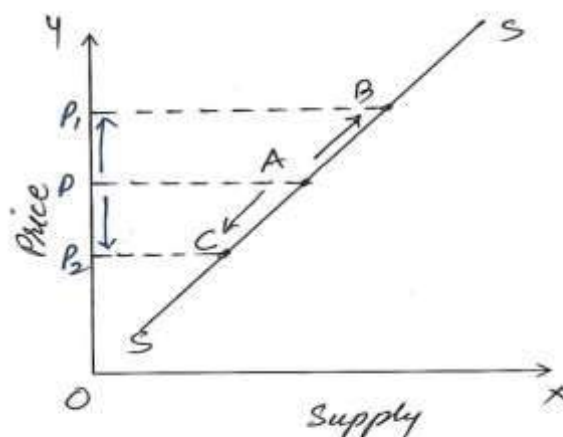


Figure 3.8: Change in quantity Supplied

The figure 3.8 show that when price increases from OP to OP_1 the Supply increases from OQ to OQ_1 . Thus with the rise in price there is a movement on the Supply curve from point A to point B . Similarly with the fall in price from OP to OP_2 the quantity Supplied decreases from OQ to OQ_2 causing a shift from point A to point C on the Supply curve. The increase in Supply due to rise in price is also called extension of Supply. The reduction in quantity supplied due to fall in price is known as contraction.

Change in Supply or shift of Supply or Increase and Decrease in Supply:

When the quantity supplied of a commodity increases or decreases due to change in factors other than price of the product like price of related goods, prices of inputs etc. it is known as change in supply or shift in supply.

In Figure 3.9 SS is the original Supply curve and the consumer in buying OQ units of the commodity at price OP . If the input cost reduces, price of the product remains constant, the supply will increase, and the new supply curve is S_1S_1 . This new curve is an outward shift in the supply and it shows an increase in the supply for the product from OQ to OQ_1 . Similarly due to the rise in input cost, price of the product remaining same, the supply curve will shift inward from SS to S_2S_2 . Quantity of good purchased will reduce from OQ to OQ_2 . This is called decrease in Supply.

Thus in the above figure quantity supplied has increased from OQ to OQ_1 , the price of commodity remaining constant at price OP . This is shown by a right ward shift of the original supply curve to form new supply curve S_1S_1 . This is called increase in supply.

The left ward shift from the original supply curve SS to S_2S_2 is known as decrease in Supply, price of the product remains same at OP .

3.4 EQUILIBRIUM OF DEMAND SUPPLY AND PRICE DETERMINATION

Equilibrium means a state of balance. The term equilibrium in Economics means the state in which there is no tendency on the part of consumers and producers to change. Market equilibrium is a situation of the market in which demand for a commodity is equal to supply of the commodity at a particular price. Hence when there is equilibrium between demand and supply of a commodity at a particular price, there is neither excess demand nor excess supply. At this position the prevailing price is called the equilibrium price and the corresponding quantity supplied/demand is called equilibrium quantity

Determination of equilibrium price:

According to Alfred Marshall demand and supply are the two blades of pair of scissors. Through intersection of demand and supply the equilibrium price and equilibrium quantity of a commodity is determined.

The force of demand and supply determine the price of a commodity. There is a conflict in the aim of producers and consumers. Consumers are interested in buying the goods at the lowest price to maximize satisfaction and producer aim at selling the goods at the highest price to maximize profit. Equilibrium price will be determined where quantity demanded is equal to the quantity supplied. This called market price. The determination of equilibrium price is explained with the help of a schedule given in table 3.5 and figure 3.10.

Table 3.5 – Equilibrium Price

Price of Apples (Rs.)	Quantity demanded (Kilogram)	Quantity supplied (Kilogram)
10	4	0
20	3	1
30	2	2
40	1	3

Table 3.5 gives a hypothetical schedule which depicts different price and the respective quantity demanded and supplied. When the prices increases from Rs 10 to Rs 40, the quantity demanded decreases from 4 Kg to 1 Kg and the quantity supplied increases from nothing to 4 Kg respectively. At price Rs 10 the quantity demanded is 4 Kg and suppliers are not interested in supplying at all. Thus at lower price consumers will demand more and suppliers will supply less. At price Rs 40 per Kg demand is 1 Kg and supply is 4 Kg. With an increase in price the demand decrease and supply increases. We can observe in table 3.5 at price at price Rs 30 the quantity demanded is equal to quantity supplied, and that is the equilibrium price and equilibrium quantity is 2 Kg. At prices less than Rs 30 there is an excess of demand over supply and at price higher than Rs 30 per Kg the supply is more than demand.

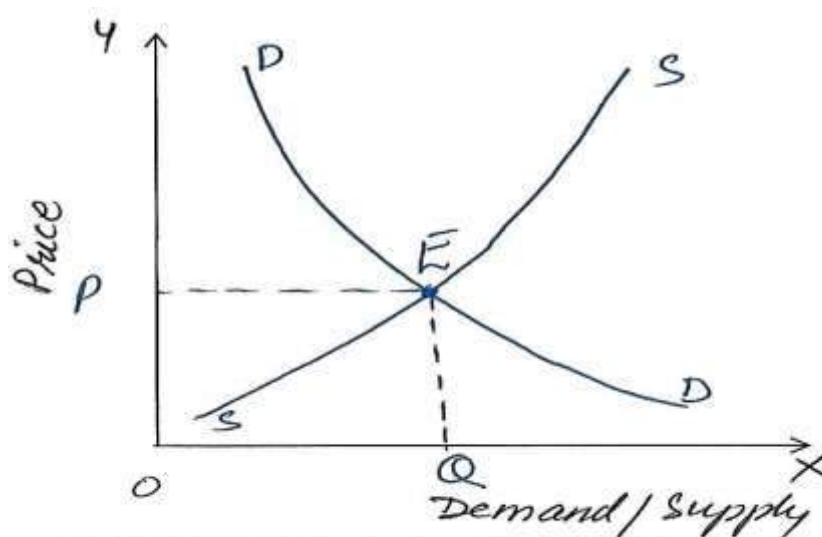


Figure 3.10: Determination of Equilibrium price

In figure 3.10 price is measured on Y axis and quantity demanded and supplied taken on X-axis price per unit. DD is the demand curve and SS is the supply curve. The demand curve and supply curve intersect each other at point E. At the equilibrium point E the quantity demanded is equal to the quantity supplied i.e. PE and therefore the equilibrium price is OP the equilibrium quantity is OQ.

Above this equilibrium price OP, at OP_1 the quantity demanded decrease to P_1G and quantity supplied increase to P_1H . At price higher than equilibrium price there is an excess of supply over demand GH. At price OP_2 , which is lower than the equilibrium price quantity supplied decreases to P_2I and quantity demanded increases to P_2K . Hence at price lower than the equilibrium price there is an excess of demand over supply.

Effect of change in supply and demand:

The equilibrium price and quantity changes with the shift in supply curve demand remaining same or shift in demand curve supply remaining same or shift in both. The change in equilibrium due to change in demand with no change in supply can be seen in figure 3.11, which shows price on Y axis and quantity demanded and supplied on x axis.

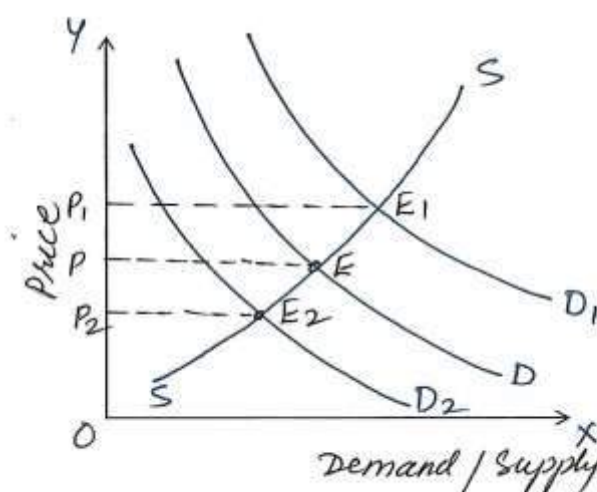


Figure 3.11: Effect of change in demand on equilibrium price

Demand curve DD intersects supply curve SS at point E, which determines the equilibrium price OP and equilibrium quantity OQ. With an increase in demand the demand curve shifts from DD to D_1D_1 . And the new equilibrium is at E_1 . Thus with the increase in demand supply remaining same there is an increase in the price to OP_1 . When the demand decreases from DD to D_2D_2 an inward shift in the demand curve the equilibrium shifts to E_2 leading to a reduction in the equilibrium price. With the increase in demand the equilibrium price increase and vice versa.

The effect of change in the supply is shown in figure 3.12, where price on Y axis and quantity demanded and supplied on x axis.

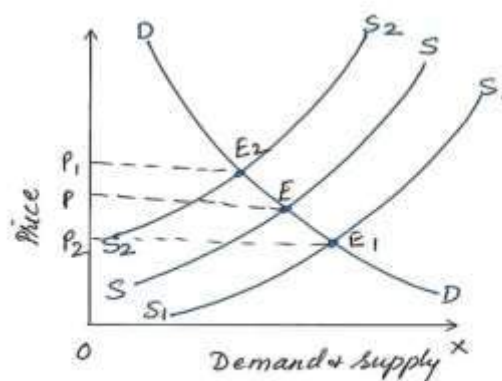


Figure 3.12: Effect of change in supply on equilibrium price

Demand curve DD intersectssupply curve SS at point E, which determines the equilibrium price OP and equilibrium quantity OQ. With an increase in supply the supply curve shifts from SS to S_1S_1 . And the new equilibrium is at E_1 . Thus with the increase in supply demand remaining same there is a reduction in the price to OP_1 . When the supply decreases from SS to S_2S_2 an inward shift in the supply curve the equilibrium shifts to E_2 leading to an increase in the equilibrium price to OP_2 . Thus with the increase in supply the equilibrium price decrease and vice versa.

Thus we learnt that

- i) When the demand increases equilibrium price will increase,
- ii) When the demand decreases equilibrium price will decrease,
- iii) When the supply increase equilibrium price will decrease, and
- iv) When the supply decreases equilibrium price will increase.

3.5 Importance of Time Element

Marshall, who propounded the theory that price is determined by both demand and supply, also gave a great importance to the time element in the determination of price. Time elements is of great relevance in the theory of value, since one of the two determinants of price, namely supply, and depends on the time allowed to it for adjustment. It is worth mentioning that Marshall divided time into different periods from the viewpoint of supply and not from the viewpoint of demand.

Time is short or long according to the extent to which supply can adjust itself. Marshall felt it necessary to divide time into different periods on the basis of response of supply because it always takes time for the supply to adjust fully to the changed conditions of demand.

The reason why supply takes time to adjust itself to a change in the demand conditions is that nature of technical conditions of production is such as to prohibit instantaneous adjustment of supply to changed demand conditions. A period of time is required for changes to be made in the size, scale and organisation of firms as well as of the industry.

Another point is worth noting. When Marshall distinguished short and long periods he was not using clock or calendar time as his criterion, but 'operational' time in terms of economic forces at work. In this regard, as said above, supply forces were given the major attention and a time was short or long according to the extent of adjustment in the forces of supply. The greater the adjustability of the supply forces, the greater the length of the time irrespective of the length in clock-time.

Time can be divided into following three periods on the basis of response of supply to a given and permanent change in demand:

1. Market Period:

The market period is a very short period in which the supply is fixed, that is, no adjustment can take place in supply conditions. In other words, supply in the market period is limited by the existing stock of the good. The maximum that can be supplied in the market period is the stock of the good which has already been produced.

In this period more good cannot be produced in response to an increase in demand. This market period may be a day or a few days or even a few weeks depending upon the nature of the good. For instance, in case of perishable goods, like fish, the market period may be a day and for a cotton cloth, it may be a few weeks.

2. Short Run:

Short run is a period in which supply can be adjusted to a limited extent. During the short period the firms can expand output with given equipment by changing the amounts of variable factors employed. Short periods is not long enough to allow the firm to change the plant or given capital equipment. The plant or capital equipment remains fixed or unaltered in the short run. Output can be expanded by making intensive use of the given plant or capital equipment by varying the amounts of variable factors.

3. Long Run:

The long run is a period long enough to permit the firms to build new plants or abandon old ones. Further, in the long run, new firms can enter the industry and old ones can leave it. Since in the long run all factors are subject to variation, none is a fixed factor. During the long period forces of supply fully adjust them to a given change in demand; the size of individual firms as well as the size of the whole industry expands or contracts according to the requirements of demand.

From above, it is clear that because of the varying response of supply over a period of time to a sudden and once-for-all increase in demand Marshall found, it necessary and useful to study the pricing process in:

- a. The market period,
- b. The short-run and
- c. The long-run depending respectively upon whether the supply conditions have time to make (i) no adjustment, (ii) some adjustment of labour and other variable factors, and (iii) full adjustment of all factors and all costs. Therefore, Marshall explained how the equilibrium between demand and supply was established in three time periods and determined market price, short-run price and long-run price.

We thus see that the price that will prevail depends upon the period under consideration. If a sudden and a once-and-for all increase in demand take place, the market price will register a sharp increase, since supply cannot increase in the market period. In this market period, firms can sell only the output that has already been produced. However, in the short run some limited adjustment in supply will take place as a result of the firms moving along their short run marginal cost curves by expanding output with the increase in the amount of variable factors. Consequently, the short run price will come down from the new high level of the market price.

But this short-run price will stand above the level of original market price which prevailed before the increase in demand occurred. In the long run the firms would expand by building new plants, that is, by increasing the size of their capital equipment.

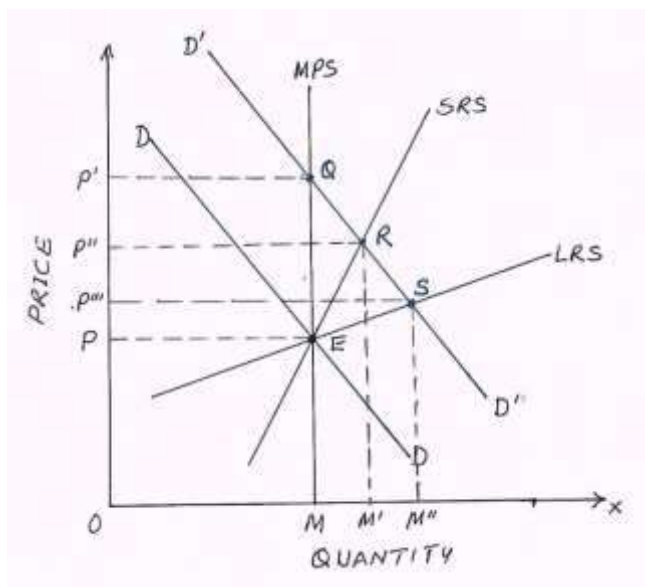
In other words, firms would expand along the long-run marginal cost curves. Besides, the new firms will enter the industry in the long run and will add to the supply of output. As a result of these long-run adjustments in supply, the price will decline.

Thus the long run price will be lower than the short-run price. But this long-run price will be higher than the original price which ruled before the increase in demand took place, if the industry happens to be increasing-cost industry.

The adjustment of supply over a period of time and consequent changes in price is illustrated in figure above where long-run supply curve LRS of an increasing-cost industry along with the market-period supply curve MPS and the short-run supply curve SRS have been drawn. Originally, demand curve DD and market-period supply curve MPS intersect at point E and price OP is determined. Suppose that there is a once- for-all increase in demand from DD to D'D'.

Supply cannot increase in the market period and remains the same at OM. Market-period supply curve MPS intersects the new demand curve D'D' at point Q. Thus, the market price sharply rises to OP''. Short-run supply curve SRS intersects the new demand curve D'D' at point R.

The short-run price will therefore be OP'' which is lower than the new market price OP'. As a result of the long-run adjustment the price will fall to OP''' at which the long-run supply curve LRS intersects the demand curve D'D'.



The new long-run price OP''' is lower than the new market price OP' and the short-run price OP'' , but will be higher than the original price OP which prevailed before the increase in demand took place. This is so because we are assuming an increasing-cost industry. If the industry is subject to constant costs, the long-run price will be equal to the original price. Further, if the industry is subject to decreasing costs, the long-run price will be lower than the original price.

It follows from above that the price which prevails in the market depends upon the period under consideration. It is thus clear that the time plays an important role in the determination of price. Another significance of the time-period analysis of pricing is that it enabled Marshall to resolve the controversy current among economists whether it is demand or supply which determines price.

Marshall propounded the view that both demand and supply took part in the determination of price. But, "as a general rule", said Marshall, "the shorter the period which one considers the greater must be the share of our attention which is given to the influence of demand on value, and the longer the period more important will be the influence of cost of production on value."

Actual value at any time—the market value as it is often called—is often influenced by passing events and causes whose action is fitful and short-lived than by those which work persistently. But in the long run these fitful and irregular causes in a larger measure efface one another's influence so that in the long run persistent causes dominate value completely".

From the above quotation from Marshall it follows that in the market period, demand exercises a predominant influence over price but in the long run it is the supply which is of overwhelming importance as a determinant of price. Roughly speaking, we can say that in the market period it is the force of demand which determines price and in the long period it is the force of supply which governs price.

Thus those economists who held that value was governed by demand were in a way right and so were those who contended that cost of production (i.e., force working on the supply side) determines price. The difference in the two views was due to the fact that one group of economists was emphasising the determination of the market price over which demand has determining influence and over which cost of production does not exercise much influence, while the other group was stressing on the determination of long-run price over which cost of production has got paramount influence. It is thus clear that Marshall by putting forth the view that both demand and supply determine price by their interaction brought about synthesis between the views of earlier economists.

Both the two opposite views of earlier economists were in a way right but each was one-sided. Each view provided us with a force which governed price. The two forces of supply and demand furnished by the two opposing views were sufficient determining factors.

Therefore, Marshall gave equal importance to both demand and supply as determinants of price, though the influence of the two varied in different time periods. Marshall introduced time period analysis into pricing process to bring out the varying influence of each of two forces over price of the product in different time periods.

It follows from what has been said above that Marshall and modern economists following him study the effect of the varying response in supply in different time periods on price to a sudden and permanent change in demand conditions.

On the contrary, economists do not study the effect on price of the adjustment in demand over time in response to a change in supply conditions. The reason why we do not study adjustment in demand to a change in supply and consequent effect on price is better brought out in the worlds of Professors Stonier and Hague. "There is no reason why, if supply conditions change, demand conditions should change as well, or if they do, why they should change differently in the short run and the long run.

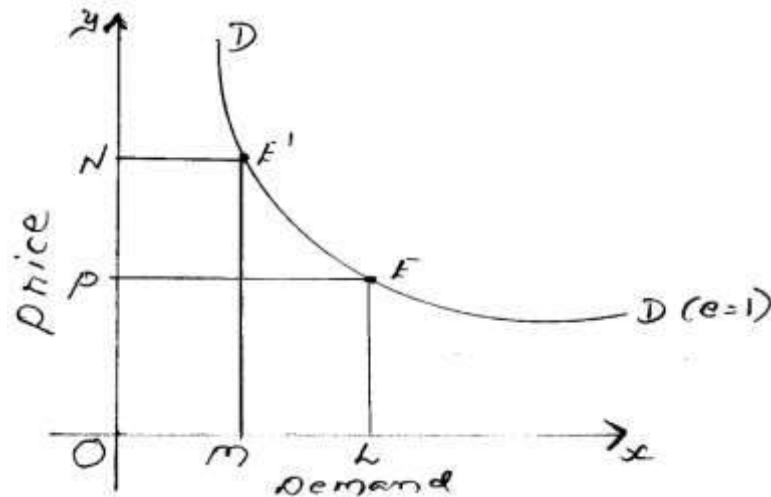
Changes in consumer's tastes are not dependent on technology in the way that supply conditions are. Admittedly, consumers' tastes may and probably will change as time goes on. But this will be a change of data and not a change induced by changed supply conditions.

There is no necessary reason why the long-run demand curve should differ from the short-run demand curve, however odd the behaviour of supply has been—we must expect that the longer is the period during which demand and supply are coming into equilibrium, the more changes will have time to take place. If we were to study the changes in demand and supply which would take place in respect to any change of data during many successive very short periods of time, we should find that we had introduced unnecessary and intolerable detail into the analysis.”

We shall explain below in detail the market-period equilibrium, short-run equilibrium, long-run equilibrium between demand and supply and thus the determination of market price, short-run price and long-run price under conditions of perfect competition.

3.16 Elasticity of Demand

The law of demand fails to tell us as to what extent demand for a commodity vary when there is a change in price. In other words, the law of demand merely indicates the direction to which demand moves when there is a change in price. But concept of elasticity explains the exact change in demand when there is a change in price. The price elasticity of demand is defined as “The degree of responsiveness or sensitiveness of demand to a change in price of a commodity or service.”



Algebraically, it is stated as

$$e(p) = \frac{\Delta Q}{Q} \div \frac{\Delta P}{P}$$

Where Δ = means a change
 Q = Quantity
 P = Price
 $e(p)$ = Price elasticity of demand

There are five cases of price elasticity of demand.

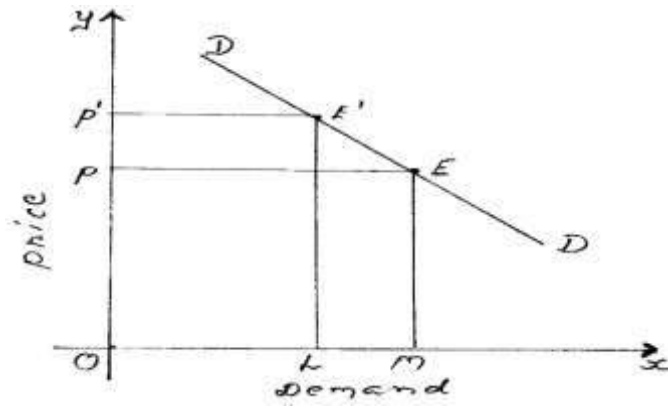
1. Unitary elastic demand (e = 1)

Demand is said to be unitary elastic when proportionate change in price is equal to proportionate change in quantity demanded of any commodity. The value of the elasticity is equal to one (e=1) in such cases demand curve is convex to the origin as shown in the diagram.

$$e(p) = \frac{\Delta Q}{Q} \div \frac{\Delta P}{P} = \frac{ML}{OL} \div \frac{NP}{OP} = \frac{ML}{OL} \times \frac{OP}{NP} = 1$$

2. Relatively elastic demand (e > 1)

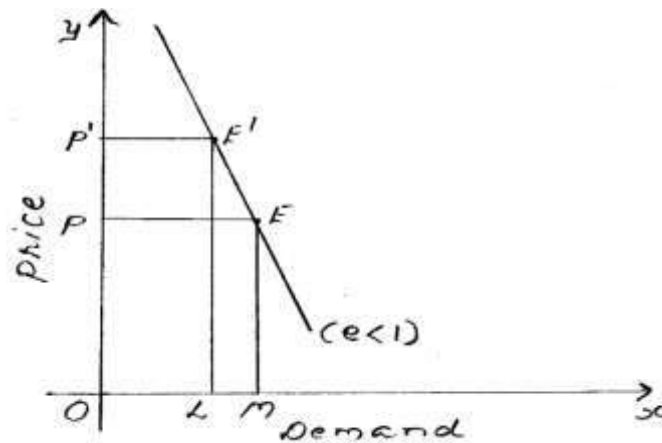
Demand for a commodity is said to be elastic when proportionate change in quantity demanded is greater than proportionate change in price. In such cases value of the elasticity is greater than one and shape of the demand curve is flatter as shown in the following diagram.



$$\begin{aligned}
 e(p) &= \frac{\frac{\Delta Q}{Q}}{\frac{\Delta P}{P}} > 1 \\
 &= \frac{LM}{OM} \div \frac{PP'}{OP} \\
 &= \frac{LM}{OM} \times \frac{OP}{PP'} > 1
 \end{aligned}$$

3. Relatively inelastic demand ($e < 1$)

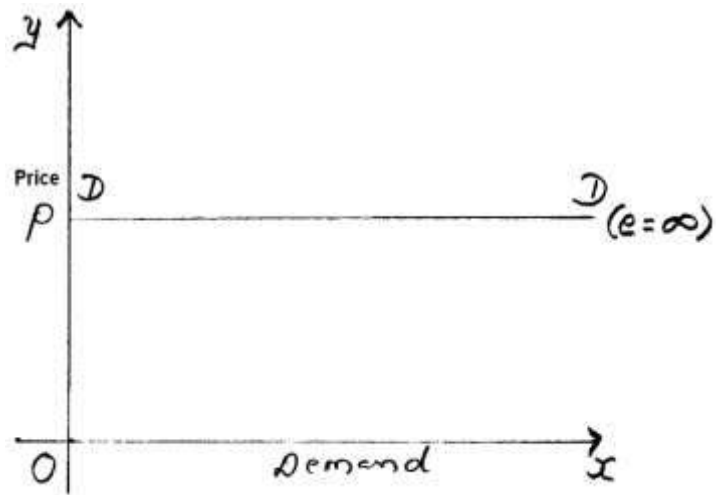
Demand for a commodity is said to be relatively inelastic when proportionate change in demand is smaller than proportionate change in price of the commodity. In such cases, value of the elasticity is less than one ($e < 1$) and the demand curve is steeper. The following diagram exhibits the said demand curve.



$$\begin{aligned}
 e(p) &= \frac{\Delta Q}{Q} \div \frac{\Delta P}{P} < 1 \\
 &= \frac{LM}{OM} \div \frac{PP'}{OP} \\
 &= \frac{LM}{OM} \times \frac{OP}{PP'} < 1
 \end{aligned}$$

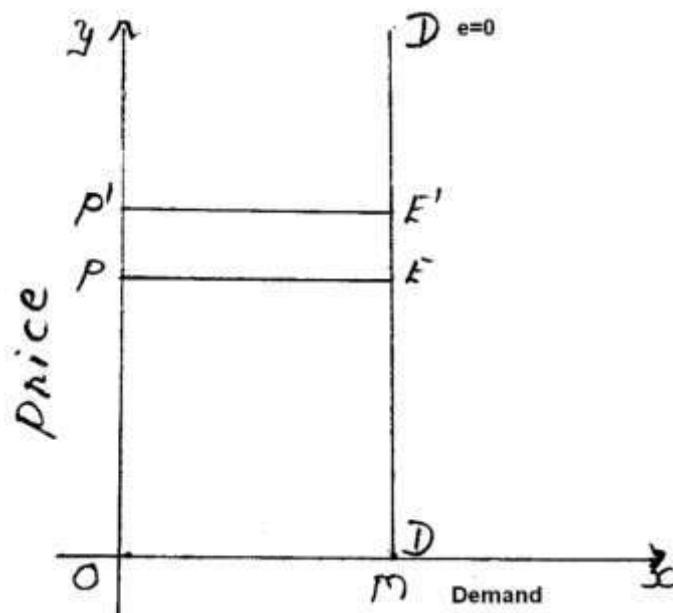
4. Perfectly elastic demand ($e = \infty$)

Demand for a commodity is said to be perfectly elastic when a small change (rise or fall) in price brings about either complete contraction or infinite expansion in demand. In such cases value of the elasticity is infinity ($e = \infty$) and demand curve is horizontal to 'x' axis. The following figure depicts the same.



5. Perfectly inelastic demand (e=0)

Demand for any commodity is said to be perfectly inelastic when there is no change in demand at a high or low price. The value of the elasticity is zero in such cases and demand curve is vertical to 'x' axis. The following figure depicts the perfectly inelastic demand.



3.17 Determinants of Elasticity

1. Nature of commodity

In case of necessities of life demand is inelastic while luxuries relatively elastic.

2. Number of uses

In case of large number of uses, demand is relatively elastic and in case a few uses, it is relatively inelastic.

3. Number of substitutes

If the substitutes are more demand is relatively elastic while less number of substitutes, demand is relatively inelastic.

4. Durability of goods

Durable goods have relatively elastic demand while perishable goods have relatively inelastic demand.

5. Low priced commodities

Low priced commodities like salt, newspapers, matchboxes etc. have relatively inelastic demand.

6. Proportion of income spent

Commodities needing less expenditure generally have relatively inelastic demand.

3.18 Importance of Elasticity

The concept of elasticity is very much useful in day-to-day life. Firstly, it deeply analyses price-demand relationship. Secondly, it helps producers in fixing prices of their product. Thirdly it is helpful to government to declare certain industries as public utility services. Fourthly it also helps the government to frame economic policies. Fifthly it helps finance minister in matter of taxation. The concept elasticity explains why there exists poverty in the midst of plenty. It is also helpful in international trade to determine terms of trade between the two countries.

3.19 Income Elasticity of Demand

$$e(i) = \frac{\text{Proportionate change in quantity demanded}}{\text{Proportionate change in income}}$$

It is defined as “the degree of responsiveness or sensitiveness of demand to a change in income.” In other words, it shows a degree of responsiveness of demand to a change in income.

$$e(i) = \frac{\Delta Q}{Q} \div \frac{\Delta I}{I}$$

3.20 Cross Elasticity

It measures elasticity of demand of related goods. It means that when price of say ‘x’ good changes, the demand for related good say ‘y’ changes. Thus, the cross elasticity of demand measures the response of the quantity demanded of a particular commodity to the change in price of some other related commodity. Generally it takes place in complementary goods and substitutes

$$\text{Cross Elasticity} = \frac{\text{Proportionate change in quantity demanded of say 'x' good}}{\text{Proportionate change in price of related good say 'y' good}}$$

The cross elasticity in case of substitutes is always positive but it is negative in case of complementary goods.

3.21 Exercise :

1. What is Law of demand? Explain with the help of schedule and diagram.(10 Marks)
2. What is a demand schedule? (5 Marks)
3. Write a note on demand curve.(5 Marks)
4. What are the exceptions of Law of demand? (5 Marks)
5. Explain the derivation of demand curve with the help of diagram.(5 Marks)
6. Discuss demand function.(10 Marks)
7. State law of supply and explain it with the help of a suitable diagram and schedule.(10 Marks)
8. Examine the factors affecting supply.(10 Marks)
9. What do you understand by equilibrium price?(10 Marks)
10. Discuss the effect of change in supply and demand on the equilibrium price. (10 Marks)
11. What is elasticity of demand? When does it become perfectly elastic, unitary elastic and inelastic?

UNIT – IV

PRODUCTION

4.1 Introduction

Production virtually means value-addition to natural resources. Men and nature are the basic elements in the production process. The valuers have to understand that commodities become saleable in the market after they are produced and every product acquires new value in this process. The output of production takes the form of goods as well as services.

In the next unit we shall see how to capture the value added through production. The product is meant primarily for exchange in return for money. The process of exchange is called transaction and return in terms of money is called price. The valuer has to make an estimate of price as it ought to be. In this way price is differentiated from value. However, value-addition is the goal of production and price is the stage in the process.

Now, in economics the following agents are usually considered as the factors for production:-

- Land
- Labour
- Capital
- Organization

We have already stated that men and nature are the primary agents. But in course of time the production process become more complex. Modern production said to be capitalistic in the sense that capital plays a predominant role. This takes us to consider what capital is.

3.1.1 Capital :

Capital is produced means of production. In the olden days, at the dawn of human civilization, man used to produce by working upon natural resources with simple tools and implements. The farmer used to produce harvest of crops with plough, cobbler used to produce shoes and other leather products with aid of simple tools, the potter used turn-out utensils with the help of earth wheels, the weaver used to weave cloths with the help of an unsophisticated spinning wheel and loom.

But, with the advancement of civilization, growth of population and multiplication of demand, production has to be augmented many-folds by division of labour and intervening capital as the dominant media of production. The process of production also became round-about. Thus, irrigation became a prior need for investment, so that ultimate scale of production may be augmented, the spindles and looms are come to be replaced by power looms, weaving machines, etc. The cobbler simple tools became replaced by machine for mass production. The potter's simple earthen wheel paved the way for appropriate machineries. These intermediate machineries and means of production are again the resultant of initial production, the purpose of which is not directly to yield consumable items but to fill-in needs for produced means called capital, which can propel the quantum of ultimate production of consumable items in a big way. In course of time, this intermediate product called capital has gradually assumed the centre stage of production, so as to be recognized as a distinctly separate factor.

3.1.2 Organization :

An organization is the typical task of coordinating and harnessing the functions of other factors of production. The person or a group of persons who take the leading role of such organization constitute a distinct class called entrepreneur. They are not simple labour as to be merged in the concept of men interacting with natural resources to make production at the primary stage. Just as capital is an offshoot of natural resources as a distinct agent of production so is an enterprise or an organization, an offshoot of man or labour.

3.1.3 The Future Scenario :

In course of time, the four factor of production, i.e., Land, Labour, Capital and Organization, are yielding place to more items through split. The factor of capital is going to be split into tangible capital and intangible capital. The latter consists of intellectual properties, developed through research and development, which again relegates the process of production to a more remote region away from directly turning-out consumable commodities. These intellectual properties are distinctly given shape as intangible rights in the form of patterns, copyrights, design, trademark, know-how, trade secret, etc.

Entrepreneurship is gradually being divided into proprietorship and management, the latter being developed as distinct cadre aiding the process of production and gradually emerging as an indispensable agent of production.

Labour has to be split-up as skilled and unskilled, as because the role of one is distinctly different from the other.

Finally, we may for the future generation of valuers, classify the factors of production in the following manner:-

Land	-	all natural resources
Labour	-	skilled and unskilled
Capital	-	tangible as well as intangible
Entrepreneurship	-	including management

4.2 ECONOMIC ANALYSIS OF COSTS

4.2.1 Total Cost : Fixed and Variable

Consider a firm that produces a quantity of output (denoted by q) using inputs of capital, labour, and materials. The firm buys these inputs in the factor markets. A profit-minded firm will keep an eagle eye on its cost to maintain profitability. The firm's accountants have the task of calculating the total dollar costs incurred at each level of q .

Table 1 shows the total cost (TC) for each different level of output q . Looking at columns (1) and (4), we see that TC goes up as q goes up. This makes sense because it takes more labour and other inputs to produce more labour and other inputs to produce more of a good; extra factors involve an extra money cost. It costs \$110 in all to produce 2 units, \$130 to produce 3 units, and so forth. In our discussion, we assume that the firm always produces output at the lowest possible cost.

(1) Quantity q	(2) Fixed cost FC (\$)	(3) Variable cost VC (\$)	(4) Total cost TC (\$)
0	55	0	55
1	55	30	85
2	55	55	110
3	55	75	130
4	55	195	160
5	55	155	210
6	55	225	280

Table 1 : Fixed, Variable, and Total Costs

The major elements of a firm’s costs are its fixed costs (which do not vary at all when output changes) and variable costs (which increase as output increase). Total costs are equal to fixed plus variable costs: $TC = FC + VC$.

Fixed Cost

Columns (2) and (3) of **Table 1** break total cost into two components: total fixed cost (FC) and total variable cost (VC).

What are a firm’s **fixed costs**? Sometimes called “overhead” or “sunk costs”, they consist of items such as rent for factory or office space, contractual payments for equipment, interest payments on debts, salaries of tenured faculty, and so forth. These must be paid even if the firm produces no output, and they will not change if output changes. For example, a law firm might have an office lease which runs 10 years and remains an obligation even if the firm shrinks to half its previous size. Because FC is the amount that must be paid regardless of the level of output, it remains constant at \$55 in column (2).

Variable Cost

Column (3) of **Table 1** shows variable cost (*VC*). **Variable costs** are those which vary as output changes. Examples include materials required to produce output (such as steel to produce automobiles), production workers to staff the assembly lines, power to operate factories, and so on. In a supermarket, checkout clerks are a variable cost, since managers can easily adjust the clerks' hours worked to match the number of shoppers coming through the store.

By definition, *VC* begins at zero when q is zero. It is part of *TC* that grows with output; indeed, the jump in *TC* between any two outputs is the same as the jump in *VC*. Why? Because *FC* stays constant at \$55 throughout and cancels out in the comparison of costs between different output levels.

Let us summarize these cost concepts:

Total cost represents the lowest total dollar expense needed to produce each level of output q -*TC* rises as q rises.

Fixed cost represents the total dollar expense that is paid out even when no output is produced: fixed cost is unaffected by any variation in the quantity of output.

Variable cost represents expenses that vary with the level of output – such as raw materials, wages, and fuel – and includes all costs that are not fixed.

Always, by definition

$$TC = FC + VC$$

4.2.2 Definition of Marginal Cost

Marginal cost is one of the key concepts of economics. **Marginal cost** (*MC*) denotes the extra or additional cost of producing one extra unit of outputs. Say a firm is producing 1000 compact discs for a total cost of \$10,000. If the total cost of producing 1001 discs is \$10,006, the marginal cost of production is \$6 for the 1001st disc.

Sometimes, the marginal cost of producing an extra unit of output can be quite low. For an airline flying planes with empty seats, the added cost of another passenger is simply the cost of the peanuts and snack; no additional capital (planes) or labour (pilots and flight attendants) is necessary. In other cases, the marginal cost of another unit of output can be quite high. Consider an electric utility. Under normal circumstances, it can generate enough power using only its lowest-cost, most efficient plants. But on a hot summer day, when everyone's air conditioners are running and electric demand is high, the utility may be forced to turn on its old, high-cost, inefficient generators. This added electric power comes at a high marginal cost to the utility.

(1) Output q	(2) Total cost TC (\$)	(3) Marginal cost MC (\$)
0	55	30
1	85	25
2	110	20
3	130	---
4	160	50
5	210	

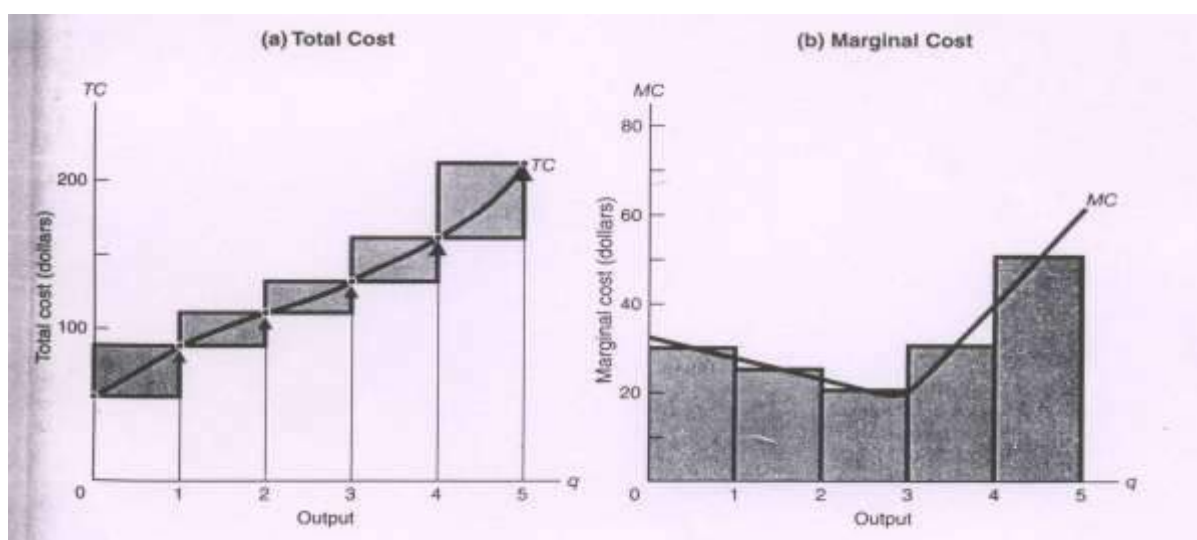
Table 2 : Calculation of Marginal Cost

Once we know total cost, it is easy to calculate marginal cost. To calculate the *MC* of the fifth unit, we subtract the total cost of the four units from the total cost of the five units, i.e., $MC = \$210 - \$160 = \$50$. Fill in the blank for the marginal cost of the fourth unit

Table 2 uses the data from **Table 1** to illustrate how we calculate marginal costs. The rust-colored *MC* numbers in column (3) of **Table 2** come from subtracting the *TC* in column (2) from the *TC* of the subsequent quantity. Thus, the *MC* of the first unit is \$30 (= \$85 - \$55). The marginal cost of the second unit is \$25 (= \$110 - \$85). And so on.

Figure 1 : The Relationship between Total Cost and Marginal Cost

This figure graphs the data from **Table 2**. Marginal cost in **(b)** is found by calculating



the extra cost added in **(a)** for each unit increase in output. Thus to find the *MC* of producing the fifth unit, we subtract \$160 from \$210 to get *MC* of \$50. A smooth black curve has been drawn through the points of *TC* in **(a)**, and the smooth black *MC* curve in **(b)** links the discrete steps of *MC*

Instead of getting *MC* from the *TC* column, we could get the *MC* figures by subtracting each *VC* number of column (3) of **Table 1** from the *VC* in the row below it. Why? Because variable cost always grows exactly like total cost, the only different being that *VC* must – by definition – start out from 0 rather than from the constant *FC* level. (Check that $30 - 0 = 85 - 55$, and $55 - 30 = 110 - 85$, and so on.)

The marginal cost of production is the additional cost incurred in production one extra unit of output.

Marginal Cost in Diagrams

Figure 1 illustrates total cost and marginal cost. It shows that *TC* is related to *MC* in the same way that total product is related to marginal product or that total utility is related to marginal utility.

What kind of shape would we expect actual. MC curves to have? Empirical studies have found that for most production activities in the short run (i.e., when the capital stock is fixed), marginal cost curves are U-shaped like the one shown in **Figure 1 (b)**. This U-shaped curve falls in the initial phase, reaches a minimum point, and finally begins to rise.

4.2.3 Average Cost

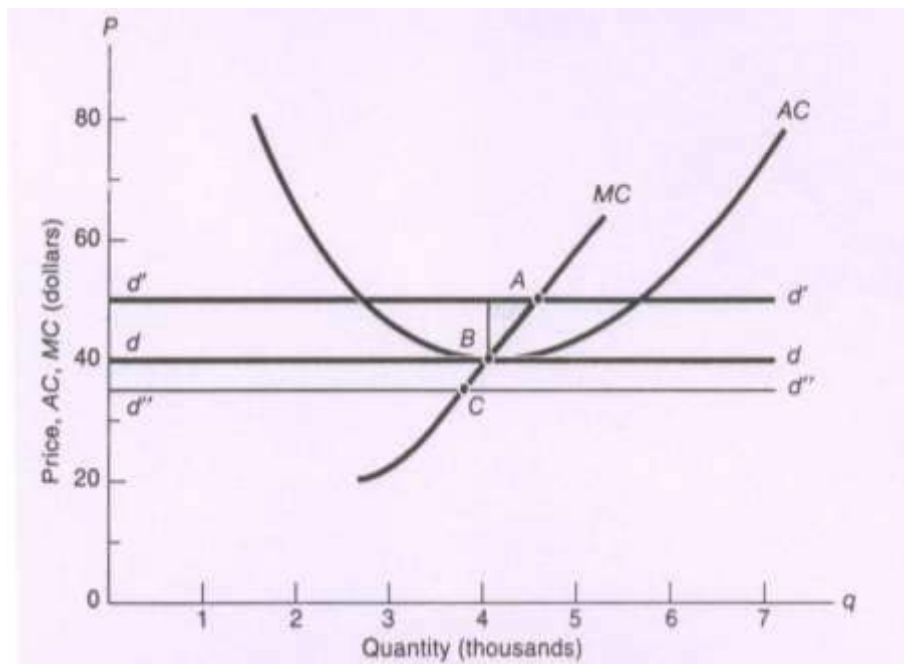
We complete out catalogue of the cost concepts important in economics and business with a discussion of different kinds of average or unit cost. **Table 3** expands the data of **Table 1** and **2** to include three new measures average cost, average fixed cost, and average variable cost.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Quantity	Fixed cost	Variable cost	Total cost	Marginal cost per unit	Average cost per unit	Average fixed cost per unit	Average variable cost per unit
	FC	VC	$TC=FC+VC$	MC	$AC = \frac{TC}{q}$	$AFC = \frac{FC}{q}$	
	$AVC = \frac{VC}{q}$						
q	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
0	55 Undefined	0	55	33	Infinity	Infinity	
1	55	30	85	27	85	55	30
2	55	55	110	22	55	27½	27½
3	55	75	130	21	43⅓	18⅓	25
4*	55	105	160	40*	40*	13¾	26¼
5	55	155	210	60	42	11	---
6	55	225	280	80	46⅔	91/6	37½
7	55	-----	370	100	526/7	76/7	45
8	55	-----	480	120	60	6⅔	53⅔

Table 3 : All Cost Concepts Derive from Total Cost Schedule

Figure 2 : Firm's Supply Curve is Its Rising Marginal Cost Curve

For a profit-maximizing competitive firm, the upward-sloping marginal cost (MC) curve is the firm's supply curve. For market price at $d'd'$, the firm will supply output at intersection point at A. Explain why intersection points at B and C represent equilibria for prices at d and d'' respectively



Rule for a firm's supply under perfect competition

A firm will maximize profits when it produces at that level where marginal cost equals price:

$$\text{Marginal cost} = \text{price or } MC = P$$

Figure 2 illustrates a firm's supply decision diagrammatically. When the market price of output is \$40, the firm consults its cost data and finds that the production level corresponding to a marginal cost of \$40 is 4000 units. Hence, at a market price of \$40, the firm will wish to produce and sell 4000 units. We can find that profit-maximizing amount in **Figure 2** at the intersection of the price line at \$40 and the *MC* curve at point *B*.

In general, then, the firm's marginal cost curve can be used to find its optimal production schedule the profit-maximizing output will come where the price intersects the marginal cost curve.

We choose the example so that at the profit-maximizing output the firm has zero profits, with total revenues equal to total costs. (Recall that these are economic profits and include all opportunity costs, including the owner's labour and capital). Point *B* is the **zero-profit point**, the production level at which the firm makes zero profits; at the zero-profit point-price equals average cost, so revenues just cover costs.

What if the firm chooses the wrong output? If the market price were \$50, the firm should choose output at intersection point *A* in **Figure 2**. We can calculate the loss of profit if the firm mistakenly produces at *B* when price is at \$50 by the shaded gray triangle in **Figure 2**. This depicts the surplus of price over *MC* for production between *B* and *A*. Draw in a similar shaded triangle above *A* to show the loss from producing too much.

The general rule then is:

A profit-maximizing firm will set its output at that level where marginal cost equals price. Diagrammatically, this means that a firm's marginal cost curve is also its supply curve.

4.5 Exercise

1. What are the different factors of production and how are they remunerated?
2. Distinguish between fixed cost and variable cost. How marginal cost is determined?
3. Explain the relationship between marginal product and average product by referring to a diagram.

UNIT – V

PRICING OF PRODUCT

5.1 What is a Market?

5.1.1 Not Chaos, but Economic Order

We usually take for granted the smooth running of the economy. When you go to the supermarket, the items you want – bread, cereal, and bananas – are usually on the shelf. You pay your bill, pop the food in you mouth, and have a juicy meal. What could be simpler?

If you pause for a moment and look more closely, you may begin to appreciate the complexity of the economic system that provides your daily bread. The food may have passed through five or ten links before getting to you, traveling for days or months from every state and every corner of the globe as it moved along the chain of farmers, food processors, packagers, truckers, wholesalers, and retailers. It seems almost a miracle that food is produced in suitable amounts, gets transported to the right place, and arrives in a palatable form at the dinner table.

But the true miracle is that this entire system works without coercion or centralized direction by anybody. Literally millions of businesses and consumers engage in voluntary trade, and their actions and purposes are invisibly coordinated by a system of prices and markets. Nobody decides how many chickens will be produced, where the trucks will drive, and when the supermarkets will open. Still, in the end, the food is in the store when you want it.

Markets perform similar miracles around us all the time, as can easily be seen if only we observe our economy carefully. Thousands of commodities are produced by millions of people, willingly, without central direction or master plan. Indeed, with a few important exceptions (like the military, police, and schools) most of our economic life proceeds without government intervention, and that's the true wonder of the social world.

5.2 The Market Mechanism

A market economy is an elaborate mechanism for co-ordinating people, activities, and business through a system of prices and markets. It is a communication device for pooling the knowledge and actions of billions of diverse individuals. Without central intelligence or computation, it solves problems of production and distribution involving billions of unknown variables and relations, problems that are far beyond the reach of even today's fastest supercomputer. Nobody designed the market, yet functions remarkably well. *Is a market economy no single individual or organization is responsible for production, consumption, distribution, and pricing.*

How do markets determine prices, wages, and outputs? Originally, a market was an actual place where buyers and sellers could engage in face-to-face bargaining. The *marketplace* – filled with slabs of butter pyramids of cheese, layers of wet fish, and heaps of vegetables – used to be a familiar sight in many villages and towns, where farmers brought their goods to sell. In the United States today there are still important markets where many traders gather together to do business. For example, wheat and corn are traded at the Chicago Board of Trade, oil and platinum are traded at the New York Mercantile Exchange, and gems are traded at the Diamond District in New York City.

More generally, a market should be thought of as a mechanism by which buyers and sellers can determine prices and exchange goods and services. There are markets for almost everything, from art to pollution. A market may be centralized, like the stock market. It may be decentralized, as in the case of houses or labour. Or it may exist only electronically, as in the case of many financial assets and services which are traded by computer. The crucial characteristic of a market is that it brings buyers and sellers together to set prices and quantities.

A market is a mechanism by which buyers and sellers interact to determine the price and quantity of a good or service.

In a market system, everything has a price, which is the value of the good in terms of money (the role of money will be discussed in Section B of this chapter), Prices represent the terms on which people and firms voluntarily exchange different commodities. When I agree to buy a used Ford from a dealer for \$4040, this agreement indicates that the Ford is worth more than \$4050 to me and that the \$4050 is worth more than the Ford to the dealer. The used – car market has determined the price of a used Ford and, through voluntary trading, has allocated this good to the person for whom it has the highest value.

In addition, Prices serve as *signals* to producers and consumers. If consumers want more of any good, the price will rise, sending a signal to producers that more supply is needed. For example, every summer, as families set out on their vacations, the demand for gasoline rises, and so does the price. The higher price encourages oil companies to increase gasoline production and, at the same time, discourages travelers from lengthening their trips.

On the other hand, if a commodity such as cars becomes overstocked, dealers and automobile companies will lower their prices in order to reduce their inventory. At the lower price, more consumers will want cars, and producers will want to make fewer cars. As a result, a balance, or equilibrium, between buyers and sellers will be restored.

What is true of the markets for consumer goods is also true of markets for factors of production, such as land or labour. If computer programmers rather than textile workers are needed, job opportunities will be more favourable in the computing field. The price of computer programmers (their hourly wage) will tend to rise, and that of textile workers will tend to fall, as they did during the 1980s. The shift in relative wages will attract workers into the growing occupation.

The nursing crisis of the 1980s shows the labour market at work. During that decade the growth in the healthcare sector led to an enormous expansion of nursing jobs with far too few trained nurses to fill them. Hospitals offered all sorts of fringe benefits to attract nurses, including subsidized apartments, low-cost on-site child care, and signing bounces as high as \$10,000. One hospital even ran a lottery for nurses, with the prize being a gift certificate at a nearby department store. But what really attracted people into the nursing profession was raising wages. Between 1983 and 1992, the pay for registered nurses rose almost 70 percent, so they were making about as much money as the average accountant or architect. The rising pay drew so many people into nursing that by 1992 the nursing shortage had disappeared in most parts of the country.

Prices coordinate the decisions of producers and consumers in a market. Higher prices tend to reduce consumer purchases and encourage production. Lower prices encourage consumption and discourage production. Prices are the balance wheel of the market mechanism.

5.3 Market Equilibrium

At every moment, some people are buying while others are selling; firms are inventing new products while governments are passing laws to regulate old ones; foreign companies are opening plants in America while American firms are selling their products abroad. Yet in the midst of all this turmoil, markets are constantly solving the *what, how, and for whom*. As they balance all the forces operating on the economy, markets are finding market **equilibrium of supply and demand**.

A market equilibrium represents a balance among all the different buyers and sellers. Depending upon the price, households and firms all want to buy or sell different quantities. The market finds the equilibrium price that simultaneously meets the desires of buyers and sellers. Too high a price would mean a glut of goods with too much output; too low a price would produce long lines in stores and a deficiency of goods. Those prices for which buyers desire to buy exactly the quantity that sellers desire to sell yield equilibrium of supply and demand.

5.4 How Markets Solve the Three Economic Problems

We have just described how prices help balance consumption and production (or demand and supply) in an individual market. What happens when we put all the different markets together – gasoline, cars, land, labour, capital, and everything else? These markets work simultaneously to determine a *general equilibrium* of prices and production.

By matching sellers and buyers (supply and demand) in each market, a market economy simultaneously solves the three problems of *what, how, and for whom*. Here is an outline of market equilibrium:

1. What goods and services will be produced is determined by the dollar votes of consumers – not every 2 or 4 years at the polls, but in their daily purchase decisions. The money that they pay into businesses' cash registers ultimately provides the payrolls, rents, and dividends that consumers, as employees, receive as income.

Firms, in turn, are motivated by the desire to maximize profits. Profits are net revenues, or the difference between total sales and total costs. Firms abandon areas where they are losing profits; by the same token, firms are lured by high profits into production of goods in high demand. A familiar example is Hollywood. If one film makes huge profits – say, a film about a cute dinosaur and an evil scientist – other studios will rush to produce imitations.

2. How things are produced is determined by the competition among different producers. The best way for producers to meet price competition and maximize profits is to keep costs at a minimum by adopting the most efficient methods of production. Sometimes change is incremental and consists of little more than tinkering with the machinery or adjusting the input mix to gain accost advantage, which can be very important in a competitive market. At other times there are drastic shifts in technology, as with steam engines displacing horses because steam was cheaper per unit of useful work, or airplanes replacing rail-roads as the most efficient mode for long-distance travel. Right now we are in the midst of just such a transition to a radically different technology, with computers replacing typewriters, paper, and many white-collar workers.
3. For whom things are produced – who is consuming, and how much – depends, in large part, on the supply and demand in the markets for factors of production. Factor markets (i.e., markets for factors of production) determine wage rates, land rents, interest rates, and profits. Such prices are called *factor prices*. The same person may receive wages from a job, dividends from stocks, interest from a certificate of deposit, and rent from a piece of property. By adding up all the revenues from factors, we can calculate the person's market income. The distribution of income among the population is thus determined by the amounts of factors (person-hours, acres, etc.) owned and the prices of the factors (wage rates, land rents, etc.).

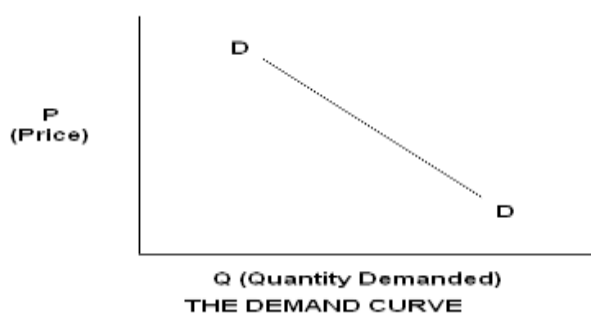
Be warned, however, that incomes reflect much more than the rewards for sweaty labour or abstemious saving. High incomes come also from large inheritances, good luck, favourable location, and skills highly priced in the marketplace. Those with low incomes are often pictured as lazy, but the truth is that low incomes are generally the result of poor education, discrimination, or living where jobs are few and wages are low. When we see someone on the unemployment line, we might say, "There, but for the grace of supply and demand, go."

5.5 The demand and Supply Framework

The working of the market mechanism can be most simple illustrated by the apparatus of demand-supply curves which is employed by economists for a variety of purposes. In order to introduce the reader to this powerful tool we take a very simple example.

Suppose we want to understand how the price of milk is determined by the market mechanism. On one side of the market are ‘consumers’ who in this case includes households as well as makers of sweets and other milk products. On the other side are producers who may be dairy farmers, and public and privet dairies. Consumers’ demand for milk is determined by, among other things, price of milk, consumers’ incomes, number of consumers, their tastes, prices of product like eggs and meat which are alternative sources of proteins etc. Now, imagine a hypothetical experiment in which we confront a group of consumers and enquire what quantity of milk they would like to purchase per day at a price of, say, Rs. 5 per liter. We repeat the question with varying prices of milk. All other determinants of demand for milk – consumer income, price of substitute etc., - are assumed to remain fixed. We will obtain a schedule of milk price and the quantities the consumers would like to purchase at each price. This relationship

between the price of milk and the quantity demanded other thing remaining fixed is called the demand curve for milk. Note carefully that we are talking of quantity and not quantity purchased. The former is an expression of consumers’ intentions or desires, when faced with a set of hypothetical prices. The actual quantity purchased is the result of the consumers translating their intentions into action when faced with an actual price asked for milk by the suppliers. The demand curve is depicted in figure below.



Quantities demanded per day are plotted on the horizontal axis (measured in liter) while prices in rupees per liter are plotted on the vertical axis.

As shown in the figure, the curve is downward sloping i.e. as price of milk declines, other things remaining constant the quantity demanded increases and vice versa. Why should this be so? While a rigorous argument is outside our scope, we can sketch a plausible explanation.

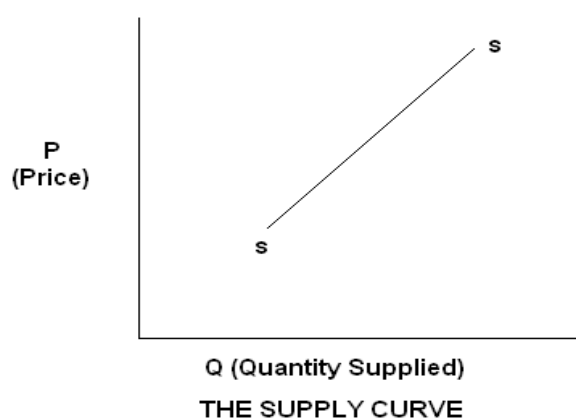
First consider a consumer faced with alternative prices. If the price is very high - say Rs.25 per liter - he might decide to go entirely without milk or decide to purchase the minimum essential quantity (suppose there is a baby in the family). As the price is reduced, the consumer would think of satisfying less urgent needs — milk for adding to tea, coffee, making butter etc. As the price decreases, less and less urgent needs would come into play. Each additional unit bought is satisfying a lesser (from the consumer's point of view) want; the price the consumer would be willing to pay for a unit of milk would be governed by the consumer's valuation of the satisfaction to be derived from consuming that unit which in turn would be a function of the quantity already consumed. Apart from this, but for similar reasons, more and more consumers would demand milk as price decreases - a family which cannot afford to buy any milk when the price is Rs.25 may want to buy some if the price goes down to say Rs.8.

A change in the price of a good has actually two effects. Consider a hypothetical consumer who consumes only three goods — rice, milk and meat. His monthly budget is Rs.500 and the prices are Rs.6 per kg of rice, Rs.5 per liter of milk and Rs.40 per kg of meat. His current consumption pattern is 30 litre of milk, 24 kg of rice and 5 kg of meat per month. Now suppose the price of milk decreases to Rs.4 per litre. The consumer can now purchase the same basket of goods (though he may not wish to) and have Rs. 30 left over with which he can purchase additional quantities of some or all of the three goods. The same effect could have been achieved by keeping the prices at the original level but giving the consumer an additional income of Rs.30. Thus a price reduction has an effect which is equivalent to an increase in income. Presumably, some of the extra income will be spent on milk thus increasing the quantity demanded. There is an additional effect.

Relative to meat, milk has become cheaper than before; this might include the consumer to substitute some milk for meat since milk can, at least partly, satisfy similar needs. Thus, there is a substitution effect- away from the relatively more expensive goods towards the relatively cheaper good. On both counts the demand for milk increases as its price decreases.

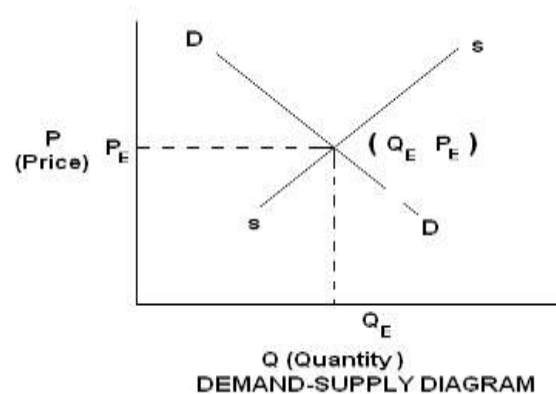
Now, consider the supply side of the market. Production of milk requires a number of inputs. For some of these, their quantities cannot be varied in the short run e.g., stock of milch cattle, grazing land, dairy machinery etc. For others, quantities can be varied e.g., cattle feed, labour, etc.

Consider a typical milk producer. He has a set of fixed inputs which are combined with varying quantities of variable inputs to produce milk. At a given price how much milk would he like to supply? It depends upon the behavior of cost of production and the objectives of the producer. If his goal is to maximise his profits - defined as sales revenue minus cost of production he will push production upto the point where the cost of production of the last unit just equals the price, and subsequent units will cost more. Thus his quantity decision will depend upon the behaviour of incremental or marginal cost. A well known law in economics, called the law of diminishing marginal products says that when the increasing quantities of variable inputs are applied to given quantities of fixed inputs, the incremental output from successive doses of variable inputs eventually declines. This implies that the incremental cost of production starts increasing beyond a point and hence the producer will be willing to supply larger quantity only if the price is higher. Figure below shows the supply curve which is the relation between the price and quantities which the producers would like to supply at each price.



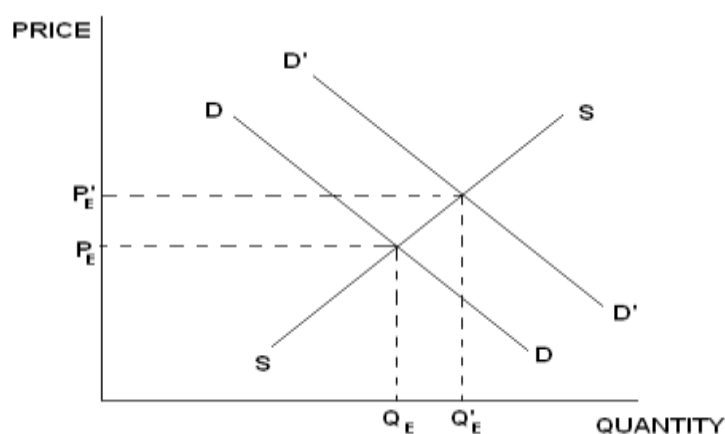
Now, combine the two sides of the market. In figure given below we have shown a demand curve and a supply curve. The point at which they intersect, shown as (P_E, Q_E) is the price – quantity combination at which the producers’ and consumers’ intentions are simultaneously realized. At any price above P_E , the producers would like to supply more than the consumers would like to purchase. The result would be unsold stocks (which in the case of milk may have to be simply thrown away). Obviously, this situation cannot last; the producers will reduce the price and bring a smaller quantity to the market. At a price below P_E there would be a shortage of milk with a number of consumers unable to buy the quantities they would like to buy at such a price.

The result would be a clamour for larger quantity with willingness to pay a higher price. The market would be in ‘equilibrium’ at (P_E, Q_E) in the sense that neither the producers nor the consumers would have an incentive to depart from it unless other factors governing demand and supply change.



There are number of questions regarding the notion of equilibrium. First, there is the question of what is the actual process by means of which a market finds the equilibrium. Since individual participants do not know the plans of others, what mechanism brings about the equality of quantity demanded and quantity supplied? Second, there is the problem of stability of equilibrium. Suppose the milk market is in equilibrium at the price-quantity combination (P_E, Q_E) . Now there is a temporary disturbance e.g. power failure in a large cold storage facility used to preserve milk. There is a temporary shortage, price shoots up and long queues are seen at milk booths. After the disturbance is eliminated, will the market return to its original equilibrium or move away from it? Related to this is the question of market dynamics.

Suppose as a result of increase in consumer income, more milk than before is demanded at every price. In terms of our demand-supply framework, we show this as a shift of the demand curve upward and to the right. The new equilibrium is the price-quantity combination (P'_E , Q'_E). What is the path of the market as it moves from the old to the new equilibrium i.e. how do price and quantity adjust to the change in demand? Can we say anything neither about markets which are nor in equilibrium?



These are some of the questions which have been and are being investigated by economists. There are no fully satisfactory answers.

The demand supply framework is a convenient representation of the working of the market mechanism. The notion of equilibrium forms a point of reference. In real life markets may not be permitted to function in the manner described above because of price controls, rationing and lack of information about prices and insufficient mobility of goods and factors of production. Nevertheless, the demand-supply framework has been found to be a useful analytical device.

Effect of changes in other factors can be depicted in the demand-supply diagram. Suppose consumers' incomes increase. At every price, consumers will now demand a larger quantity than before in figure this is shown as a rightward-upward shift of the entire demand curve. The result is a higher price and larger quantity in the new equilibrium. On the other hand suppose a drought causes shortage of fodder with a resultant increase in its price; the result would be an increase in the cost of production of milk.

At every price producers would be willing to supply a smaller quantity than before. In figure this is shown as a leftward-upward shift of the entire supply curve resulting in a higher price and a smaller quantity in the new equilibrium. You must be always careful to distinguish between movement along a demand or a supply curve, and shifts of curves.

5.6 Pure Competition

Pure competition is said to exist when the following two conditions are fulfilled:

(1) Large Number of Buyers and Sellers

The first condition is that there should be operating in the market a large number of buyers and sellers. If that is so no single producer or purchaser will be able to influence the market price. The output of any single firm is only a small portion of the total output and the demand of any single purchaser is only a small portion of the total demand. Hence, the market price has to be taken as given and unalterable by every purchaser and seller. Thus no individual purchaser can influence the market price by varying his own demand and no single firm is in a position to affect the market price by varying its own output.

(2) Homogeneous Product

The second condition is that the articles produced by all firms should be standardized or identical. In case all farms produce kalia wheat, it is immaterial for the purchaser as to who has produced it. He can buy it as well from the one as from the other. This condition ensures that the same price rules in the market for the same commodity. In case the output is not standardized (i.e., it is differentiated) each individual firm will be in a position to influence the market price.

Whether the products are identical or not, has to be looked at from the purchaser's angle. Even if the products are identical, the purchaser may have a prejudice against the output of a particular firm and may consider it different. That is, if the consumers regard the commodities as different, they should be considered different for purposes of classification in spite of the fact that they are actually identical. The consumers generally believe that the products are different. They generally believe that the commodities that they purchase from a particular shop are superior, even though they may actually be of the same quality.

When the quality is the same, the commodities are perfect substitutes of one another and their cross-elasticity is infinity. In these circumstances, if a firm raises its price, it will lose all customers. It can sell as much as it likes at the prevailing price. Why should it then think of lowering its price? Hence it cannot raise its price and it need not lower it. That is why the prevailing market price is accepted and acted upon by all dealers.

Thus, if the above two conditions, viz., homogeneous products and large number of buyers and sellers, are found in a market, it is said to be under pure competition.

Examples of pure competitions are to be found in the case of farm products, e.g., wheat, cotton, rice. There is a large number of producers, each producing an insignificant proportion of the total market supply. Their product is similar and none of them is in a position to influence the market price by his own individual action. In other fields we seldom come across pure competition.

5.7 Perfect Competition

Perfect competition is wider than pure competition. In addition to the two conditions of pure competition mentioned above, several other conditions must be fulfilled to make it perfect competition.

These conditions are:

(1) Free Entry or Exit

There should be no restriction on the firm's entry into, or exit from, that industry. This will happen when all the firms are making just normal profit. If the profit is more, new firms will enter and extra profit will be competed away; and if, on the other hand, profit is less, some firms will quit, raising the profits for the remaining firms. But if there are restrictions on the entry of new firms the existing firms may enjoy super-normal profit. Only when there are no restrictions on entry or exit, the firms will be in equilibrium.

(2) **Perfect Knowledge**

Another assumption of perfect competition is that the purchasers and sellers should be fully aware of the prices that are being offered and accepted. In case there is ignorance among the dealers, the same price cannot rule in the market for the same commodity. When the producers and the customers have full knowledge of the prevailing price, nobody will offer more and none will accept less and the same price will rule throughout the market. The producers can sell at that price as much as they like and the buyers also can buy as much as they like.

(3) **Absence of Transport Costs**

If the same price is to rule, it is necessary that no cost of transport has to be incurred. If the cost of transport is there, prices must differ in different sectors of the market.

(4) **Perfect Mobility of the Factors of Production**

This mobility is essential in order to enable the firms to adjust their supply to demand. If the demand exceeds supply, additional factors will move into the industry and in the opposite case, move out. Mobility of the factors of production is essential to enable the firms and the industry to achieve an equilibrium position.

5.8 Pure and Perfect Competition Distinguished

As would have become evident from the above discussion, the main difference between pure competition and perfect competition is that in pure competition there is no element of monopoly enabling a producer to charge more. If the two conditions of pure competition are fulfilled, there can be no question of monopolistic control. In perfect competition, apart from absence of monopoly, other conditions are also essential, e.g., free entry and exit, absence of transport cost, perfect knowledge, etc.

5.9 Imperfect Competition

It refers to conditions which are quite opposite of those that prevail under perfect competition. For instance, the number of dealers is not large, at any rate not as large as under perfect competition, the products are not homogeneous; they are on the other hand differentiated by means of different labels attached to them such as different brands of toilet requisites. Either in ignorance or on account of transports costs or lack of liability of the factors of production, same price does not rule in the market throughout. Rather different prices are charged by different producers of products which are really similar but are made to appear different through advertisements, high pressure salesmanship and labeling and branding. The result is that each producer comes to have a hold on a client from whom he can charge higher prices. In this case the demand curve or sales curve or what is also called average revenue curve, is not a horizontal straight line. It is, on the other hand, a downward sloping curve, i.e., the seller can sell more by reducing price. Under perfect competition, he need not reduce the price, for he can sell any amount at the prevailing price. He can also charge higher prices because his customers are attached to him.

He can thus have a price policy of his own whereas a seller under perfect competition has no price policy; he has merely to accept the market price. The demand for his product is not perfectly elastic; it is responsive to change in price.

This form of market is a blend of monopoly and competition and has been called "*monopolistic competition*" by Chamberlain, an American economist. In the real world, we have neither monopoly (i.e., absence of competition) nor competition but imperfect competition, i.e., partly monopoly and partly competition. The products are not complete substitutes for one another but they are close substitutes. But monopolistic competition is only one form of imperfect competition where there is a large number of sellers but products are differentiated. Other forms of imperfect competition are oligopoly and ordinary monopoly.

5.10 Monopolistic Competition

The last category of imperfect competition is monopolistic competition; this occurs when a large number of sellers produce differentiated products. This market structure resembles perfect competition in that there are many sellers, none of whom have a large share of the market. It differs from perfect competition in that the products sold by different firms are not identical. *Differentiated products* are ones whose important characteristics vary; for example, for automobiles, important characteristics include size, performance, fuel economy, and safety. Because companies sell slightly different products, they can sell at slightly different prices.

The classic case of monopolistic competition is the retail gasoline market. You may go to the local Exxon station, even though it charges slightly more, because it is on your way to work. But if the price at Exxon raises more than a few pennies above the competition, you might switch to the Mobil station a short distance away.

Indeed, this example illustrates that one important source of product differentiation comes from location. It takes time to go to the bank or the grocery store, and the amount of time needed to reach different stores will affect our shopping choices. In economic language, the total opportunity cost of goods (including the cost of time) will depend upon how far we live from a store. Because the opportunity cost of local shops is lower, people generally tend to shop in nearby locations. This consideration also explains why large shopping complexes are so popular they allow people to buy a wide variety of goods while economizing on shopping time. The product differentiation that comes from different locations is an important reason why these tend to be monopolistically competitive markets.

Product quality is an increasingly important part of product differentiation today. Goods differ in their characteristics as well as their prices. Most IBM compatible personal computers these days can all run the same software, and there are many manufacturers. Yet the personal computer industry is a monopolistically competitive industry, because computers differ in speed, size, memory, repair services, and ancillaries like CD-ROMs, internal modems, and sound systems. Indeed, a whole batch of monopolistically competitive computer magazines is devoted to explaining the differences between the computers produced by the monopolistically competitive computer manufacturers!

The main features of monopolistic competition are:-

- (i) In monopolistic competition, the number of dealers is quite large but not as large as under perfect competition.
- (ii) The products are not homogeneous; they are, on the other hand, differentiated by means of different labels attached to them, such as different brands of toilet requisites.
- (iii) Either in ignorance or on account of transport costs or lack of mobility of the factors of production, the same price does not rule in the market throughout. Rather different prices are charged by different producers for products which are really similar but are made to appear different through advertisements, high pressure salesmanship and labeling and branding. The result is that each produce comes to have a hold on a clientele from whom the producer can charge higher prices.
- (iv) Under monopolistic competition, the demand curve or sales curve, or what is also called average revenue curve, is not a horizontal straight line. It is, on the other hand, a downward sloping curve, i.e., the seller can sell more by reducing price. Under perfect competition, he need not reduce the price, for he can sell any amount at the prevailing price. Under monopolistic competition, the seller can also charge higher prices because his customers are attached to him. He can thus have a price policy of his own, whereas a seller under perfect competition has no price policy; he has merely to accept the market price as given.
- (v) Under imperfect competition, the demand for the product is not perfectly elastic; it is responsive to changes in price.

This form of market is a blend of monopoly and competition and has been called monopolistic competition by Chamberlain, an American economist. In the real world, we have neither monopoly (i.e., absence of competition) nor competition but imperfect competition, i.e., partly monopoly and partly competition. The products are not perfect substitutes for one another but they are close substitutes.

5.11 Price – Output Determination under Monopoly Market:

5.11.1 What is Monopoly?

The term monopoly is split up into mono and poly. 'Mono' means one and 'Poly' means seller. Thus monopoly means a single seller of the product having complete control on the supply of the product secondly, there should be no close substitute to monopoly product or the cross elasticity of demand between monopoly product and other's product must be either zero or very small. Zero cross and small elasticity implies total absence of substitutes and small elasticity implies distant substitute. Thirdly, there must be strong barriers to the entry of new firms in the market. Under monopoly condition, no rival firm is allowed to enter the market. Thus a single firm will face the market demand for the product. Therefore, the single firm constitutes the entire industry. Hence, there is no difference between firm and industry under monopoly form of market.

5.11.2 Nature of Demand Curve under Monopoly:

There is a marked difference between the demand curve faced by the firm under perfect competition and the demand curve faced by a monopoly firm. A firm under competitive conditions faces perfectly elastic demand curve whereas a monopoly firm faces relatively elastic demand curve. In case of monopoly market, a single firm constitutes the whole industry. Therefore the market demand for the product is faced by a single monopoly firm. Since individual demand schedules for the product slope downward the monopoly firm faces a downward sloping demand curve. This means that if the firm wants to increase sales of its products, it must lower the price. Monopoly firm can make two decisions viz (i) how much to produce i.e. fixing the size of output or naming the price for the product. But it can not make both the decisions at a time. It can make either of the decisions at a time.

It means that the firm may either fix the size of output to be produced and leaves it to consumers to determine the price for the product or it may name the price for the product and leaves to the consumers to buy whatever quantity they want to buy at that price.

However, the monopoly firm is a price maker and not merely a quantity adjuster like a firm under perfect competition. So the problem faced by a monopoly firm is one of picking up right price – quantity combination which is optimum for the firm.

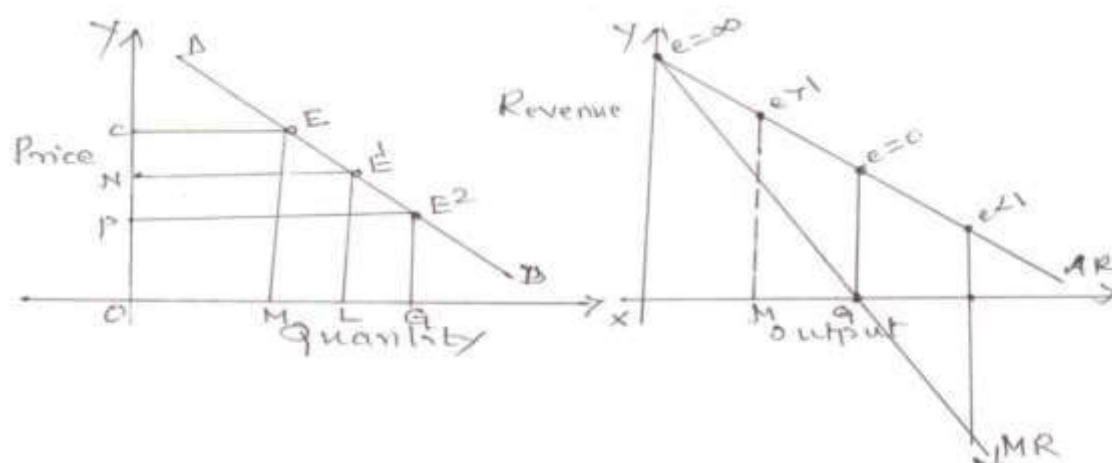
Demand curve of a monopoly firm is its average revenue curve. Since individual demand schedules slope downward, the average revenue curve of the monopoly firm also slopes downward through out its length. The marginal revenue curve lies below the average revenue curve. It is so because every additional unit of the product is sold at a lower and lower price. That is why marginal revenue is less than average revenue. The shape and the relationship between AR and MR are shown and explained in the following diagram. The MR curve lies below the AR curve because every additional unit is sold at lower price than the previous one. Though MR is less than AR, they are related to each other through price elasticity of demand. The price elasticity on AR curve will tell whether MR is positive or negative at a particular size of output. As long as price elasticity is positive i.e. between infinity and unity MR is positive and between unity and zero elasticity, MR is negative. At unity elasticity MR is zero as shown in the diagram below.

The relationship between AR and MR is explained by the following formula.

$$MR = AR \left(\frac{e - 1}{e} \right)$$

Where (a) MR → Marginal Revenue (b) AR → Average Revenue (c) e = elasticity of demand. The value of $\frac{e - 1}{e}$ is less than one therefore MR is always less than AR or Price. So price or AR under monopoly market is always higher than MR. The extent to which the MR curve lies below the AR curve depends upon the value of the fraction $\frac{e - 1}{e}$ However at infinity on AR curve both are equal, at unity MR is zero, at elasticity greater than one it is positive and elasticity less than one it is negative. Thus it can be observed that the higher the elasticity on AR curve, the closer will be the MR curve to the AR curve and lower the elasticity the farther off will be the MR curve from the AR curve. Beyond unity, MR becomes negative.

5.12 Price – Output Equilibrium Under Monopoly :

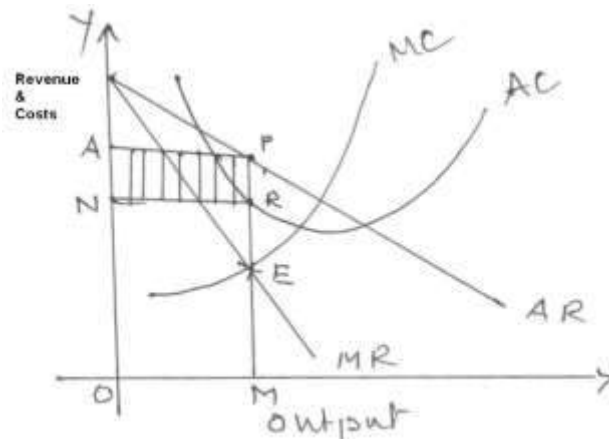


Monopoly firm like any other firm keeps before itself two objectives viz (i) Maximisation of profit or minimisation of losses. It is rather surprising that monopoly firm incurs losses. Yes, it does when demand for its product is inadequate in the short run.

As we have seen earlier that the monopoly firm makes either of the decisions at a time that is fixing the size of output or naming the price for its product.

Generally, price for the product is named. Once price is fixed, then it is up to consumers to buy whatever quantity they want to buy at that price.

The monopoly firm will continue production up to that point at which Marginal cost (MC) becomes equal to marginal revenue (MR). In other words, the essential condition for monopoly equilibrium is the equality between $MC = MR$. However this is essential condition but not a sufficient condition. The sufficient condition is that the elasticity of demand on the AR curve must be greater than one at the point of equilibrium. Thus the monopoly firm will never fix its size of output at that level where the elasticity is less than one because there after MR becomes negative. Therefore total receipts of the monopoly firm always falls if it increases its sales. Thus the problem faced by the monopoly firm is to pick up that price quantity combination which is the best for the firm i.e. which enables the firm to earn maximum possible profits. The following diagram depicts the monopoly equilibrium. Revenue and costs are measured along 'OY' axis and output along 'OX' axis. The diagram indicates MC and MR are equal at OM size of output and 'OA' is the price named by the monopolist.



ON is the average cost of production. Thus AN is the profit per unit ($OA - ON = AN$). The firm is in equilibrium at 'E' point where $MR = MC$ and elasticity of demand at 'P' point on AR curve is also greater than one. The firm makes excess

$$\begin{aligned}
 \text{Profit} &= TR - TC \\
 &= \text{Price} \times \text{output} - \text{Average cost} \times \text{output} \\
 &= AO \times OM - ON \times OM \\
 &= AOMP - NOMR \\
 &= ANRP \text{ (shaded Area)}
 \end{aligned}$$

One point is to be noted in the case of monopoly equilibrium is that the monopoly price is not equal to marginal cost. It is always higher than marginal cost but it stands in certain relation with MC through elasticity. This relationship is explained with the help of the formula given by Prof (MS) Joan Robinson, English Economist.

$$MR = AR \left(\frac{e-1}{e} \right)$$

$$\therefore AR = MR \left(\frac{e}{e-1} \right)$$

But in equilibrium $MR = MC$

$$\therefore AR = MC \left(\frac{e}{e-1} \right)$$

$$\text{AR or Price} = \text{MC} \left(\frac{1}{e - 1} \right)$$

Since the Value of the fraction $\frac{1}{e - 1}$ is greater than one for a given value of

elasticity, it follows that under monopoly, price is always greater than MC

$\text{AR} > \text{MC}$. However, the extent to which price differs from MC depends upon the value of the elasticity on AR curve at the point corresponding to the equilibrium. The smaller the elasticity, the greater is the value of expression $\frac{1}{e - 1}$ and hence the

greater the extent to which price would differ from MC. Thus the monopoly price is the function of marginal cost and the elasticity of demand.

However MC curve which represents the supply curve of the product under perfectly competitive conditions does not function as such under monopoly. Since MC can never be negative, equality between MC and MR can not be achieved where elasticity is less than one because then MR becomes negative. Thus the monopoly equilibrium will always lie at a point where elasticity is greater than one.

5.13 Price Discrimination or Discriminating Monopoly :

Price discrimination refers to the practice of a seller of selling the same product at different prices to different buyers or groups of buyers. In other words, the monopolist sells the same product to different customers at different prices. This he does it to maximize profit. According to Prof. Stigler, price discrimination refers to "The sales of technically similar products at prices which are not proportional to marginal cost". This implies that the monopolist improves the quality of the product and sells it at a much higher price than the cost he incurs on improving the product.

There are three types of price discrimination namely personal price discrimination, local price discrimination and price discrimination according to use of the product.

- (1) **Personal Price Discrimination** : It refers to charging of different prices or fees for the same services or the product to different persons. This is possible in all personal services.
- (2) **Local Price Discrimination** : It refers to charging of different prices to customers living in different localities or places under this type of price discrimination, the monopolist divides his total market in to various sub-markets based on elasticity of demand or on the basis of economic conditions of the people.

(3) **Price Discrimination According to use of the Product** : It refers to charging of different prices for the same product or service in its different uses. For example electricity charges, or railway fares.

5.13.1 Conditions For Price Discrimination :

- (i) Price discrimination takes place only when it is not possible to transfer units of the product from one market to another. In other words sub-market must be separated from each other either by a long distance or by tariff walls otherwise buyers in the dear market may come down to the cheap market and buy the product or buyer in the cheap market may resell the product in dear market. Thus, there should be no seepage between the two sub-markets.
- (ii) The second condition for price discrimination is that the buyers in the dear market should not convert themselves into the buyers of cheap market for the purpose of buying the product. It means that the rich should not pretend themselves to be the poor. If they do so then in that case price discrimination will break down.

5.13.2 Price Discrimination is possible in the following cases :

- (1) It is possible in all personal services because there is no resale possible.
- (2) It is possible when sub-markets are separated by long distance or by tariff walls.
- (3) Legal sanction permits the price discrimination. The government allows the monopolist to charge different prices to different customers for the same product.
- (4) People's prejudices and preferences for certain products enable the monopolist to charge different prices to different groups of people for the same product.
- (5) Price discrimination is possible on account of ignorance and laziness of the people.
- (6) When several groups of buyers need the same service for clearly differentiated commodities or use, Price discrimination takes place.

5.13.3 When Is Price-Discrimination Possible & Profitable?

Price discrimination is possible, yet it may not be profitable. Price discrimination is possible only when there is different elasticity of demand in different sub-markets. If the demand curves in all the sub-markets are iso-elastic, then price discrimination may not be profitable even though it is possible. It is so because marginal revenue in all the sub markets at a price will be the same.

This is better explained by the formula

$$MR = AR \left(\frac{e-1}{e} \right)$$

We suppose, that there are two sub – markets namely ‘A’ and ‘B’. Price elasticity in both the markets is the same i.e. 2. So, at price Rs. 10 per unit MR in both the markets A and B would be the same. Therefore, it will not pay the monopolist to transfer any amount of the product from one market to another. He will get same revenue in both the markets. If he sells one extra unit in either of the markets.

$$MRa = AR \left(\frac{e-1}{e} \right)$$

$$MRa = 10 \left(\frac{2-1}{2} \right)$$

$$MRa = 10 \times \frac{1}{2}$$

$$MRa = 5$$

$$MRb = AR \left(\frac{e-1}{e} \right)$$

$$MRb = 10 \left(\frac{2-1}{2} \right)$$

$$MRb = 10 \times \frac{1}{2}$$

$$MRb = 5$$

e = 2, Price Rs. 10/- Per Unit

MR in both the market is Rs. 5/- . It is thus clear from the above example that it will not be profitable for the monopolist to discriminate prices between the sub-markets A and B. When elasticity is the same in both markets.

But it is possible and profitable only when elasticity of demand in different sub-markets is different. In such cases, it will be profitable for the monopolist to charge different prices if elasticity of demand in sub-markets at single monopoly price is not the same. Monopolist will make maximum profit by discriminating prices in the sub-markets having different price elasticity of demand. This is better understood by the formula.

$$MR = AR \left(\frac{e-1}{e} \right)$$

When elasticity is different in sub-markets, MR in different sub-markets is different. Let us use the same example but elasticity as $e = 2$ in 'A' market and $e = 4$ in 'B' market. Therefore MR in 'A' market and MR in 'B' market are as follows

$$MR_a = AR \left(\frac{e-1}{e} \right)$$

$$MR_b = AR \left(\frac{e-1}{e} \right)$$

$$MR_a = 10 \left(\frac{2-1}{2} \right)$$

$$MR_b = AR \left(\frac{4-1}{4} \right)$$

$$MR_a = 10 \times \frac{1}{2}$$

$$MR_b = 10 \times \frac{3}{4}$$

$$MR_a = \text{Rs. } 5/-$$

$$MR_b = 15/2$$

$$MR_b = \text{Rs. } 7.5$$

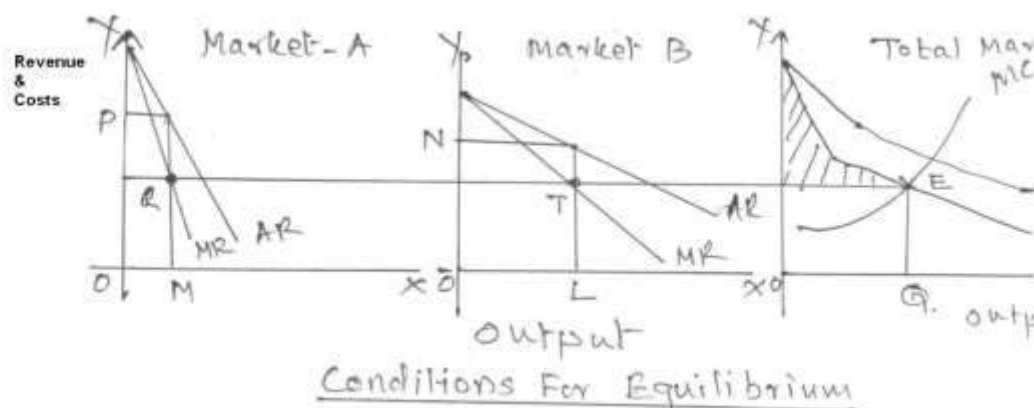
The above example makes clear that MR is higher in 'B' market than the MR in 'A' market. Thus it is profitable to transfer some quantity of the product from 'A' market to 'B' market. If he transfers one unit from A to B market, he will gain $7.5 - 5$ Rs. 2.5 per unit. Thus, he will go on transferring unit of the product from A to B market until MRs. In both the markets become equal. Now, he will charge different prices for the same product in A and B markets. A higher price in 'A' market and a lower price in 'B' market . Generally a high price is charged in low elasticity market and a low price in a high elasticity market.

5.13.4 Monopoly Equilibrium Under Conditions of Price Discrimination :

To study equilibrium of discriminating monopoly we have to assume that the monopolist has divided his market in two submarkets. On the basis of elasticity of demand in each market. Having divided the markets, he has to make two decisions to attain equilibrium. These decisions are (a) How much out put is to be produced? and (b) How to share the total output between various sub-markets. In other words, how much quantity of the product is to be sold in each sub –market and at what prices. To illustrate the equilibrium under price discrimination, let us suppose that there are only two sub-markets namely 'A' and 'B'. Market 'A' is having low elasticity and market 'B' is having high price elasticity for the monopoly product.

The equality between marginal cost and aggregate marginal revenue will tell the monopolist how much to produce. It means that the monopolist would continue production up to a point at which $MC = AMR$ or CMR . AMR or $CMR = MR_a + MR_b + MR_c + \dots + MR_n$ th market. So, AMR refers to aggregate marginal revenue

Which is obtained by adding marginal revenues in all the sub-markets [$AMR = MR_a + MR_b + MR_c + \dots + MR_n$ th]. The second condition necessary for equilibrium is that $MC = MR_a = MR_b = MR_n$ th market. The equality between $AMR = MC$ will guide the monopolist as to how much to produce? And equality between MC and MR revenue in all the sub-market would tell him as to how much to sell in each sub-market. The AMR curve show the total output that would be sold in the sub-market taken together corresponding to each value of the marginal revenue. He will then distribute that total output in such a way that marginal revenue in the two sub-markets are equal. Marginal revenues in sub-markets must be equal if profits are to be maximized. The following diagram depicts the equilibrium of monopolist under discriminating conditions.



5.13.5 Conditions For Equilibrium

(i) $AMR = MC$ (ii) $MC = MR_a = MR_b = MR_{nth}$. The above figure shows that the monopolist attains equilibrium at 'E' point where $MC = AMR$ at OQ size of output. So the total output is OQ. Of the total output, OM quantity is sold in 'A' market and OL quantity in B market $OQ = OM + OL$. This sharing of OQ output is obtained by equating MC with MR_a and MR_b . In market 'A' he charges OP price and market 'B' he charges ON price per unit. Op price is higher than On price because price elasticity in 'A' market is lower than that of B market. The shaded area in total market depicts the profit. Thus it can be said that given the demand for the product and the cost conditions, the discriminating monopolist will produce OQ size of output and will sell Om part of the total output in 'A' market and OL part in 'B' market and thus will maximize profits.

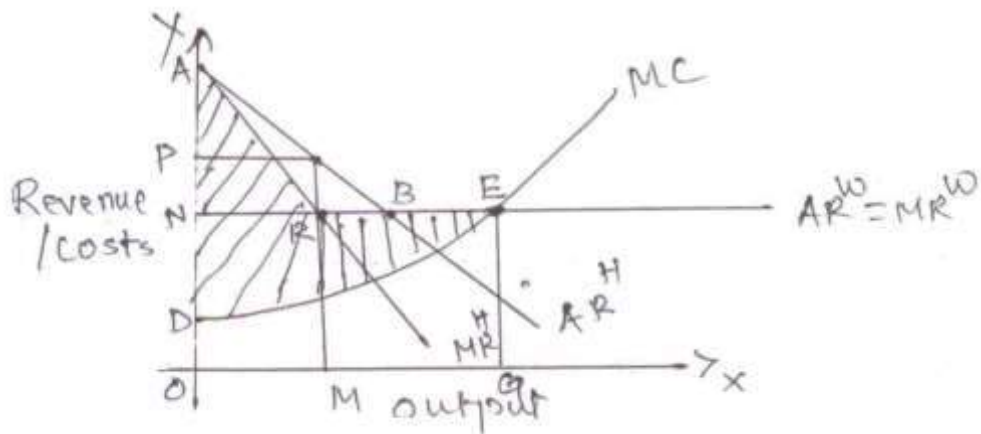
5.13.6 DUMPING – A Special case of Price – discrimination :

Dumping is nothing but price discrimination but it is a special type of price discrimination. It takes place when monopolist sells his product in two markets; one in which he faces perfect competitions and monopoly in the other; so demand curve for his product in perfect market will be perfectly elastic while in monopoly market relatively elastic or downward sloping demand curve. This happens when a producer is monopolist in home market and one of the sellers in the world market. In international market he is one of the sellers and therefore he faces keen competitions there. It is for this reason; he sells his product in international market at prevailing price. The international price is much lower than the price charged in domestic market.

Dumping may also refer to the practice of the monopolist to sell his product in the world market at a price less than the cost of production. He does this to enter and capture the world market. Secondly he may resort to dumping to clear off his excess output as domestic market is not large enough to sell his entire output. Thirdly, he may resort to dumping to earn foreign exchange for modernisation and lastly to maximise profits. The conditions for equilibrium of dumping monopoly are the same as ordinary discrimination.

$$1) \quad MC = AMR \quad 2) \quad MC = MR^H = MR^W$$

The second condition complies that MRs in world market as well as home market must be equal to marginal cost of production. The following diagram show equilibrium of the monopoly under conditions of dumping.



Revenue and costs are measured along 'OX' axis and output along OX axis. $AR^H = MR^H$ represents average and marginal revenue in home market while $AR^W = MR^W$ in world market. $AR^W = MR^W$ line is perfectly elastic because in the world market monopolist faces perfect competition. In the home market he faces relatively elastic demand curve. That's why AR^H and MR^H slope downwards. The monopolist attains equilibrium at that size of output at which $MC = AMR$ or aggregate marginal revenue. This equality is attained at 'E' point at OQ size of output. Now question of sharing of output between home market and world market arises. The monopolist solves this problem when he equates MC with MR^W and also MR^H . Market i.e. $AR^W = MR^W$. This condition is fulfilled at 'R' point in the diagram. At 'R' point $MC = MR^H$ that is $RM = EQ = MR^W$. Thus OM size of output he will sell in the home market and MQ size of output in the world market. Thus the total output in the market outside. Thus, the total output OQ is divided between home market (OM) and the world market (MQ) i.e. $O = OM + MQ$.

The AMR curve, in this case is the composite curve i.e. ARBE which is the lateral summation of MR^H and MR^W . Total profit earned is equal to the area APNDE (shaded Area). He will charge OP price in the home market and ON price in the world market.

5.14 MONOPOLISTIC COMPETITION

In reality, there exists neither perfect competition nor pure monopoly. Both are extreme forms of market. The reality lies between the competition and monopoly. It was Prof. E. H. Chamberlin who developed this kind of market. It is a blending of competition and monopoly. This form of market includes some features of monopoly and some features of competitions. The term monopolistic implies 'Mono' means one and 'Polistic' means competitions. Thus, it is the competition among the producers who produce similar products and not the same product. So each firm faces a keen competition from its rivals.

Therefore each firm so far as supply of its product is concerned is monopolist because no one else can supply that product. So, it becomes a single seller of that product. But it faces competitions from other firms who produce close substitute. In other words, cross elasticity between the products of the firms under monopolistic market is very high. Therefore, it is called as the blending of monopoly and competitions.

Product differentiation is the characteristic feature of this market. This means that the products of different firms are heterogeneous but are closely related to each other. Product differentiation doesn't mean that the products of different firms are totally different but they are slightly different. That's why they are called similar and not the same. If the degree of product differentiation is greater, the presence of monopoly element is greater and if the degree of product differentiation is smaller, the greater is the competitive element. Since this form of market exhibits features of monopoly and competitions, we call it as monopolistic competitions.

5.14.1 Characteristics of Monopolistic competition :

- 1) **Large numbers of buyers:** Like perfect competition there are large number of buyers. But how large is the number can not be ascertained. Each firm has its own group of buyers. They are attached to particular brand of product. Therefore, they follow their own pricing policy. Prices of different products therefore differ. Because tastes and preferences of the people differ, each firm finds demands for its products. However the large numbers of buyer are divided among many sellers supplying the similar products.

- 2) Large numbers of sellers:** Existence of large number of sellers is the second condition of this form of market. Each seller supplies similar products. If the number of firms is larger, the product differentiation may be smaller., Again, if the number of firms are smaller differentiation is generally greater. Thus, this form of market offers an opportunity to everyone who wants to enter the market but on one condition that the product is differentiated from the existing ones. So, there is no limit to the number of firms like perfect competitions. In this way, the market also resembles perfect competition.
- 3) Product Differentiation:** This is the distinguished feature of this market. Each firm produces non identical product and not the same product. The degree of product differentiation depends upon the numbers of firms. The larger the number of firms, the smaller is the difference and vice-versa. However each firm’s product is close substitute to other firms. Therefore, product differentiation is the soul of this market. The product differentiation is based on certain characteristic of the product itself like exclusive patented features, trade marks, trade names, designs, colour, weight, packaging price etc. also conditions surrounding sales of the product like making available free home delivery etc. Besides, location of the seller, the way of doing business seller’s reputation for fair dealing courtesy etc also determine product differentiation.
- 4) Free Entry and Exit of Firms:** There are no barriers on entry and exit of firms under this market. But new firms will have to supply differentiated product from the existing ones. Thus any numbers of firms are welcomed provided they produce similar products. This brings about automatic adjustment in the supply of the product. The larger the number of firms, the greater is the competition and vice – versa.
- 5) Selling Costs:** This is another marked feature of this form of market. There is no need of advertising either under perfect competitions or under monopoly. But under, this form of market, without selling costs, no firm can survive. Each firm will have to advertise its product to inform the consumers about the new product for creating demand. A skillful and imaginative advertisement is necessary to convince the consumers to buy the product. Thus, the selling cost refers to the cost incurred on advertisement. It may be informative or competitive.

- 6) Informative:** The purpose of this type of advertisement is to inform the consumers about the new product. It can be done through newspapers, magazines, sign boards, radio, T.V. cinema houses etc so that the people know about the new product. The purpose of this type of advertisement is not to boost demand but to inform the people about the new product to make their rational choice. It also enlightens them about the market situation and helps them to make rational choice.
- 7) Competitive Advertisement:** The objective of this type of advertisement is either to create demand or boost the demand for the product. Generally, all means moral immoral are made use of to create demand for the product and rattle down the rivals. Public media like newspapers, radios, TV, cinema houses, models, window dressing, sign-boards, magazines etc are used to convince the consumers to choose a particular product from among many. Even popular figure like film star, sportsman are employed to advertise the product. This category of advertisement tries to establish that the advertised product is the best or superior to all and appeals the consumers to buy that product some times, even free gifts are offered on purchase of the product.

However, this type of advertisement misleads the consumer. It becomes difficult for consumer to make correct and rational choice from among host of advertised products. Many times, they make wrong choice based on false and exaggerated advertisement. Therefore on moral and economic grounds such advertisement is not desirable. The selling cost influences the shape and the position of the demand curve because it influences the elasticity of demand. When demand curve shifts to the right, it means that the selling cost has proved successful in improving demand for the product.

5.14.4 CONCEPT OF GROUP

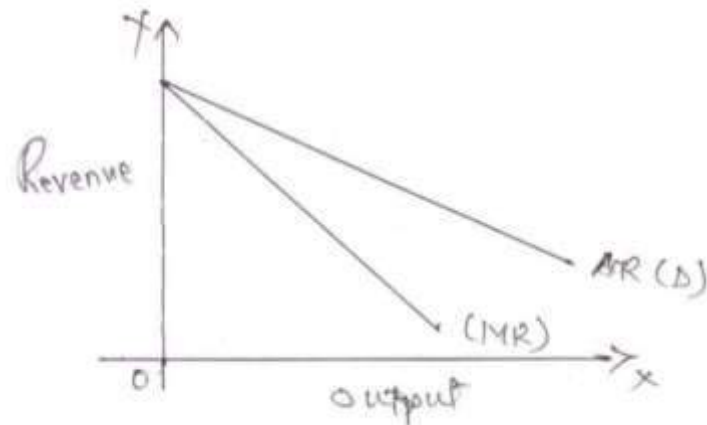
Since all the firms under monopolistic competition produce non – identical products, therefore they are said to be in a group. The concept of industry is peculiar with perfect completion only because all firms under perfect competition produce identical products. But under monopolistic competition each firm produce close substitute to other is product. It is for this reason within the group firms has greater affinity and their products become close substitutes. They offer stiff competition to each other. The larger the number, the keener is the competitions and vice versa.

5.14.3 NATURE OF DEMAND CURVE

The shape of the demand curve under this form of market is determined by the tastes and preference of the consumer, pricing policy of rivals, output, selling costs and product decision of rivals firms. The problems of monopolistic competitions are therefore more complicated than those under perfect competition. The demand curve faced by a firm under monopolistic competition is its average revenue (AR) curve. It is neither perfectly elastic nor perfectly inelastic. It lies between the two elasticities. It is more elastic than it is under monopoly and less elastic than the demand curve under perfect competition.

This makes clear that the demand faced by the firm under this form of market is flatter and elasticity of demand is greater than one. The degree of elasticity depends upon the extent of product differentiation and the number of firms operating.

If the degree of product differentiating is greater, then in that case monopoly element will be larger and so the demand curve will be relatively inelastic. But if the degree of product differentiation is smaller then in that case competitive element will be greater and therefore demand curve will be more elastic. Secondly number of firms in the group also determines the position and shape of the demand curve. If the number is larger, the smaller is the product differentiation and hence greater is the competitive element and hence the demand curve will be relatively elastic. If the degree of product differentiation is smaller then in that case competitive element will be greater and therefore demand curve will be more elastic. Secondly, the numbers of firms in the group also determine the position and shape of the demand curve. If the number is larger, the smaller is the product differentiation and hence greater is the competitive element and therefore the demand curve will be more elastic. If the number is smaller, the greater is the product differentiation and therefore greater is the monopoly element so demand curve will be relatively inelastic. The following diagram depicts the shape and position of demand curve. Since individual demand schedule slopes downward, AR curve of the firm also slopes downward. The marginal revenue curve lies below the AR curve. MR like monopoly is always less than price because additional sale of output involves cut in price.



5.14.4 Production & Selling Costs

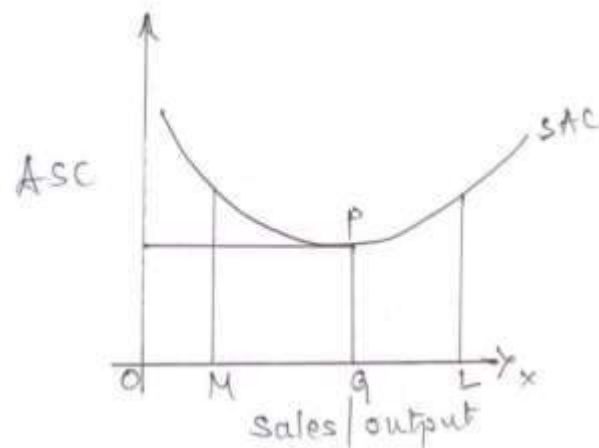
Selling costs occupy an important place in marketing the product. In fact, in certain cases selling cost exceeds the production cost because marketing of the product becomes difficult. To market the product means to create the demand for the product. Thus to convince the consumers to buy the product an intensive and skillful advertisement campaign needs to be undertaken. Many a times a good product does not get sales for want of proper and effective advertisement.

Therefore, we should know the difference between the two.

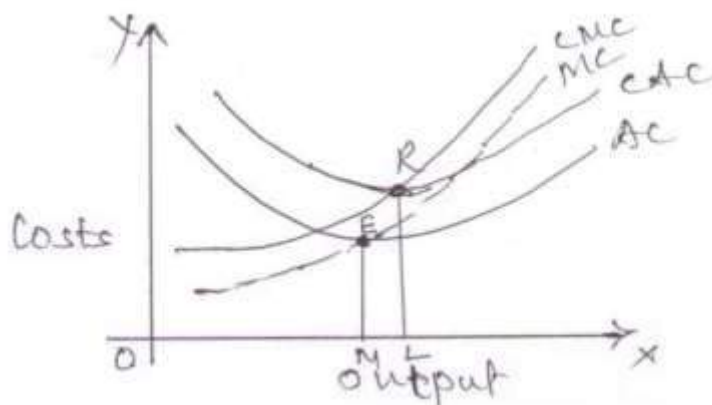
- 1) Production cost is incurred to produce and supply good and services whereas selling costs are incurred to raise sales of the product.
- 2) Production cost is generally incurred to satisfy the exiting wants whereas selling costs are incurred to create future demand.
- 3) Selling costs change the shape and position of demand curve. It makes it more elastic but production cost does not do the same.
- 4) Production costs create utility but selling costs do not create any utility
- 5) Production costs increase supply of goods and services while selling costs create or increase demand for the product.
- 6) Production cost increases national income in real terms whereas selling costs bring about merely transfer of resources without adding anything to the national income.

5.14.5 NATURE AND SHAPE OF THE AVERAGE SELLING COST:

Average Selling Costs (ASC) refers to the selling cost incurred per unit of sale. It is also U shaped. Thus in the beginning it is high but as the sales of the product increases, the average selling cost starts falling. It falls due to operation of the law of increasing sales. Therefore ASC declines. But this will not happen indefinitely. After having reached the minimum point, it begins to rise due to the operation of the law of decreasing sales. In other words, the operation of the law of non – proportional sales is the cause of ASC being U shaped. The following diagram depicts the shape of ASC.



Total cost of production includes TFC, TVC and total selling costs. Therefore AC of production is equal to $AFC + AVC + ASC$. In the following diagram combined AC and MC are shown.



5.14. Exercise

1. What is meant by market in equilibrium? How does the demand curve and the supply curve enable us to arrive at it? Explain with the diagrams.
2. What are the essentials of pure and perfect competition? When does it turn imperfect?
3. Explain the main features of monopolistic competition. How product differentiation helps to distinguish a monopolistic competition?
4. Explain the mechanism of price determination under monopoly with reference to a diagram where the area of excess profit is shown.
5. Explain the market situation which enables price discrimination possible & profitable.
6. Write short notes on :-
 - (a) Dumping
 - (b) Selling cost
 - (c) Product differentiation
 - (d) Discriminating monopoly

UNIT – VI

PRICING OF FACTORS (DISTRIBUTION)

6.1 THE GENERAL THEORY OF DISTRIBUTION

Production is the result of joint endeavor of four factors of production namely land, labour, capital and entrepreneur. Since their services are economic goods, they are to be paid for. Thus, the national income is distributed among these factors of production. The theory, which refers to the distribution of national income among the factors of production, is called as the general theory of distribution. It deals with the pricing of the productive resources. It determines the relative share of land, labour, capital and entrepreneur in the national income. Thus land is paid in terms of rent, labour in wages, capital in interest and entrepreneur in profits from the national income.

National Income = Rent + wages + interest + profit. Distribution of national income is studied in two ways namely personal distribution and the functional distribution. Personal distribution refers to the study of individual incomes. It analyses how much is earned by individuals in the country. However, it is very difficult to explain earning of individual incomes because they earn from different sources. Earning of individual incomes depends upon social and political structure of the country, system of ownership, of property and the laws of inheritance. It is for these reasons study of personal distribution becomes a complex one.

Functional distribution on the other hand deals with the study of factor incomes. It analyses the relative share of each factor in total national income in terms of rent, wages, interest and profit. In other words functional distribution of national income studies pricing of factors in terms of function they perform in producing goods and services or national income. Thus, the functional distribution is named as the theory of factor pricing.

6.2 MARGINAL PRODUCTIVITY THEORY

The marginal productivity theory of distribution is only an extension of general theory of distribution. It explains determination of incomes of factors of production. Theory is associated with names of J. B. Clarke, Wicksteed and others. The theory states that income of the factor of production is determined by its marginal product. Marginal product refers to the addition made to the total product by employing one more extra unit of the same factor of production, quantity of other factors remaining constant.

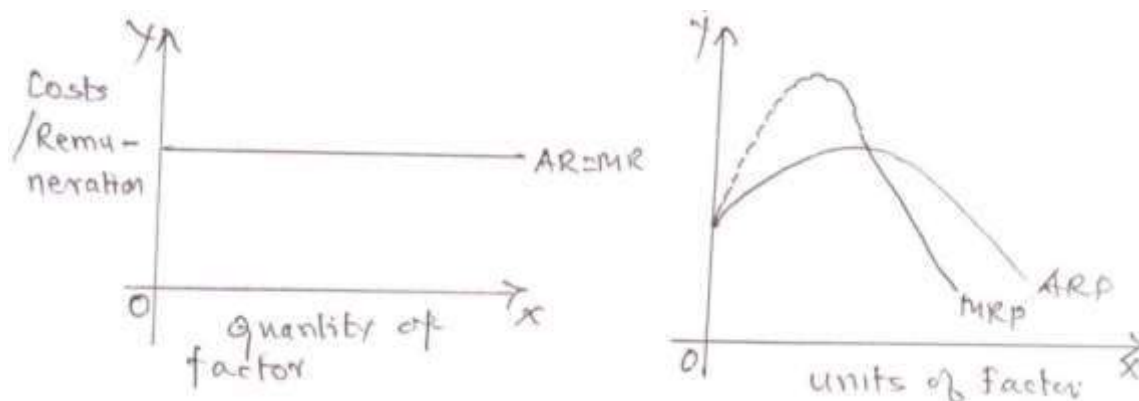
J. B. Clark, held the view that in a static economy, every factor of production including entrepreneur receives reward equal to its marginal product. The marginal product can be measured in marginal physical product or marginal revenue product. Marginal Physical Product (MPP) refer to the addition made to the total product in physical form by employing one more unit of the same factor keeping quantity of other factors the same. While marginal revenue product (MRP) is money value of MPP i.e. $MPP \times \text{price}$ of the product. Since factors of production are paid in their revenue productivity, the theory is studied in terms of revenue productivity.

6.3 THE STATEMENT OF THE THEORY

The marginal productivity theory relates the reward of a factor of production to the revenue productivity of that factor. Thus price of any factor of production depends upon its revenue productivity. An employer will continue employing units of a factor up to the point at which rewards paid to the marginal unit of that factor is equal to the contribution made to the total production by that unit in terms of money. No rational producer would go beyond this point of equality because the cost (Reward) exceeds the contribution (income). At the margin, the reward of the factor is equal to its productivity or marginal productivity. Thus, the marginal productivity theory states that

- 1) rewards of a factor would depend upon the contribution of that factor to the total production.
- 2) the reward of a unit of factor of production would be determined by and would be equal to the marginal productivity of that factor unit.
- 3) Under certain conditions, the reward of the factor unit would be equal to both, the average productivity of factor under consideration.

Here two points are to be noted. First the reward which a factor of production receives is income for that factor but it is the cost to the employer under perfect competition, rewards which pays is the same for all units of factor. Therefore cost curve of the factor is horizontal straight line indicating that average cost and marginal cost are the same to the employer. Secondly that the factors of production are paid in money and not in



what they produce. Therefore, employer is interested in revenue productivity. Physical productivity is converted into revenue productivity through price mechanism or prices. Average revenue productivity (ARP) refers to the total revenue divided by number of units of the factor employed to produce the given output. Marginal Revenue Productivity (MRP) refers to the net contribution made to the total revenue productivity by employing one more unit of the same factor. Both revenue productivity depend upon the law of variable returns that is they increase, reach maximum and then decline.

The marginal productivity theory of distribution states that under perfect competition in the long run, the reward paid to the factor units will be equal to both average revenue productivity as well as marginal revenue productivity. The following figure show the ARP and MRP curves and the average and marginal remuneration (Cost) curves under competitive conditions

6.4 EQUILIBRIUM OF THE FIRMS IN FACTOR MARKET

To understand the equilibrium of a firm with regards to employment of factors of production, one assumption is made i.e. quantity of other factors of production is kept fixed quantity of one variable factor say labour is increased. In other words, more and more units of labour are employed until contribution made by the last unit employed becomes equal to the reward that unit of labour receives from the employer.

The following diagram illustrates the firm is equilibrium. Revenue productivity and costs are measured along vertical axis while labour along horizontal axis.

6.5 CONDITIONS FOR FIRM'S EQUILIBRIUM

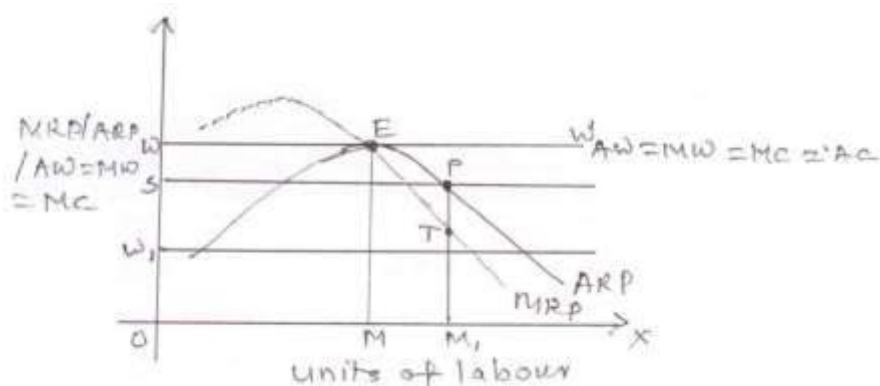
The firm would be in equilibrium with regards to employment of factors of production if the following conditions are fulfilled.

Marginal Revenue productivity (MRP) = Marginal Cost (MC or MW). This is essential condition but not the sufficient condition for a firm to be in equilibrium. Therefore, the second sufficient condition for firm's equilibrium is that the marginal revenue productivity curve must cut marginal cost curve or marginal wage line from above. If these two conditions are fulfilled, the firm would be in equilibrium earning maximum profit.

WW is the supply curve faced by the firm parallel to the OX axis. It depicts the supply curve of labour to the individual firm. Since there is perfect competition in the labour market, the firm can hire as many units of labour as it desires at the ruling wage rate of rupees i.e. OW per worker. Under competitive conditions, the firm would have to accept the ruling price. The firms demand for labour is so insignificant in comparison with total demand of the industry that any change in the firm's demand for labour will not affect the price anyway. The marginal revenue productivity of labour to the firm is the firms demand curve for labour. Demand for labour is a derived demand because labour is hired only for what it produces. So in the following figure the MRP curve indicates derived demand curve for labour of the firm under consideration.

Conditions for equilibrium

- 1) $MRP = MC = AC = AW = MW$
- 2) MRP curve must cut ARP curve at its highest point from above to maximize the profit.



Where

- 1) MRP = Marginal Revenue Productivity
- 2) ARP = Average Revenue Productivity
- 3) AW = Average Wage
- 4) MW = Marginal Wage
- 5) MC = Marginal Cost
- 6) AC = Average Cost

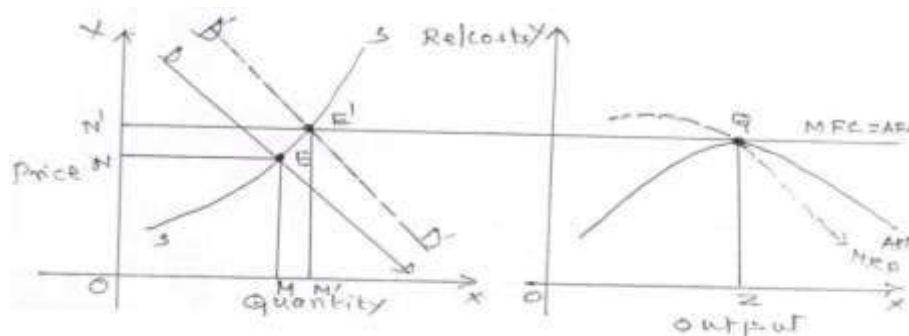
In the above diagram WW' curve represents both the average and marginal wage. The average amount of money paid to a worker is OW . Since, the firm is operating under competitive conditions, what is paid to one worker would be paid to all the workers employed. Therefore WW wageline is horizontal to 'x' axis. The firms will be in equilibrium and maximizes its profit when the MRP of the factor (ME) unit is equal to the marginal cost of the factor which is equal to marginal and average wage.

This takes place when OM amount of labour is employed. If less than OM amount of labour is employed, the firm would suffer unnecessary losses. If it wants to raise its receipts, it must increase the employment of labour which would go on adding to the receipts of the firm more than the marginal cost. The MRP exceeds the $MW = AW = MC$. In the same way if more than OM amount of labour is employed, the marginal cost of labour, that is marginal wage would exceed its MRP; the firm would be paying more to its marginal employees than their contribution. This results into losses.

At OM employment of labour, the firm would be in equilibrium and its profit would be maximized. It is so because the last unit of labour employed would contribute equal amount to the firm's receipts. In other words, the firm would be in equilibrium when it equates marginal revenue productivity of labour with its marginal cost ($MRP = MC = MW$). But this equality must realized at falling MRP.

And that is why economists are more keen to show that the MRP must ultimately decline otherwise equilibrium would be impossible. Assuming rationality on the part of entrepreneur, a firm will be in equilibrium when MRP of a factor to the firm equals its marginal cost. Fulfillment of this condition enables the firm to maximize profit. This condition realizes at OM amount of labour Not only MRP is equal to marginal cost but it is also equal to average wage and average revenue productivity of labour. This also implies that the industry is in full equilibrium earning normal profit. Though price of any factor of production including labour is determined by the demand for and supply of it, it is always equal to its MRP. The next diagram depicts the industry equilibrium.

Price is measured along 'OY' axis and quantity along 'OX' axis. With increase in demand for the factor shown in the diagram above, price of the factor shoots up to 'ON'. As soon as price goes up at 'ON', the firm will be in equilibrium at 'Q' using OZ amount of that factor earning normal profits. At OZ amount of that factor, the price of it is equal to its MRP as well as ARP of the factor. At equilibrium point 'Q' the firm earns just normal profits. Thus in the long run under perfect competition in the factor market, price will always equal to MRP and ARP of the factor.

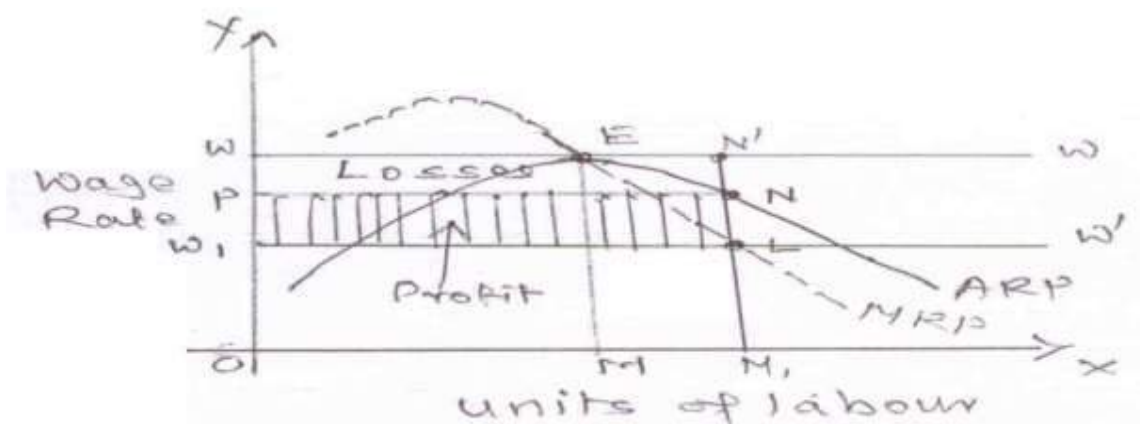


In other words, long run equilibrium between demand for and supply of the factor is established at the level where the price of the factor is equal to both MRP as well as ARP of the factor which means only normal profit is made.

6.6 EQUILIBRIUM OF AN INDUSTRY

Industry equilibrium will be attained only when each and every firm constituting that industry is in equilibrium earning normal profits. This means that each firm would be equating MRP with marginal wage or marginal cost. If it happens, the whole industry would be in equilibrium earning normal profits. Diagrammatic representation of the industry equilibrium is the same as that of equilibrium of a firm. It is also explained in terms of costs and receipts. For industry equilibrium, it is assumed that the entrepreneurs are homogenous and each firm would be in equilibrium when ARP curve is tangential to the wageline.

In short run, some firms will be earning super normal profits while some will be earning normal profits and some will be minimizing losses by just covering variable cost. But in long run, this will not happen. Firms incurring losses will quit the industry and if excess profit is made new firms will enter the industry and compete out the excess profit. This entry and exit of firms in and out of industry will continue until equilibrium is established. So, the industry equilibrium will realized when $MRP = ARP = MW = AW = MC$. The following diagram depicts the same.



The industry equilibrium takes place at employment of OM amount of labour and the OW wage is paid to every unit of labour. So 'E' is the equilibrium point where $MRP = ARP = MW = AW = MC$ are equal. MRP and ARP curves are tangent to wage line WW. Industry is earning normal profit. If less than OM amount of labour is employed, industry will unnecessarily reduce its profits and if more than OM amount of labour is employed say OM', the industry will incur losses because its labour cost would be more than the receipts. Wage rate would exceed receipt. If the wage line shifts down ward that is W'W', equilibrium position would change. Now it would be at 'L' point at 'OM' employment of labour. At 'L' point $MRP = MW = AW$ and MC of the firm. But ARP is M'N which is higher than MRP (L'M) which means that the industry would be making excess profit. This will invite new firms in the industry which will compete out the excess profit bringing the industry to the level of normal profit. The entry of new firms will lower the price of its products and this will bring down the MRP and ARP. Likewise an increase in demand for labour may raise wages. The ARP curve will fall and wage line will rise until they are tangent to each other.

6.6.1 Principle of an industry Equilibrium:

$$\frac{\text{MRP of Land}}{\text{Rent}} = \frac{\text{MRP of Labour}}{\text{Wages}} = \frac{\text{MRP of Capital}}{\text{Interest}}$$

$$= \frac{\text{MRP of Entrepreneur}}{\text{Profit}}$$

If this condition is fulfilled, the industry will be in equilibrium earning normal profit. This is the same principle as the consumer's equilibrium with regards to more than one good i.e. the law of substitution. To conclude an entrepreneur employs units of any factor of production until its MRP becomes equal to the marginal cost.

ASSUMPTIONS :

The above stated theory holds good only when certain conditions are fulfilled. These conditions are the foundation stones of the theory.

- 1) There exists perfect competition in both the markets, factor as well as commodity market.
- 2) All units of labour are homogeneous in all respects.
- 3) Problem of overtime is ignored.
- 4) Theory would hold good only in long run.
- 5) It considers only stationary conditions.
- 6) There is equal bargaining power on the part of buyer seller.
- 7) The theory assumes that there is perfect mobility of factor of production.
- 8) It is based on belief that entrepreneurs can predict and measure MRP of labour in advance.
- 9) The theory holds that entrepreneurs always try to maximize profit.
- 10) No government intervention anywhere in the process of determining rewards of factor of production.

Criticism / Limitations :

Through the theory is pioneer in explaining as to what determines prices of factors of productions, it is not free from drawbacks.

- 1) Perfect competition is not reality. Reality is imperfect markets.
- 2) Units of labour are not homogeneous; On the contrary, the world is full of heterogeneity.
- 3) The theory is static where as problems it attempts to solve is dynamic. Therefore it is illogical to solve problems of dynamic world with tools of static theory.
- 4) The theory is applicable in long run only. But Lord Keynes says that we are all dead in long run. What concerns us most is the short run.
- 5) The theory doesn't solve the problems of individual income.
- 6) There is no equal bargaining on the part of buyers and sellers. Actually labour is exploited by the employers.
- 7) The government interference is in every walks of life. A number of labour laws shows that there is a great deal of government interference in determing reward for labour.
- 8) The theory is not useful in determing reward of such factors which are used in fixed proportions.
- 9) According to this theory, trade unions are superfluous and collective bargaining is a futile activity.
- 10) Marginal productivity ignores the positive inter relation between rewards of factors of production and their productivity especially between the wages and efficiency of labour.
- 11) The theory is based on the principle of maximization of profit which is not true.
- 12) The various factors are jointly demanded for the production of a commodity.
- 13) The theory fails to explain the remuneration of entrepreneur that is profit. Marginal productivity of a factor can be known if it can be varied by keeping the other factors fixed. However, the entrepreneur in a firm is only one and therefore variation in it is not possible.

6.6.2 IMPORTANCE OF THE THEORY :

- (1) The theory enables us to determine the levels of employment of factors of production. Price of factor depends upon its demand.
- (2) The theory is useful in bring about the efficient and optimum allocation among their alternative uses. The movement of factors is essential for best and efficient use of scarce natural resources.
- (3) The theory also guides us to determine the incomes of factor owners and thereby determines the relative share of factors of production in the national income.

6.7 RENT

Introduction : Land is a primary and original factor of production. Its total supply to the entire society is perfectly inelastic. It is a free gift of nature. However for an individual or an industry it is relatively elastic. The reward paid for use of land is called rent. The economic rent refers to payment for the use of land. It excludes any return on capital investment. Economic rent is also called as surplus because it does not result from any exertion on the part of land owner. Adam Smith held, " The landlords like all other men love to reap where they never sow". It was Ricardo an English Economist who explained why rent is paid.

6.7.1 Ricardian Concept of Rent :

Ricardo held, "Rent is a return for the use of the original and indestructible powers of the soil; and high rents are not a sign of the bounty of nature. On the contrary, they are an indication of the niggardliness of nature." He defined rent as, "that portion of the produce of earth which is paid to the landlord for the use of original and indestructible powers of the soil." The above definition makes it clear that rent is payment for the use of land only and it is different from contractual rent. It does not include return on the capital investment. However, Physiocrats laid great stress on the bounty of nature as the reason of the rent of land. Ricardo argued that though the land was useful, it was also scarce. While the productivity of nature may be a sign of its usefulness and of the bounty of nature, the fact is that the total supply of land is fixed is a sign of nature's niggardliness. The contention of Ricardo that rent is a return for the use of the original and indestructible powers of the soil does not throw any light on the powers of the land that are said to be original. By the term Original Powers, Ricardo perhaps meant that it must be distinguished between money spent on improvement of land and the economic rent.

Though, the land itself can not be destroyed, its fertility can be destroyed . It depends upon the climatic conditions, use of irrigation, improved farming methods and so many other factors. Therefore, it would be entirely unreasonable to regard the powers of the land as indestructible. The Ricardian theory of rent is based on two basic principles viz. The Law of Diminishing Returns which operate in agriculture and the Mal thus principle of population. These two principles are the foundation stones of Ricardian theory of rent.

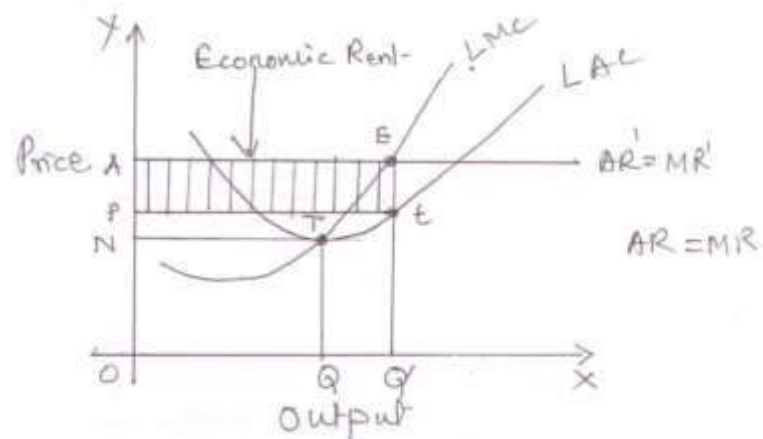
Assumptions of the Theory :

- (1) The elasticity of supply of land is zero which means supply of land to the society is fixed.
- (2) The land is used to produce food grains only. No other use of land is considered.
- (3) Land differs in fertility. This means that there are different grades of land differing in fertility.
- (4) There exists perfect competition in factor market. This only means that there are a number of land owners who are willing to rent out their pieces of land at ruling rate of rent.
- (5) The theory operates only in long run.
- (6) The concept of marginal piece of land plays a dominant role in the classical theory of rent.

In the light of above assumptions, it is stated that if the land is of same quality, scarcity of land in relation to its demand gives rise to rent. Ricardo calls it as the scarcity rent. And if land differs in quality, then in that case superior quality pieces of land earn rent. Ricardo calls it as differential rent.

6.7.2 Scarcity Rent Theory :

To explain the scarcity rent theory, it is assumed that a new piece of land is discovered which was not occupied by man. As the people start occupying this new land, it starts earning rent because demand for land exceeds supply of land for producing food grains. As long as vacant pieces of land are available for producing food grains, its production cost would be equal to average cost of production. So, cost of production and price of the food grains would be the same. So there would be no surplus. But once, the entire land is brought under cultivation, further demand for food-grains would raise the price of food-grains above the average cost of production. This happens because population goes on increasing. Since there is perfect competition in factor as well as product markets, the cultivator's equilibrium will be established at the lowest point on long run average cost curve. But as the population grows, demand for food grains also increase but supply can not be increased on account of fixity of supply of land. This raises, the price and therefore, there appears a difference between price or average revenue and average cost of production. It is this difference between revenue and cost Ricardo calls it as the scarcity rent. The following diagram illustrates the scarcity rent phenomenon. Price is measured along OY axis and output along OX axis.



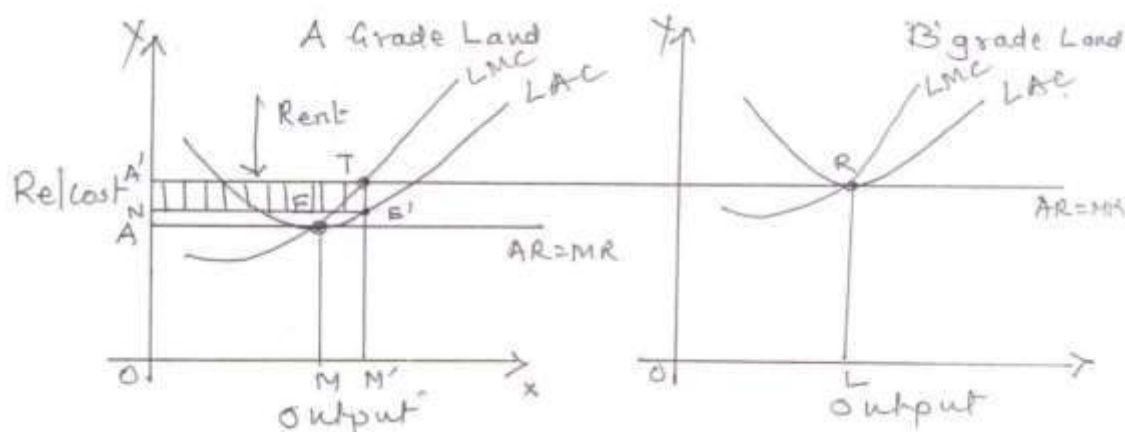
The cultivator is in equilibrium at OQ size of output. At this level of output price of corn i.e. ON. Is equal to average cost of production i.e. TQ. Thus, at this size of output price and long run average cost are equal and hence there is no surplus. But as output is raised to OQ', price shoots up to OA or EQ' but the average cost of production remains at OP or TQ' level. Thus, there appears a surplus to the extent of APLE rectangle which Ricardo calls as economic rent. It must be noted that there exists perfect competition among landlords so it is not possible to earn any rent as long as surplus land exists. As demand for food grains increases, the vacant pieces of land are brought under cultivation to produce more food grains to meet increased demand for food grains. But once entire land is put to use, there is no scope to improve the supply of food grains . So, demand for food grains exceeds supply of food grains which shoots up the price of the food grains. Now, price can not fall back to original level that is ON because there is no idle land to be put to use. Now, cultivator's equilibrium realizes at 'E' point at OQ' size of output because LMC is equal to new price OA' but LAC is tQ. So, 'Et' or AP surplus arises which is scarcity rent according to Ricardo. Thus, contention of Ricardo rent arises, due to niggardliness of nature is true. The classical thinking holds that rent is a surplus over and above cost of production. They never held rent as a part of cost of production. Thus scarcity rent arises due to the fixity of supply of land.

6.7.3 RENT UNDER INTENSIVE CULTIVATION :

The Ricardian concept of surplus rent applies to intensive cultivation also. Intensive cultivation refers to usage of same piece of land again and again for the production of same food grains. In such cultivation fertility of land goes on declining and so additional doses of labour and capital applied to produce food grains from the same piece of land yields less and less quantity of food grains. The cost of last dose of labour and capital must be at least equal to the yield which we get in return from the land to make application of the dose of labour and capital worth while. So the last dose is called marginal dose because it simply covers its cost. It doesn't give rise to any surplus. Whereas earlier doses produce more than the cost incurred on them. So, it is this Surplus over and above cost of doses of labour and capital is called rent. Thus Ricardian theory of rent is true in case of intensive cultivation of land also.

6.7.4 THE DIFFERENTIAL RENT THEORY :

This concept of rent is based on assumption that of land differs in quality or productivity. So superior pieces of land earns rent when inferior quality pieces of land area brought under cultivation. It is held that on new island people begin cultivating the best piece of land for production of food grains. But as the population goes on increasing, inferior pieces of land are brought under cultivation to produce more and more food grains to meet increase demand for food grains. As the inferior pieces of land are brought under cultivation cost of production increases and therefore price of food grains. So, there appears a surplus over and above the cost of production in case of superior pieces of land; and it is this surplus which Ricardo calls a differential rent.



The following diagram illustrates the phenomenon.

The cost of production on 'B' grade land is higher than that of on A grade land. Therefore 'A' grade land earns rent i.e. a difference between price of food grains and cost of production. Total rent earned by 'A' grade land is equal to shaded area A'NET'. In case of 'B' grade land, there is no rent because price and cost of production are equal. Hence it doesn't earn any rent.

6.7.5 RENT UNDER EXTENSIVE CULTIVATION :

Extensive cultivation is defined as the cultivation of different pieces of land of different quality for the production of same food grains. As inferior quality pieces of land are brought under cultivation, cost of production rises and so price of food grains. So, there appears a difference between price of food grains and cost of production of superior quality pieces of land and it is this difference which is called as differential rent. The cost on last piece of land must be equal to price to make cultivation of that piece of land worthwhile. According to classical economists rent does not form a part of the cost of production. It is an earnings over and above the cost of production of marginal land which is no rent land. That is why it is said that rent is not price determining but price determined. David Ricardo contends, "Corn is not high because rent is paid but a rent is paid because corn is high." This means that it is the price of food grains that determines rent. Thus it can be summed up as follows:

- (1) Rent is a differential surplus because it is a Surplus over and above cost of production which arises due to differences in fertility of soil. In other words if all pieces of land were of equal quality no rent would arise.
- (2) Rent is price determined and not price determining.
- (3) Rent is peculiar to land alone. It means that other factors of production do not earn rent.

6.7.6 APPRAISAL OF THE RICARDIAN THEORY :-

- (1) In modern thinking, it is the interaction between demand for and supply of land will determine price of land. Rise in population, raise demand for food grains and so for land. But land is fixed in supply. That is why price of food grains increases which creates surplus over and above the cost of production. But Ricardian theory does not explain what determines wages of labour, interest on capital, transport cost etc.
- (2) Ricardo holds that the land has no transfer earnings or it has no alternative use. But in modern times, it is held that every factor of production has alternative use.
- (3) Supply of land for the whole economy is perfectly inelastic but for a firm or a particular industry supply of land is not fixed. Supply of it can be varied depending demand for its product. Thus, demand for land also depends upon its marginal productivity.
- (4) The contention of Ricardo that land is indestructible is also not true. In the age of atomic energy, fertility of land could be destroyed converting it totally barren. That is why his contention that rent is reward paid for the use of original and indestructible powers of soil does not hold good.
- (5) Two foundation pillars of the Ricardian theory are the Malthusian Principle of population and the law of diminishing returns. But operation of both the principles can be postponed with the help of modern technique of cultivation, irrigation, use of fertilizers and pesticides. Growth of population can also be controlled. Ricardo failed to take cognizance of it.
- (6) Land has transfer earnings. It can be put to alternative uses. Therefore transfer earnings of land enters into the cost of production and hence determines the price of the product.
- (7) The Ricardian theory is not applicable in short run. But according to J.M. Keynes we are all dead in the long run in which theory holds good what concerns us most is the short run and not the long run.
- (8) Perfect competition doesn't exist in the real world. Our world is full of imperfections.
- (9) Ricardo had predicted economic stagnation on the basis of his rent theory. But modern economists do not agree with his stagnation theory.
- (10) Lastly, David Ricardo did not use forces of demand for and supply of to explain the emergence of rent. He uses them indirectly. The Ricardian model of scarcity rent can be better and easily explained with the forces of demand and supply.

This brings us to the conclusion that demand and supply theory would have been enough to explain the phenomenon of rent.

In fine, it can be said that from the view point of individual firm or industry or cultivator, rent enters into the cost of production and therefore determines price. Ricardo was wrong in contending that the rent does not enter into the price. Rent does enter into cost of production.

6.7.7 MODERN THEORY OF RENT :-

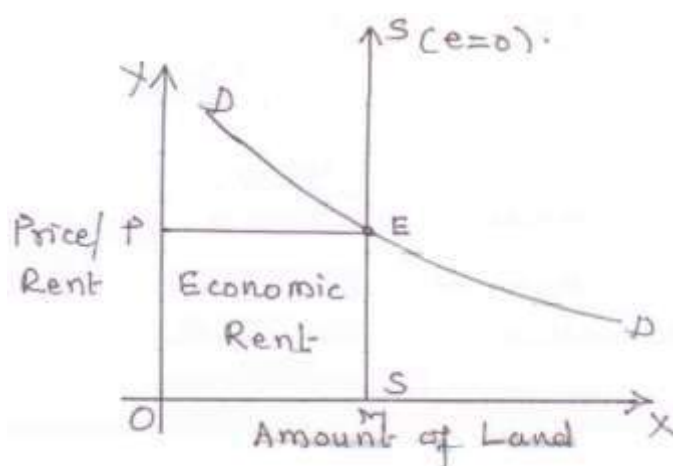
Surplus payment made to any factor of production over and above its transfer earnings is called rent in modern theory of economics. This means that labour, capital and even entrepreneur earn rent which is called as rent of ability. According to Pareto, "Economic rent means the excess payment to a factor of production over and above the minimum amount necessary to keep a factor in its present occupation." Benham held, "Economic rents are the sum paid to the factors which need not be paid in order to retain the factors in the industry." It means that income received by a unit of factor of production in its present employment or industry in excess of its transfer earnings is therefore called rent.

Transfer earnings of any factor of production can be defined as the minimum payment that must be made to a unit of factor of production in order to retain it in its existing employment and that it must be equal to the earnings of what that unit of factor of production would earn in the next best alternative use or employment. For individual farmer the whole rent will be a cost that is cost of preventing the land from transferring to other uses. Thus, in modern theory, economic rent is not merely confined to land alone. It refers to the surplus payments made to units of factors of production in excess of what is necessary to keep them in the present employment or use. Economic rent emerges when supply of a factor is less than perfectly elastic. According to Joan Robinson whenever supply of factors units is not perfectly elastic, a part of the earnings of that factors will consist of surplus or economic rent since the full price they get is not necessary to make all the units available.

If supply is not perfectly elastic, some units of that factor would be available at lower price than what it would receive at equilibrium price. The difference between the actual price and the one necessary to make it available is economic rent. Since land has no supply cost, entire earnings of it is economic rent.

A) PERFECTLY INELASTIC SUPPLY ($e = 0$) :-

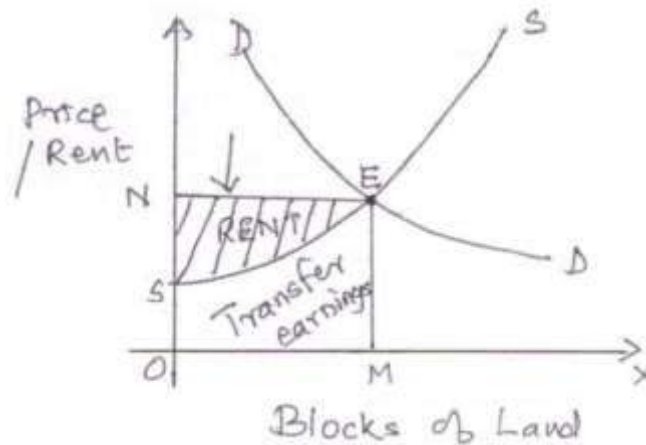
The whole earnings of land is considered as surplus earnings since land is free gift of nature. The following diagram explains the phenomenon of economic rent. 'SS curve represents perfectly inelastic supply curve of land and 'DD' is the demand curve. Intersection of demand and supply curves, determines the price of land i.e OP or EM. Since transfer earnings are zero, the entire earnings or price will be economic rent per unit of land. The total earnings or economic rent is OM XOP = POME. ($e = 0$).



Economic rent is defined as payment for any factor whose supply is perfectly inelastic. This is depicted in the along side diagram. If the quantity of land is in plenty in relation to its demand, there would be no reward for its use, and therefore no economic rent will arise. In Ricardian theory land is considered to have specific use only i.e. it is used only for production of a particular food grains but in real world, land is used for different commodities. According to modern economists, supply of land is fixed to the society but not to a particular industry or firm. There are various uses of land competing with each other. If in its next best alternative use, it earns more than what it earns in present use, it would get transferred to that use.

(B) RELATIVELY ELASTIC SUPPLY ($e > 1$) :-

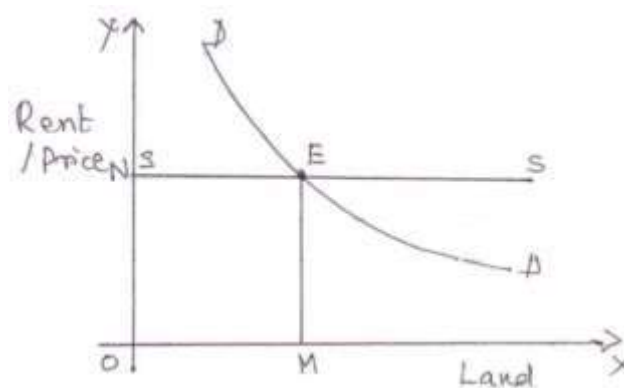
If supply of land or any other factor is relatively elastic, then in that case, there arises a difference between actual earnings and its transfer earnings; and it is this difference which is called rent in modern theory. The following diagram illustrates the phenomenon. The diagram shows that equilibrium between demand for and supply of land takes place at 'E' point where demand and supply intersect each other. So equilibrium price is ON.



Transfer earnings of last block of land and price are equal that is $ON = EM$. Hence last block of land earns no rent. But earlier blocks earn rent because there is difference between actual earnings and transfer earnings. At ON equilibrium price, total actual earnings of 'OM land is $NOME$ ($ON \times OM$) whereas transfer earnings is $SOME$. So the difference between actual earnings and transfer earnings is $NOME - SOME = NSE$ (Shaded Area). This difference is economic rent.

(C) PERFECTLY ELASTIC SUPPLY ($e = \infty$):-

When supply of land or any other factor is perfectly elastic, no economic rent arises or earned. To illustrate the point, we suppose all blocks of land are homogeneous in all respects. So, each block of land will have equal transfer earnings which means supply curve will be straight line and horizontal to the 'X' axis 'DD' is the demand curve. It cuts supply curve at 'E' point. It means that at 'E' point demand for land and supply of land become equal. 'ON' will be the equilibrium price. Since supply of land is perfectly elastic, price ON and transfer earnings EM will be equal hence there is no rent paid to any piece of land. This is depicted in the following diagram.



Here no rent is paid because transfer earnings and actual earnings are the same. Hence, there is no difference between the two. That is why no rent is paid. Hence we can conclude if supply of land or any other factor is perfectly elastic no rent is paid.

6.7.8 CONCEPT OF QUASI – RENT :

It was Dr. Marshall who introduced this concept in economic theory. It is Just expansion of Ricardian concept of rent to the short run earnings of the capital equipments or factors of production whose supply is perfectly inelastic ($e=0$) in short run. It is therefore quasi-rent is essentially a short run phenomenon. Earnings of specialized capital equipments depends upon the demand conditions and thus similar to rent of land. However, supply of fixed capital assets is not perfectly inelastic in long run like land. Therefore, Dr. Marshall instead of calling this earnings as economic rent called it as quasi-rent. Quasi rent refers to an excess earnings of any factor of production over and above its marginal productivity. It is temporary surplus earned by such capital assets in the short run.

Quasi-rent arises because specialized equipments like machinery has no alternative use. So its supply is limited in short run. Its transfer earnings will be zero since it has no alternative use in short run. So entire earnings of such factors will be the surplus since its transfer earnings of such factors will be the surplus since its transfer earnings is zero. There may be some maintenance cost to keep it in running conditions. It can be defined as the short run earnings of a fixed factor or capital assets minus the short run cost of keeping it in running condition. Supply of capital assets is fixed in short run but not in long run. That is why this surplus vanishes in long run as supply of fixed factor gets increased to match increased demand for it. This makes the quasi-rent disappear. Quasi-rent is also defined as the excess of total revenue earned in the short run over and above the total variable costs of production.

6.8 WAGES

Introduction :- The term wage has a broad connotation it includes pay, salary, emoluments, fees, commissions, bonus etc. In other words, it includes all types of income earned by labour as a factor of production. The term wage may refer to piece-wage, time wage, money wage, real wage and piece wage. It may be paid per hour, per day, per week and per month or annum.

6.8.1 NOMINAL WAGES & REAL WAGES :

Nominal Wages means money wages. It refers to total amount of money paid to labour as its price for its service in the process of production. So nominal wages are measured in terms of money while real wages refer to the amount of purchasing power received by a labour through his money wages. It refers to the net advantages of labourer's remuneration. It means the amount of necessities, comforts and luxuries of life which a labour can enjoy in return for his services through his money wages.

It is the real wages which determine the standard of living of the people. Real wages depend upon the money wages and the general price level. Thus it is stated as

$$\text{Real wages} = \frac{\text{Money Wages}}{\text{Price level}}$$

6.8.2 DETERMINANTS OF REAL WAGES :

- (1) **Price Level** :- The Purchasing power of money determines the real wages. But purchasing power of money depends upon the general Price level in the economy. The purchasing power refers to amount of goods and services which a unit of money can buy. There is inverse relationship between general price level and purchasing power of money. When general price level rises, the purchasing power falls and vice-versa.
- (2) **Working Conditions** :- The working conditions also determines the real wages. It includes, number of hours of work put in and number of days worked per years; educational and recreational and other facilities made available to the labour. If a worker works in a poorly ventilated, hot and unhealthy surroundings, he would be dissatisfied and his estimation of real wages would definitely be low. This brings home that payment of high money wages alone would not raise real wages.
- (3) **Trade Expenses** :- Jobs requiring high trade expenses tend to reduce real wages. Doctors, lawyers, C.A. etc need high trade expenses and therefore estimation of their real wages would be very low.
- (4) **Incidental Benefits** :- There are some jobs in which money wages are low but other benefits like free lodging and boarding, subsidized canteen facilities, free transport and free medical treatment etc raise the real wages.
- (5) **Possibility of Extra-Earnings** :- In certain areas, workers may have a plenty of scope to under take other lucrative work along with their regular work. This fetches them additional income. This tends to increase their real wages.

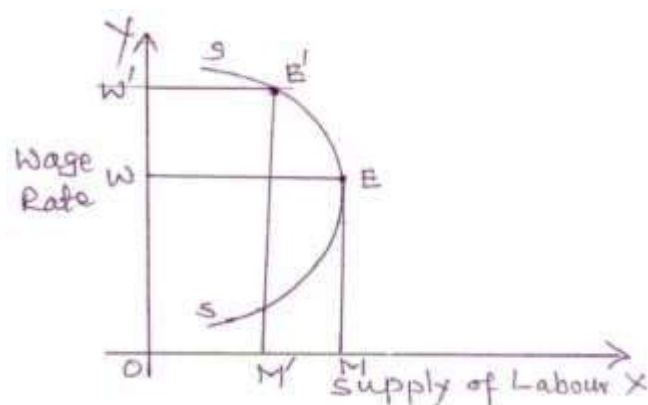
- (6) **Period and Cost of Training** :- While estimating real wages, the period required for completion of training and cost incurred on that training is also taken into account. The longer the period and higher the cost, the lower would be the real wages.
- (7) **Nature of Job** :- If a Job is precarious or insecured , estimation of real wages in such jobs would be much low. Estimation of real wages in all risky employment is very low.
- (8) **Possibility of Promotion** :- An allowance should be made for prospects of success while estimating real wages. A labourer may be prepared to work on low wages if he knows that there is a bright prospects of possible promotion in future. Besides, social prestige attached to jobs, regularity of payment, permanency of work and uncertainty etc are to be considered while calculating real wages.

6.8.3 SUPPLY OF LABOUR :

Supply of labour depends upon size and composition of population, skills of workers and their willingness to work. One must understand one thing and that is supply of labour can not be adjusted to demand overnight. However advocates of the subsistence theory of wages believed that the size of population depends upon wage rate. But it is known fact that apart from wage-rate, size of population depends upon social, cultural, religious and economic factors. But ability to work and willingness to work are the most important factor in determining the supply of labour. However willingness to work is influenced considerably by the wage-rate. Rise in wage rate has a great effect on supply of labour. Changes in wage-rate has composite effect on supply of labour that is some may offer more hours of work while others may contract and women might withdraw and therefore it is said that rise in wage rate has negative effect on supply of labour because of substitution effect. Workers may substitute more leisure for work efforts.

That is why supply curve of the labour force slopes backward. It is generally held that the total supply curve of labour rises up to a certain wage level and then it slopes backward. The following diagram depicts the backward sloping supply curve of labour. As the wage rate rises to OW, the total quantity of labour offered increases to OM amount but beyond OW wage rate say OW', the total quantity of labour supplied instead of increasing contracts from OM to OM'.

But supply of labour to a particular firm or industry is elastic. If the wage rate is increased, workers from other industries are attracted and supply will match the increased demand, supply of labour also depends upon transfer earnings of workers.



Long run supply curve of labour is more elastic than short run supply curve. It is so because to acquire skill of particular trade or occupation required some time to switch over to other employments. That is why supply of labour is more elastic in long run than in the short run.

6.8.4 WAGE DETERMINATION UNDER COMPETITIVE CONDITIONS :

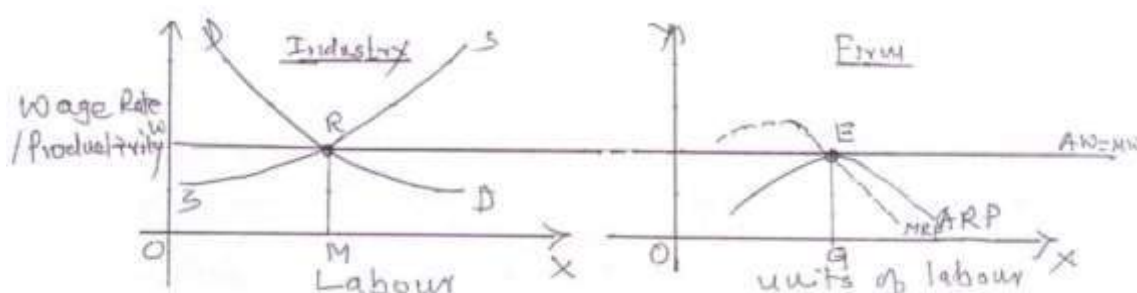
Assuming that there are competitive conditions in both the markets that is labour as well as commodity markets, we shall take up for discussion wage determination under competitive conditions, under competitive conditions, wage rate would be determined by the interaction between demand for labour and supply of labour. In other words, wage rate is determined by the equilibrium between the demand for and supply of labour. Demand for labour is governed by marginal revenue product (MRP). The equilibrium wage rate would be equal to marginal revenue product of labour which is also equal to average revenue product (ARP). Since there are Competitive conditions in factors as well as product markets.

This brings home that under competitive conditions a firm would employ that much amount of labour at which wage-rate would be equal to MRP of the last unit of labour employed under competitive conditions wage rate would be equal to average revenue product which is also equal to marginal revenue product. A rational entrepreneur therefore goes on employing additional unit of labour up to that level at which wage rate becomes equal to MRP of the last unit of labour employed.

In short run, firms can make profit or incur losses but in long run free entry and exit of the firms will force every firm in the industry to pay wage rate equal to marginal product of labour which is also equal to average revenue product. At this, the industry will be earning normal profits. Equilibrium position would be attained only when MRP curve cuts average wage and marginal wage line from above and at this point of cutting average revenue product curve will be tangent to the wage line ($AW=MW$). MRP curve will intersect ARP curve at its highest point from above. At the point of equilibrium $MRP = MW = ARP = AW$. When this equality is attained each and every firm in the industry will be in equilibrium earning normal profits. The following diagram illustrates the position.

6.8.5 BILATERAL MONOPOLY & WAGE DETERMINATION :

It is a market situation under which a single buyer faces a single seller of the same commodity. When a single seller of labour and single buyer of it carry on transaction in buying and selling of labour at an agreed wage-rate; it is called a bilateral monopoly. There are two limits which could be reached by collective bargaining. They are the upper and lower limit. The upper limit is set by the trade union of workers and a lower limit is set by an employer or the employer's association. However, the actual wage rate is determined between these two limits. Relative bargaining strength of trade union and employer's association would determine whether the wage-rate is nearer to upper or lower limit. It becomes difficult to predict at what rate the wage-rate is fixed between these two limits. Therefore wage determination under bilateral monopoly remains indeterminate. But definitely it would be fixed between the upper and lower limit. The upper limit can not be higher than MRP of labour and lower limit set by employers must be acceptable to the union. Thus the range of wage-rate would be upper and lower limits in which actual wage rate is determined. If entrepreneurs try to set wage-rate below the acceptable wage-rate to the union, it will ask its members to go on strike and if wage-rate demanded by union is higher than MRP entrepreneurs stop employing labour as it meant losses to them.



But the concept of lower limit is not clear. It is ambiguous but there would be a certain minimum wage below which workers will refuse to work. Thus the wage-rate would be fixed some where between these two limits namely the upper and lower limits as a result of bargaining powers between the two parties. The distance between the upper limit and the lower limit indicates the bargaining range within which the wage rate would be actually set. One can not know exactly at what particular point the wage-rate would be fixed within the bargaining range. That is why wage determination under collective bargaining remains indeterminate.

6.8.6 EXPLOITATION OF LABOUR :

Under conditions of imperfections, labour is exploited. If imperfect conditions exist either in product or factor market labour is exploited. If imperfect market exists in product market, it is called monopolistic exploitation and in case of imperfections in labour market, it is called monopolistic exploitation.

Prof (MRS) Joan Robinson defined exploitation of labour as the payment to the labour less than its value of marginal product. The value of marginal product is equal to price multiply by MRP of labour i.e. $AR \times MRP$. In the works of Mrs. Robinson, "what is actually meant by exploitation is usually, that the labour valued at its selling price." This means that exploitation of labour does not take place under competitive conditions in both the markets. When there is imperfect competition in the product market, MR differs from the price of the product (AR). That is why under such conditions of Market, MRP of the factor differs from value of the marginal product.

(1) Value of Marginal Product = Marginal Product X Price i.e.

$$MPP \times AR \text{ or Price}$$

(2) Marginal Revenue Product = Marginal Product X Marginal Revenue

$$MPP \times MR$$

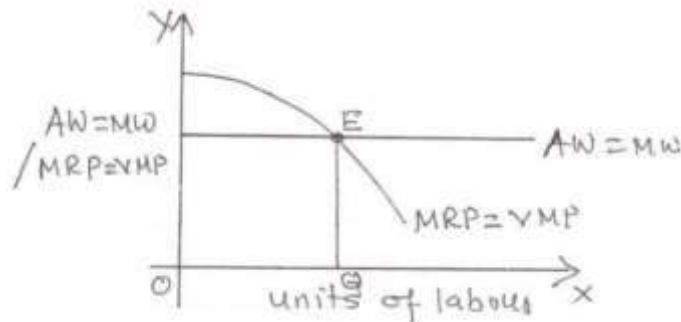
Since under imperfect market, average revenue or price is always greater than marginal revenue, the Value of marginal product (VMP) will be always greater than marginal revenue product (MRP).

Thus,

(a) $MRP = MP \times MR$

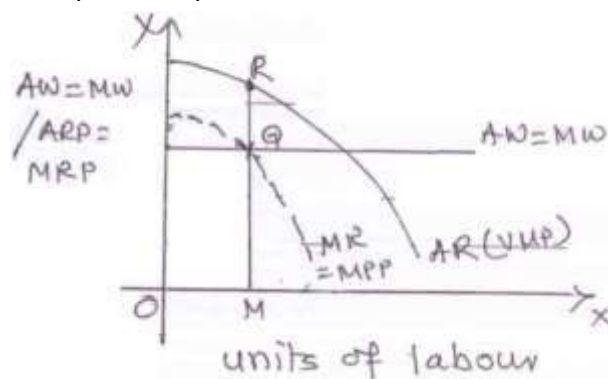
(b) $VMP = MP \times AR$. Since under imperfect market price (AR) of the product is greater than MR ($AR > MR$)

VMP > MRP.



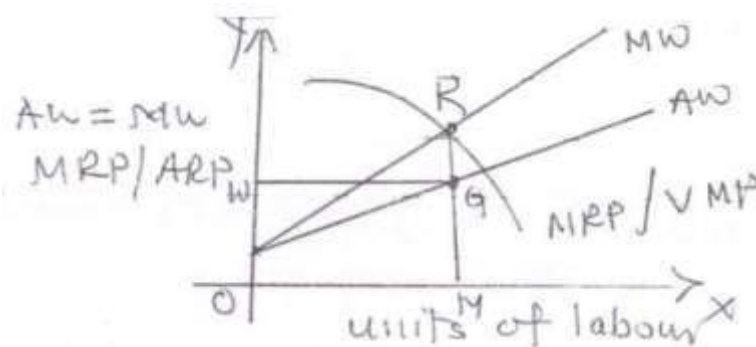
But under perfect competition both VMP and MRP are equal since there is no difference between AR and MR. Therefore, there would be no exploitation of labour under perfect competition. The following diagram depicts the same. Since wage rate is equal to MRP as well as VMP under perfect competition, there is no exploitation of labour under perfect competition. The firm under consideration employs OQ quantity of labour and pays each labourer wage equal to its MRP or VMP and so there is no scope for exploitation of labour.

Now let us consider the situation where there is monopoly in product market and competition in labour market under such situation labour would be exploited. The wage line would be perfectly elastic and horizontal to 'X' axis. But existence of monopoly in product market means sloping down ward AR as well as MR curves. There is a difference between the two. This means that every additional labourer adds more to the total revenue than what he is paid i.e. he is paid less than what is due to him. The following diagram depicts the phenomenon.



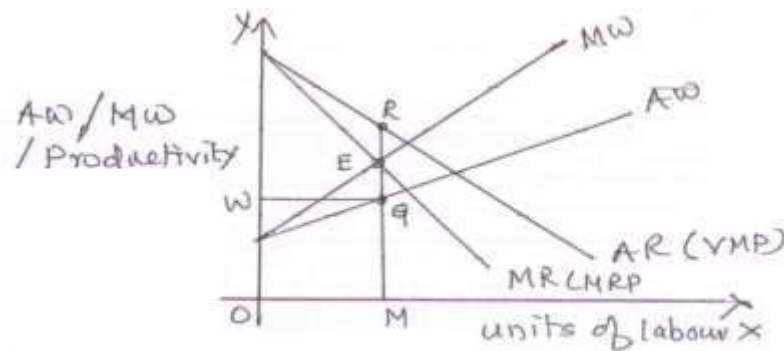
Because there is competition in the labour market wage line would be straight line horizontal to X axis. But there is a difference between AR and MR and therefore, there is a difference between VMP and MRP. So labour is exploited to the extent of RQ. It is also said that exploitation of labour occurs when there are imperfections in labour market even though there is perfect market in product market.

Imperfections in labour market means monopoly in labour market. In this case, supply curve of labour (AW) is not perfectly elastic but it slopes down ward. It is for this reason marginal wage curve would lie above the average wage. Under this situation also labour is exploited because there is a difference between the value of marginal product and the wage rate. Because, there is perfect competition in product market MRP and VMP will be the same. The diagram below explains the situation.



The firm will attain its equilibrium when it equates marginal wage with the marginal revenue product or the value of marginal product. OM, amount of labour is employed and 'OW' wage is paid. But it is less than the value of marginal product. The value of marginal product is greater than the wage. The wage-rate is less than the value of marginal product by RQ amount and this is nothing but exploitation of labour. This kind of exploitation of labour occurs because the supply curve of labour is not perfectly elastic and that is why marginal wage line lies above the average wage line.

If imperfections exist in factors as well as product market i.e. it may be monopsony in labour market and monopoly in product market. In such cases, labour would be doubly exploited. The following diagram depicts the same.



The above diagram shows that labour is exploited to the extent of RQ. It could be split up as RE monopolistic exploitation and EQ amount as monopolistic exploitation. This explains why labour is doubly exploited. According to Prof. Pigon and Prof. Joan Robinson perfect competition is an ideal situation. So, wage-rate determined under it would be just and fair. Any change in this wage-rate will result in the exploitation of labour.

However Prof. Chamberlin did not accept Prof. Pigou Robinson concept of exploitation of labour and has supplied his own concept of exploitation of labour. According to him all factors of production receive less than the value of their MPP under imperfect market under conditions of imperfect competition in the product market MRP is always less than price (AR).

If all factors are paid equal to the value of their marginal product then in that case total payment to all factors exceed total revenue of the firm. Therefore, it becomes impossible for a firm to pay all factors equal to their value of marginal product. He holds the view that labour would be exploited only when he is paid less than his marginal revenue product. Nevertheless exploitation of labour would be removed by creating conditions of perfect completion in product market. The government can take measures to remove imperfections from the product market. In case of monopolistic exploitation, it can be removed by raising the wage rate through the activities of trade unions and the government.

6.8.7 DIFFERENCES IN WAGES :

It is generally observed that all units of labour do not get same wage rate. Some get higher while others get lower. Why this happens? Why can't be there equal wage rate for all ? Answers to these questions we find in following factors.

- (1) **Demand Conditions** :- Demand for labour is derived demand. So if demand for the product labour produces is greater, then demand for that kind of labour would also be greater. This raises its wage-rate as in the short run it is the demand for labour which plays dominant role in determining the wage rate. That is why wage rate of such labour is very high.
- (2) **Non-monetary Factors** :- Certain jobs enjoy non-monetary benefits which tend to reduce wage rate. For example college teacher. He has to work only for 3 to 4 hours a day. Moreover he works comparatively in healthy and decent atmosphere. In sharp contrast to this a medical practioner will have to work round the clock. He has to work in unhealthy conditions and all the time in midst of deadly diseases. Naturally remuneration received by a doctor is always more than a college teacher. It is so doctor does not get non-monetary benefits like that of college teacher.
- (3) **Imperfections In Labour Market** :- Imperfections like immobility of labour, cost of transporting, customs and traditions, social surroundings, climatic conditions, cost of settling down else where etc. help a unit of labour to move from low paid job to a high paid job.
- (4) **Non-Competing Groups** :- There are certain trades which do not compete with each other. Their scale of pay is determined by different principles. This is due to differences in skills in these trades or professions. Therefore higher payment in one trade does not lead to the movement of a unit of labour from low paid trade to a high paid trade. Besides, it is not possible for a person to change his trade in short run due to high skill. For instance, an engineer can not become a doctor or lawyer in short run.
- (5) **Risk and uncertainty** :- The higher the risk and uncertainty, the higher would be payment. In other words, risk and uncertainty involved determines the level of payment of labour.
- (6) **Specificity of labour** :- If a Person does the same kind of job again and again, his mobility is restricted. He becomes expert in that kind of job. He can not be then transferred to any other job. Hence, this brings about the differences in wage-rate.

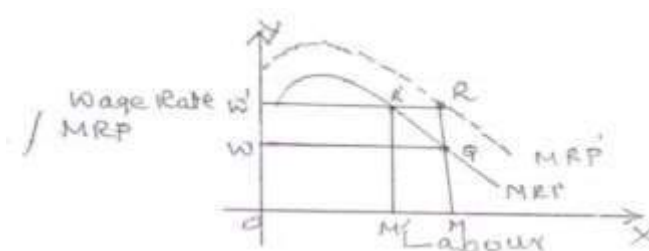
- (7) **Customs And Traditions** :- Customs and traditions also play a role in fixing fees and remuneration in certain skilled professions like medicine and law. In these profession rates of remuneration are based on old established practice and traditions. So price of labour in these professions is not adjusted by competitive forces.
- (8) **Artificial Restrictions** :- Certain occupations and professions put some restrictions on the entry in these professions on the pretext of maintaining high standard of those professions. For example, Medical Council of India, Bar Councils etc.

6.8.8 COLLECTIVE BARGAINING :

In the past, it was believed that trade unions or collective bargaining could not raise the wages of labour. They thought that trade unions were superfluous or ineffective in bettering workers lot. According to them, it was futile undertaking. That is why almost all the theories which attempted to explain what determines wage-rate neglected collective bargaining altogether. The subsistence wage theory, the Iron Law of Wages. The Residual claimant theory of wages and the marginal productivity theory. All these theories considered that in long run wage-rate would remain equal to the subsistence level. As per these theories, long run supply curve of labour (LRS) perfectly elastic at subsistence wage rate. It implies that any attempt by trade unions to raise wages will be useless. An increase in wage rate above subsistence wage-rate will lead to increase in population and working force. This will bring down the wage-rate to level of subsistence because supply of labour would exceed demand for labour. Secondly, supply curve of labour being perfectly elastic, a change in demand for labour would not alter the wage-rate. Even marginal productivity theory holds that there is no scope for collective bargaining. Nevertheless, modern thinking holds that collective bargaining plays a very important and positive role in bettering the conditions of working class.

6.8.9 COLLECTIVE BARGAINING & WAGE RATE

It is widely accepted that marginal productivity curve as the employer's demand curve for labour and wage-rate will be settled at the point where MRP will be equal to the marginal wage. It was argued further that any attempt by trade union to raise wage rate above MRP will lead to unemployment. This argument is rebutted by saying that when wage rate goes up, the marginal productivity schedule will shift upward. The higher wages make the labour force better off which increases their efficiency and it is this increased efficiency which raises their marginal productivity. So, an increase in wage-rate would not create unemployment. This is illustrated in the along side diagram.



At OW wage-rate OM amount of labour is employed. Now we suppose that wage rate raises to OW' due to collective bargaining by the trade unions. If the MRP schedule remains the same, MM' amount employment is created. But, increased wage increases the efficiency of labour, the MRP schedule would shift to NRP' which would not create unemployment. The diagram makes clear that the OW' wage-rate same amount of labour is employed. This brings us to the conclusion that a powerful trade union would prove successful of raising wage-rate without creating any amount of unemployment.

However, one point is to be noted that in case of collective bargaining when the wage rate is raised, the supply of labour might fall because supply curve of labour is backward sloping. It means that as the wage-rate goes up, workers contract their labour. Therefore, the higher wage-rate might create unemployment which would be due to backward sloping supply curve and not due to collective bargaining. According to Prof. Rothchild, "the imposition of higher wage-rate may lead initially to some unemployment but then produce such a change in the determinants of the wage-employment situation that the unemployment disappears and the higher wage rate becomes an equilibrium wage rate"

6.8 INTEREST

6.8.1 INTRODUCTION

Capital is a man made factor of production. That is why it is considered to be secondary factor of production. The term capital is defined as “all those instruments of production which are deliberately made by man to undertake production of goods and services. It is also called as “Produced means of Production”. Capital is the only factor of production over which man has a complete control in production. Capital goods have a complete control in production. Capital goods have a long life and therefore the time of expenditure and expected receipts from them will have to be carefully predicted in making decision of creation of them. This makes the problem all the more difficult and complicated.

Interest is defined as reward paid to the capital for having used its services in production of goods and services. According to Alfred Marshall. “Interest is nothing but the price paid for the use of capital in the market.” J.M. Keynes defines, “Interest as the premium which has to be offered to induce people to hold their wealth in some other than hoarding.”

Distinction is always made between gross interest and net interest. The total income received by owner of capital is called gross interest. It includes payment of the loan and capital, payment to cover risks of loss, payment for the inconvenience of investment and the last payment for administrative work and worry involved in the process whereas net interest is a payment for the loan of capital when no rise no inconvenience and no administrative work is involved. It is a pure income to capital owner. Dr. Marshall holds, “Net interest is the reward for waiting while gross interest includes some insurance against risk and the cost of management.”

Natural rate of interest refers to that rate of interest at which demand for saving and the supply of savings are in equilibrium whereas market rate of interest corresponds to this equilibrium rate of interest. If market rate of interest tends to be higher than natural rate of interest, supply of savings will exceed the demand for savings at that rate of interest. This will bring down market rate of interest. Likewise if market rate of interest tends to be lower than the natural rate of interest, demand for saving would exceed supply of savings taking market rate of interest upto the level of natural rate of interest. This shows that there are remote chances of market rate of interest differing from natural rate interest. However, price stability could guarantee identify between natural rate and the market rate of interest.

The time preference theory of interest was presented by many economists. Those who supply capital abstain from current consumption. That's why interest is regarded as a compensation for this abstinence. Since lending involves waiting on the part of people, interest should be paid to induce to wait and delay their consumption until the time investment becomes fruitful. Normally people prefer present consumption to future consumption. Secondly, future is always uncertain and thirdly, good in present command a technical superiority over goods in future, according to senior", Interest is the price paid for the use of capital and this price depends upon the forces of demand for and supply of capital:

6.8.2 THE CLASSICAL THEORY OF INTEREST

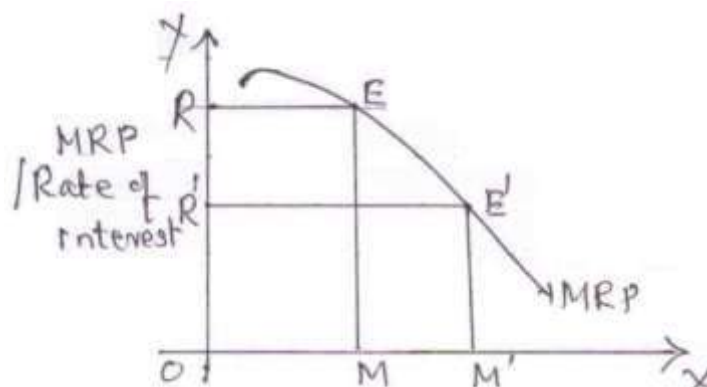
The classical economists held MRP of capital as the interest. Rate of interest is the rate of return over investment in physical capital. It is the role of waiting or time preference. In determination of interest is more important than anything else. But some economist held productivity of capital more important. Prof. Fisher and Prof. Bohm Bawerk held that the determination of rate of interest in terms of demand for and supply of investible funds. However, classical economists stressed the time preference and marginal productivity which are called the real factors of determination of rate of interest. That's why the classical theory is called as the real theory of rate of interest. Neo-classical economists developed a new theory called as the Loanable Funds or Neo-Classical theory of interest. According to them monetary as well as non-monetary factors determine the rate of interest. But J.M. Keynes holds phenomenon and rate of interest is determined by the forces of demand for money which he called as liquidity preference and the forces of supply of money. Interest is the price of parting with liquidity. All theories which attempt to explain the phenomenon of rate of interest either take demand side into consideration or supply side.

A theory of interest has to answer (1) why is interest paid? And (2) how is the rate of interest determined? Since capital is one of the factors of production, its price is also governed by its marginal productivity. But MRP of capital is very difficult to ascertain because capital has long life. It yields incomes for years. But future is uncertain. People prefer present to future. Because of number of uncertainties, entrepreneur will have to take into consideration, all those uncertainties of the future and estimate prospective yields from capital investment after deducting depreciation charges.

6.8.3 DEMAND FOR CAPITAL

Demand for capital comes from entrepreneurs to be used for production of goods and services. Since capital is productive, it earns series of income. Therefore, interest is to be paid to those who supply capital. The price of capital is governed by its MRP. The higher the MRP, the higher would be the rate of interest offered by entrepreneurs and vice-versa. As long as MRP of capital exceeds the rate of interest, demand for capital would continue and would come to an end at that point at which both rate become equal. A rational entrepreneur will go on demanding capital assets with the borrowed funds as long as expected net returns from the capital asset would be equal to the price he pays for the borrowed funds. In other words, it would be the rate of interest paid to the people for surrendering their liquidity. Investment in capital assets would be worth while till the rate of interest equates with the prospective rate of return from the capital asset and at this point of equilibrium investment in capital assets will come to an end. If the entrepreneur continues to investment beyond equilibrium point, he would incur losses; the rate of interest being higher than the prospective rate of return. Since MRP schedule slopes downwards, it would be profitable for an entrepreneur to purchase more units of capital provided the rate of interest falls. Since rate of interest is expressed in terms of percentage, both marginal efficiency of capital and rate of interest schedules follow the same course. But they do not depend upon each other. They are independent and not interdependent classical economists held the view that investment demand is interest elastic.

MRP schedule of capital and rate of interest schedule slope downwards from left to right indicating thereby more will be invested if the rate of interest comes down and as more and more units of capital are demanded for investment, the return from each marginal unit of capital goes on falling. So more will be invested if the rate of interest falls and also MRP of capital declines as more and more units of capital are demanded for investment. The following diagram shows the MRP schedule of capital.



It falls from left to right. 'OR' is the market rate of interest. At this rate of interest OM amount of investment is undertaken. The curve MRP depicts the falling marginal net expectations as more and more investment is undertaken. Here one must note that rate of interest becomes equal to MRP of the capital. Now let us suppose that rate of interest falls from OR to OR¹. This will make further investment more profitable. Therefore MM¹ additional fresh investment is undertaken to equalise MRP with new rate of interest. It is therefore concluded that investment demand slopes downward from left to right with a change in rate of interest.

6.8.4 SUPPLY OF CAPITAL

Capital is productive and hence capital owner is required to pay some income to make it available for producing goods and services. To make people to surrender their savings or investible funds, they must be offered something and that is rate of interest. The suppliers of capital prefer present consumption to future consumption. When they lend their investible funds, they would have to postpone their present consumption of goods and services. This involves a sacrifice on the part of lenders. Interest is the reward for this sacrifice or waiting. The investible funds come from general public. They supply these funds out of their savings. Therefore, savings schedule slopes upward from left to right indicating the direct relationship between rate of interest and supply of funds. Thus according to the classicists savings is interest elastic or $s = f(r)$. It means that it is a function of rate of interest.

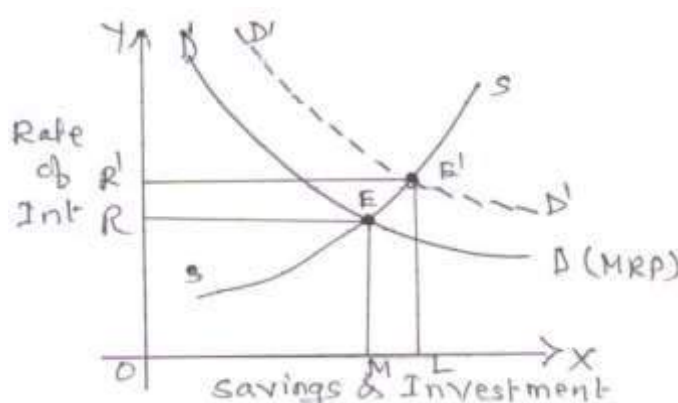
6.8.5 DETERMINATION OF EQUILIBRIUM RATE OF INTEREST

The classical economists held that interaction between demand for and supply of investible funds determines the equilibrium rate of interest. According to classical economists savings is interest elastic. If the demand for investible funds exceeds supply of investible funds, the rate of interest would shoot up and vice – versa.

The classical economists held to view that the rate of interest is equilibrium force between demand for and supply of investible funds. This equilibrium rate of interest demand for savings for investment. If saving exceeds demand for it, the rate of interest would fall. This would result into a fall in rate of interest and reduction in supply of savings. So, the rate of interest is the mechanism which brings two into equality. The classical economists always held.

$$(1) S = f(r) \quad (2) I = f(r)$$

where, 'S' stands for savings and 'I' stands for investment, 'r' for rate of interest & 'f' for function. So, Savings would be equal to investment always. Aggregate savings and investment are treated to be flows; and secondly, it is the rate of interest that brings about equality between the two. The following diagram depicts determination of rate of interest. The diagram shows DD demand curve is nothing but MRP schedule of capital.



'DD' demand schedule cuts supply schedule at 'E' point at 'OM' size (MRP) of investment. Thus OR is the equilibrium rate of interest. If any change either in demand for or supply of investible funds takes place, a new equilibrium rate of interest would be established. Thus according to classical economists rate of interest is determined by the interaction between demand for and supply of investible funds.

6.8.6 ASSUMPTIONS OF THE THEORY

- 1) Existence of full employment of natural resources.
- 2) Government policy of laissez-faire.
- 3) Long Run operation.
- 4) Existence of perfect competition
- 5) Savings and investment are the function of rate Interest $S = f(r)$, $I = f(r)$
- 6) Accepting the marginal productivity theory as the base and rate of interest as a mechanism which brings savings and investment into equality. The classical theory is also called as real theory of rate of interest because it is based on real factors like capital and abstinence form consumption neglecting totally monetary factors.

6.8.7 LIMITATIONS OF THE THEORY

- 1) **Full Employment:** The classical theory of rate of interest is based on full employment. i.e. all natural resources are fully employed. But there can be cyclical, frictional, voluntary or involuntary unemployment in the economy. So, assumption is unrealistic.
- 2) **Savings is not interest elastic:** The classicists held that savings is the function of rate of interest. But this is not correct. Saving is basically income elastic and then interest elastic. It means that savings depends upon the level of national income which classicists failed to recognise.
- 3) **Investment is not interest elastic:** Though the classical economists held investment also function of rate of Interest but it is not so. Investment is primarily function of marginal efficiency of capital or prospective rate of return over cost. Rate of interest on one side and marginal efficiency of capital on the other determines the volume of investment in the economy. But classical economists failed to consider this fact.
- 4) **Monetary Forces Neglected:** Another drawback of the theory is that they totally neglected monetary forces such as bank money, hoardings etc. these factors equally influence rate of interest. The classicist emphasized only real forces.
- 5) **Rate of Interest Is A Weak Mechanism:** The Classical economists held the view that the equality between savings and investments is brought through rate of interest. It is so because according to them both are interest elastic. But there are many other forces which are equally important in bringing about equality between the two.

Whatever may be the drawbacks of the classical theory, it can not be discarded because it is based on real factors such as productivity, time preference, waiting, sacrifice etc. Therefore, it is termed as real theory of rate of interest.

6.9.8 THE LOANABLE FUNDS THEORY OF RATE OF INTEREST

This theory of interest associated with the name of Neo-classical economists like Wicksell, Marshall Robertson etc. This theory holds that rate of interest is determined by the interaction between the demand for and supply of loanable funds. Not only real factors but monetary factors also like bank money hoardings, disinvestment etc. determine the equilibrium rate of interest. So, the loanable funds theory takes much more broader view of demand for as well as supply of loanable funds.

6.9.9 SUPPLY OF LOANABLE FUNDS

Funds for investment come from four different sources which are as follows :

- 1) **Savings (S)** : Savings of general public as well as of institutions forms the major source of supply of funds. It is interest elastic. The higher the rate of interest, the greater would be volume of savings and vice-versa. Savings is defined as an excess of income over consumption expenditure. It depends upon the level of income and the prevailing rate of interest. Besides, industrial houses accumulate savings out of undistributed profits and reserved funds. Since savings is interest elastic, saving function slopes upward from left to right.
- 2) **Dis-hoarding (DH)**: Hoardings means idle cash balances or money kept out of circulation. If the rate of interest goes up, people dishoard their hoardings and make funds available for investment. It is also interest elastic and therefore dishoarding curve also slopes upward.
- 3) **Bank Money (BM)**: The credit created by the banking system forms the another source of loanable funds. The expansion or contraction of credit creation increases or decreases the supply of funds for investment. The BM function also slopes upward.
- 4) **Dis-investment (DI)**: Investments which do not remain attractive are liquidated and funds are made available for fresh investment. Old investment is liquidated because rate of return over cost is less than the current rate of interest. That is why old investment is liquidated and funds are made available for new investment. So, the supply of funds comes from savings, dishoardings, bank money, and dis-investment.

Thus, $SL = S + DH + BN + DI$

6.9.10 DEMAND FOR LOANABLE FUNDS

The demand for loanable funds come from investment, consumption and hoardings.

1) **Investment Demand (I):** Demand for funds mainly come from investors. The businessmen borrow funds for the purpose of investment. It depends upon the rate of interest. So long as the rate of profitability is higher than the current rate of interest, funds will be demanded for investment. The moment the rate of profitability comes down to the level of current rate of interest, further demand for funds would come to an end. The higher the rate of interest, the lower would be the demand for funds for investment and vice-versa.

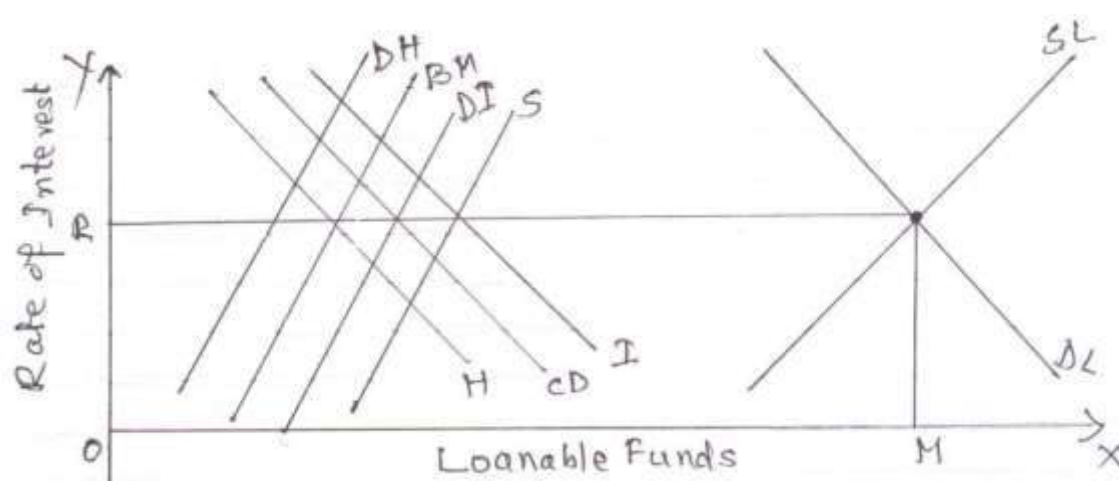
2) **Consumption Demand (CD):** For buying durable goods such as vehicles, houses, air-conditioners, refrigerators etc. people demand funds. They do so because their current income may not be sufficient to buy these goods. Demand for funds for this purpose is also interest elastic. That is why CD function slopes downwards from left to right.

3) **Hoardings (H):** When people decide to maintain high liquidity when rate of interest is very low, they demand funds simply for hoardings. In other words they keep funds idle without making any investment. But at high rate of interest they dishoard it. So the rate of interest and demand for funds are inversely related.

Thus total demand for funds (DL) = I + CD + H

6.9.11 DETERMINATION RATE OF INTEREST

The equilibrium rate of interest is determined by the equality between the total demand for and supply of funds. This equality is reached at the point of intersection between total supply of funds and total demand for funds. Thus SL and DL curves intersect at each other at 'E' point at which equilibrium rate of interest is determined as OR and funds demanded supplied are OM. This implies that any other rate of interest will bring disequilibrium between the SL and DL. The following diagram depicts the equilibrium rate of interest.



LIMITATIONS

- 1) No clarity about the concept of hoardings.
- 2) The theory is indeterminate, in the sense that what determines what is not made clear.
- 3) National Income never remains constant. It always fluctuates which the theorists failed to recognize/
- 4) The assumption of full employment is not true.
- 5) Saving-Investment are not only interest elastic. They depend upon income and marginal efficiency of capital.
- 6) The theory is synthesis of the real theory and liquidity preference theory.
- 7) It is also states to be static whereas our world is dynamic. We can not solve the problems of dynamic world with static tools.

6.10 PROFITS

6.10.1 INTRODUCTION

Profit is regarded as the reward for entrepreneur. An entrepreneur means undertaker; one who undertakes the task of producing goods and services. He hires the services of factors of production. He also co-ordinates their services to complete the process of production. In the past, the owner of a business was considered entrepreneur. But in modern times business enterprises have not remained one man enterprise. Therefore, it has become more difficult to conceive the proper and clear cut meaning of the term entrepreneur.

There is a controversy over the meaning and functions of entrepreneur. Entrepreneurial work is regarded as special type of labour. His job is to hire, combine and co-ordinate the factors of production. In order to complete the process of production. All are expected to lead to maximum profit. One point to be noted that all other factors are hired but entrepreneur can not be hired. The entrepreneur is paid profit as his reward. However, it is considered as non-contractual income. It is the left over income. So, profit can be positive as well as negative. But in case of other factors, their rewards would always be positive. Net profits are calculated after having deducted imputed values of the land and capital owned by the entrepreneur himself. He must also deduct the value of his services rendered to the production. There is also a difference between profit and profits. Profits are those which an entrepreneur hopes to earn in near future while profit is one which already earned.

6.10.2 GROSS PROFIT & NET PROFIT

Gross profit refers to the total income received by an entrepreneur after having deducted total explicit cost from total earning. Total explicit cost includes all the money expenditure incurred by a business man to produce a commodity or a service payment made to outside parties whereas Net profit or pure profit refers to the total revenue minus total cost inclusive of implicit cost. Gross profit includes, wages, rent and interest and this imputed value while net profit is a left over income after having made all contractual and non-contractual payments. It is quite possible, therefore that net profit may be either positive or negative. It would be positive when total revenue exceeds total costs including implicit costs. It would be negative when total cost exceed total revenue. If all the factors of production are paid equal to their MRPs, then that case, there would not be any net profit. Except perfect competition, there would be always left over income which goes to entrepreneur.

6.10.3 NORMAL PROFIT

Normal profit can be defined as the minimum profits which entrepreneur must earn to make him remain or continue in the same business. In other words, it is the transfer earnings of the entrepreneur. If he fails to get the minimum expected profit in the existing business, he would transfer his services to some other lucrative business. Normal profit is treated as a part of total cost. It is regarded as the return for entrepreneur for managing and bearing uncertainty of the business. While abnormal profit or excess profit refers to any surplus over and above normal profit. It is residue surplus which can be referred as rent of ability. Earning of excess profit is not necessary for continuance of the business.

6.10.4 FUNCTIONS OF ENTREPRENEUR

Profit is closely related with functions of entrepreneur. It is the entrepreneur who hires the services of other factors of production and pays them fixed contractual remuneration to them but entrepreneur himself is not employed by any one and is not paid a fixed salary. Entrepreneurship includes all those productive functions which are not rewarded in the form of rent, wages and interest. It is a residual income which he earns for performing special functions.

- 1) **ORIGINATING** : The entrepreneur introduces new products, new techniques or processes of production and explores the new opportunities of earning profits.
- 2) **RISK BEARING**: It is the entrepreneur who shoulders the entire risk of the business. He bears all risk because he is the originator and executor of the business.
- 3) **CO-ORDINATING**: It is he who hires and employs the services of other factors of production. He combines and co-ordinates the work of other factors of production so that production is made possible and goods and services are produced.

6.10.5 PROFITS & UNCERTAINTY

Before production is undertaken, an entrepreneur has to make various decisions on certain figures of cost and revenue. If his calculations regarding costs and revenue come true, he will certainly make profits. But these calculations go wrong, he will incur losses and these calculations vary from entrepreneur to entrepreneur. Therefore, these estimates regarding costs and revenue are subjective. But if these calculations are not known then in that case everything becomes uncertain. Therefore, whether he would earn profits or incur losses, all depends upon his expectations, calculations and guesses. And if these all come true, he will definitely make profits but unfortunately if these go wrong, he would incur losses. So, there is a great amount of uncertainty in these calculations with uncertainty. That is the reason why profits are associated with uncertainty. However, one thing must be noted that if the world is static, there would be no uncertainty and so scope for losses. But things may not shape as we want them to be. That's why there is uncertainty which gives rise to risk in business. Dr. H.L. Ahuja holds, "Profits arise due to disequilibrium caused by the changes in demand and supply conditions."

6.10.6 RISK & UNCERTAINTY

As other factors of production namely land, labour and capital have their MRP schedules, in the same manner entrepreneur also has his MRP schedule. It means that he is also productive like all factors of production. The risks which entrepreneur shoulders can be insurable and non-insurable. This distinction is of great importance. There are number of risks and uncertainties that the entrepreneur is confronted with besides the risk of losing his money invested in the business. These risks take place partly due to his misjudging the market movements and partly due to natural uncertainties. The risks like fire, theft, death, earthquakes can be insured against. So over such risks entrepreneur is not to worry. He has to shoulder those risks which can not be insured against.

These risks are connected with his business decisions about what to produce? Where to produce? When to produce? Which technique to follow? Etc. predictions regarding demand conditions are very difficult. These predictions may come true or may go wrong. Therefore, it is impossible for any insurance company to ensure such risks and uncertainties. If an entrepreneur uses his own capital, land and his own labour he is entitled to rent, wages and interest. Such payments are called as imputed values.

6.10.7 PROFIT AS A DYNAMIC SURPLUS

J.B. Clarke developed this theory of profit. He holds that profits are a dynamic surplus. In a static economy where there are no changes in conditions of demand and supply, remuneration paid to the factors of production on the basis of their MRP would exhaust the total revenue and hence no profit would occur to the entrepreneur. Profit results when total revenue is in the excess of total cost of production.

In a competitive market, in the long run price equals average cost ($AR = AC$) and no profit. Profits arise due to disequilibrium caused by the changes in demand and supply conditions and therefore there would be no profit since both demand and supply forces balance each other. The size and composition of population, incomes, tastes and preferences, existence of substitutes, changes in government, economic and fiscal policies bring about change in demand conditions. Similarly, introduction of a new commodity or a new technique or a process of production or a new method of selling or a change in supply which cause disequilibrium leading to profit. But in a static economy demand and supply are taken to be constant hence cost and price do not change and so no profit.

But in reality, everything is subject to changes or uncertainty. Nothing can be anticipated before hand. A dynamic economy is one in which demand and supply conditions undergo change constantly. These changes lead to profit or losses. Thus, disequilibrium between demand and supply causes profit or losses. Like internal changes, there are external changes which affect entire manufacturing units in the economy. These changes are, war, inflation and depression, change in monetary and fiscal policies, change in the technique of production, change in spending habits of the people and lastly statutory changes. These changes either bring changes in demand or supply conditions resulting into disequilibrium leading to either profits or losses.

6.10.8 LIMITATION OF THE THEORY

1) According to F.H. Knight, dynamic surplus theory does not make any difference between a foreseen changes and unforeseen changes. Certain changes can be predicted in advance. The moment this aspect we take into account, the entire clarkian thesis based upon the effects of changes falls flat on the ground. Thus, it is not change as such but uncertainty about this change that gives rise to profit. Uncertainty is the permanent feature of economic system.

2) The theory ignores completely the role of uncertainty in making profit. He also rejects the view that profits are nothing but the reward for shouldering risk of the business. Risk and uncertainty exist in entrepreneurial function. The one can not exist without other. Therefore, the theory is one sided.

3) Clark's concept of profit as a dynamic surplus is worked out in the context of static background and is too mechanical. Nothing is static in the world. Hence, the role of uncertainty creeps into it. Thus Clark overlooks the active role played by uncertainty and expectations in shaping the course of things. In the words of professors Stonier and Hange "In an economy where nothing changes, there can be no profits." There is no uncertainty about the future, so there are not risks and no profits."

6.10.9 INNOVATION THEORY OF PROFIT

It was Joseph Schumpeter who developed the innovation theory of profit. Innovation is an important factor responsible for the occurrence of profit to the entrepreneur. According to Schumpeter the main function of the entrepreneur is to introduce innovations in the economy and profits are reward for performing this function. Schumpeter held that innovations are not only the cause of profits but also the root cause of economic fluctuation. He explained the phenomenon of trade cycles in terms of innovation and the behavior of entrepreneurs. The term innovation is not the same as invention. Innovation has wider meaning. Any new measure or technique or policy introduced by an entrepreneur to reduce the costs of production or to increase the demand for his product is an innovation. So, innovations can be put into two categories namely cost saving or demand boosting. In either case profit is made.

Cost saving innovations do change the production function. These innovations are introduction of a new machinery, new and cheaper technique or process of production, exploitation of a new source of raw materials and better method of organizing the business, etc. The second category innovations are the measures which increase the demand for the product and these measures alter the utility function. They include introduction of new product, a new design of product, a new and superior method of advertisement or discovery of new market etc. If the introduction of an innovation proves worthwhile or successful in reducing either cost or raising demand for the product, it would generate profit. One who introduces innovation first will reap the maximum profit. But later on others will imitate the pioneer entrepreneur and the profit margin will start declining due to keen competition from other entrepreneurs.

Introduction of innovation which gives rise to profits are temporary. Profits are earned till the effects of innovation remain. Once that innovation is completely exploited, the cost of production starts rising and profits come to zero. Economic activity comes to an end. But if any other entrepreneur introduces a new innovation at the time when the desirable effects of previous innovation are dying out, he would be monopolist for new innovation is confined to him. So, he makes profits. Others may try to imitate him but take some time and during this period the pioneer entrepreneur makes profits. When others succeed to imitate him, excess profits would be competed out by imitators until another innovation emerges. It must be noted that innovations appear in cluster i.e. one after the other and take economic system to its climax. It is so because in a competitive and progressive economy true and rational entrepreneurs are always after the new method of production or technique or any device that reduces the cost of production. Therefore as long as innovations exist, profits continue to emerge out of them.

LIMITATIONS OF THE THEORY

- 1) Role of uncertainty is not analysed. He gave all importance to innovation without considering the role of risk and uncertainty.
- 2) Joseph Schumpeter denies the much accepted contention that the entrepreneur is the risk bearer. He says "The entrepreneur is never risk bearer. The one who gives credit comes to grief if the undertakings fails." But this is not a correct view. Ultimately the entire responsibility of business lies on one who makes all the production decisions. These decisions may go wrong and hence one who makes wrong decisions will have to face losses. Even introduction of innovation may be wrong time but it may prove successful who knows? This means uncertainty and risk of making such decisions.

6.10.10. PROFIT AS A REWARD FOR RISK BEARING

This theory is developed by Hawley. According to him risk bearing is the main function of the entrepreneur and this results into profit. Before undertaking any business, the entrepreneur expects to earn a certain amount of profit because the business involves some element of risk. The higher the risk, the greater would be the gain. If the gain is not a proportion to the risk, no entrepreneur would undertake that business. Therefore to start any business, the entrepreneur is required to be rewarded sufficiently. Thus risk bearing is an essential function of entrepreneur and therefore is the basis of profits.

LIMITATIONS OF THE THEORY

- 1) Firstly profits arise because of the reduction of risk in the business by above and efficient entrepreneur and not by merely shouldering risk.
- 2) Secondly, it is not true to hold that every risk leads to profits. Some risks can be insured against whereas others can not. Risks of making production decisions can not be insured against. It is only these risks which are responsible for occurrence of profits.

In conclusion, we can add that the root cause of profits is innovation. Profits are the necessary incentives for entrepreneurs to undertake economic development of the country. Since innovations generate profits, profits are incentive to introduce innovations. So both are there as cause and consequences of each other. Both are required to take up economic system of the country to the level of full employment.

Exercise

1. Explain the marginal productivity theory of distribution with special reference to marginal revenue productivity.
2. What are the conditions of equilibrium of an industry? What are the assumptions behind it and what are the limitations thereof.
3. Explain the Ricardian concept of “rent” and the assumptions on which it rests.
4. What is the modern theory of rent? How elasticity of supply of land affect it? Explain quasi-rent.
5. Distinguish between nominal wage and real wage. How wage is determined under competitive conditions.
6. Discuss the effect of collective bargaining on wage rate.
7. What is meant by ‘interest’? What determines the equilibrium rate of interest? Explain with diagram.
8. Explain the theory of profit as a reward for risk bearing. What are the limitations of the theory?

MACROECONOMICS

INRODUCTION

The weightage of utility arising out of consumption is recorded through money. Such utility arising out of consumption is referable to commodity which means goods as well as services. The immediate effect of demand and supply of a commodity is recordable as price and ultimate effect is the value. The aspect of pricing had been our subject matter of microeconomics. We are concerned with valuation which goes beyond pricing and analysis the forces as well as the factors that go to determine the ultimate effect, determining value.

In pricing, we are concerned with behaviour of demand schedule and supply schedule under different market conditions – perfect, imperfect and monopoly. In valuation, we have to take into account various other forces which are deeply laden in macroeconomics that means monetary polices, distribution of national income, price level and inflation, demographic patterns, changes in consumer behaviour, rate of saving and investment, parallel economy, etc., which lie within the domain of macroeconomics. That is how the study of macroeconomics assumes extreme importance in the context of valuation.

The goals of macroeconomic policy are:

1. A high and growing level of national output (i.e., of real GDP)
2. High employment with low unemployment
3. A stable or gently rising price level

The Tools of Macroeconomic Policy

Governments have certain instruments that they can use to affect macroeconomic activity. A *policy instrument* is an economic variable under the control of government that can affect one or more of the macroeconomic goals. That is, by changing monetary, fiscal, and other policies, governments can avoid the worst excesses of the business cycle and can increase the growth rate of potential output.

Fiscal Policy. Begin with **fiscal policy**, which denotes the use of taxes and government expenditures. *Government expenditures* come in two distinct forms. First there are government purchases. These comprise spending on goods and services—purchases of tanks, construction of roads, salaries for judges, and so forth. In addition, there are government transfer payments, which boost the incomes of targeted groups such as the elderly *or* the unemployed. Government spending determines the relative size of the public and private sectors, that is, how much of our GDP is consumed collectively rather than privately. From a macroeconomic perspective, government expenditures also affect the overall level of spending in the economy and thereby influence the level of GDP.

The other part of fiscal policy, *taxation*, affects the overall economy in two ways. To begin with, taxes affect people's incomes. By leaving households with more *or* less disposable *or* spendable income, taxes tend to affect the amount people spend *on* goods and services as well as the amount of private saving. Private consumption and saving have important effects *on* output and investment in the short and long run.

In addition, taxes affect the prices of goods and factors of production and thereby affect incentives and behaviour. For example, the more heavily business profits are taxed; the more businesses are discouraged from investing in new capital goods. From 1962 until 1986, the United States employed all investment tax credit, which was a rebate to businesses that buy capital goods, as a way of stimulating investment and boosting economic growth. Many provisions of the tax code have an important effect *on* economic activity through their effect on the incentives to work and to save.

Monetary Policy. The second major instrument of macroeconomic policy is monetary policy, which government conducts through the management of the nation's money, credit, and banking system. You may have read how *our* central bank, the Federal Reserve System, operates to regulate the money supply. But what exactly is the money supply? Money consists of the means of exchange *or* method of payment. Today, people use currency and checking accounts to pay their bills. By engaging in central-bank operations, the Federal Reserve can regulate the amount of money available to the economy.

How does such a minor thing as the money supply have such a large impact *on* macroeconomic activity? By changing the money supply, the Federal Reserve can influence many financial and economic variables, such as interest rates, stock prices, housing prices, and foreign exchange rates.

Restricting the money supply leads to higher interest rates and reduced investment, which, in turn, causes a decline in GDP and lower inflation. If the central bank is faced with a business downturn, it can increase the money supply and lower interest rates to stimulate economic activity.

The exact nature of monetary policy-the way in which the central bank controls the money supply and the relationships among money, output, and inflation-is one of the most fascinating, important and controversial areas of macroeconomics.

UNIT – VII

NATIONAL INCOME

7.1 CONCEPT OF NATIONAL INCOME

The total income of the nation is called "national income." The aggregate economic performance of the whole economy is measured by the national income data. In fact, national income data provide a summary statement of a country's aggregate economic activity.

In real terms, national income is the flow of goods and services produced in an economy in a particular period - a year.

Modern economy is a money economy. Thus, national income of the country is expressed in money terms. A National Sample Survey has, therefore, defined national income as: "money measures of the net aggregates of all commodities and services accruing to the inhabitants of a community during a specific period."

More elaborately, however, we may say that national Income is a money measure of value of net aggregate of goods and services becoming available annually to the nation as a result of the economic activities of the community at large, consisting of households or individuals, business firms, and social and political institutions.

An important point about national income is that it is always expressed with reference to a time interval. It is meaningless to speak of the income of an individual without mentioning the period over which it is earned, say per week, per month, or per year. Similarly, it is meaningless to talk of national income without mentioning the period over which it is generated. This is because national income is a flow and not a stock *i.e.*, income is generated every year, and at different rates and, therefore, it is necessary to mention the period during which that income is generated. National income is usually measured and shown with reference to a year or as annual flow; it is, thus, an amount of total production per unit of time.

Like many other terms in common use, the concept "national income" has various connotations. For instance, national income is variously described. Sometimes it is known as "national income" at other times, "national product", or "national dividend." As a matter of fact, all these terms mean one and the same thing.

In national income accounting, thus, the concept of national income has been interpreted in three ways, as: (1) National Product, (2) National Dividend, (3) National Expenditure.

National Product

It consists of all the goods and services produced by the community and exchanged for money during a year. It does not include goods and services, which are not paid for, such as hobbies, housewives' services, charitable work, etc.

National Dividend

It consists of all the incomes, in cash and kind, accruing to the factors of production in the course of generating the national product. It represents the total of income flow which will exactly equal the value of the national product turned out by the community during the year.

National Expenditure

This represents the total spending or outlay of the community on the goods and services (of all types, capital as well as consumption) produced during a given year. Since income is the source of expenditure, national expenditure constitutes the disposal of national income, which is evidently equal to it in value or in other words, National Expenditure equals National Income.

Indeed, one man's income is another man's expenditure. When a person buys milk, it is his expenditure, but this very expenditure is the milkman's income. When the milkman spends part of this income in buying sugar, it becomes income for the sugar merchant and so on. In a sense, therefore, the sum of expenditure of all agents of production is equal to the total income received by the factors of production during that year. National Income can, therefore, be also defined as a sum of the expenditure on producer goods; consumer goods and services of agents of all production.

In fact, there is a fundamental equality between the total income of the community and its total expenditure, as one's expenditure becomes another's income in the economy. Hence, there is a large circular flow established in which each expenditure, creates an income, which in its turn is spent and creates other incomes. Therefore, this total national income will be equal to the total national expenditure.

Briefly, thus, the identity of the three factors of the flow of national income may be expressed as follows:

$$\text{National Expenditure} = \text{National Product} = \text{National Income or Dividend}$$

When we analyse, the above three concepts, we find that national income is nothing but “the total flow of wealth produced, distributed and consumed.” National income is not a stock but it is a flow. It is not that the income is first earned and then gradually spent or distributed, or alternatively, it is not that the expenditure first takes place and then an income is earned. As a matter of fact, the process of income creation and income distribution goes on at one and the same time.

There are, thus, three alternative definitions of national income. The first definition is that it is the money value of goods and services produced by agents of production during the course of a year. We might call this "total production approach.”

The second definition is that it is the sum of incomes of agents of production, profits of public enterprises, income from government companies. This we might describe as "income approach."

The third definition is that national income is the sum of total expenditure of agents of production. We might call it "Total expenditure approach.”

Corresponding to these approaches, we observe that national income has been defined in three ways in the publications of the United Nations:

- (a) "Net National Product" as the aggregate of the net value added in all branches of economic activity during a specified period, together with the net income from abroad.
- (b) "Sum of the distributive shares" as the aggregate of income accrued to the factors of production in a specific period, these payments taking the shape of wages, profits, interest, rent etc.
- (c) "Net national expenditure" as the sum of expenditure on final, consumption of goods and services, plus domestic and foreign investment.

Incidentally, Keynes has suggested three approaches to national income, which are more suitable and practicable in the microanalysis of income and employment, as follows:

1. Income-expenditure approach: in which total expenditure on consumption and investment goods constitute total income.
2. Factor-income approach: in which national income is measured as the aggregate of incomes received by all the factors of production.
Keynes wrote: $Y = F + E_p$ where, Y stands for national income, F stands for payments received by land, labour and capital owners, and E_p refers to entrepreneurial profits.
3. Sales proceeds minus cost approach: in which Keynes considered that national income is based on aggregate sales minus cost.

In fact, Keynesian analysis has revolutionized thinking of the national income analysis. Prior to Keynes's General Theory, national income data were not collected officially from the economic analysis point of view. Keynes developed a theory which showed how consumption and investment expenditure can affect the national income flow. From the Keynesian analysis, modern concepts of national income has been evolved which are more dynamic in content.

Modern economists consider national income as a flow in three forms: income, output and expenditure. When goods are produced by the firms, factors of production comprising households are paid income, these income receipts are spent by the household sector on consumption and their savings are mobilised by the producers for investment spending. Likewise, a circular flow is constituted between income and expenditure. Obviously, income, output, and expenditure flows are always equal per unit of time. There is, thus, a triple identity:

$$\text{Output} = \text{Income} = \text{Expenditure}$$

7.2 Concepts Associated with National Income Total

7.2.1 Gross National Product (GNP)

In calculating national income, we add up all the goods and services produced in a country. Such a total represents the gross value of final products turned out by the whole economy in a year, which is technically called Gross National Product. The word "gross" indicates the inclusion of the provision for the consumption of capital assets, *i.e.*, depreciation or replacement allowances.

GNP, thus, may be defined as the aggregate market value of all final goods and services produced during a given year. The concept of final goods and services stands for finished goods and services, ready for consumption of households and firms, and exclude raw materials, semi-finished goods and such other intermediary products. More specifically, all sales to households, business investment expenditures, and all government expenditures are treated as final products: But, intermediary goods purchased by business firms are obviously regarded as final goods. For example, when a textile mill purchases a machine or showroom, it is regarded as final goods, but when it buys cotton, it is not regarded as final goods. This is to avoid double counting because when cotton is transformed into cloth, its value will be included in the price of cloth.

In an open economy (an economy subject to international trade), GNP may be obtained by adding up:

1. The value of all consumption goods, which are currently produced.
2. The value of all capital goods produced which is defined as Gross Investment. Gross investment, in the real sense, here implies the increase in inventories plus gross products of buildings and equipments. It, thus, includes the provision for the consumption of capital assets, *i.e.* depreciation, or replacement allowances.
3. The value of government services which are measured in terms of governmental expenditure on various goods and services for rendering certain services to the benefit of the entire community.
4. The value of net products, *viz.*, the difference between total exports and total imports of the nation. This value may be positive or negative.

5. The net amount earned abroad. This represents the difference between the income received by the nationals from abroad on their foreign investment, minus the income paid by them abroad on the foreigner’s investment.
 GNP at market price, thus, represents:

$$\text{GNP} = C + I + G + (X - M) + (R - P),$$

Where,

- C stands for consumption goods,
- I stands for capital goods/or gross investment,
- G stands for government services,
- X stands for exports,
- M stands for imports,
- R stands for income receipts from abroad, and
- P stands for income paid abroad.

In a closed isolated economy, however, $\text{GNP} = C + I + G$.

GNP is the basic social accounting measure of the total output. It represents the final products, ready for consumption, valued at current market prices.

7.2.2 Gross Domestic Product (GDP)

When we take the sum total of values of output of goods and services in the country, without adding net factor incomes received from abroad, the figure so obtained is called Gross Domestic Product (GDP).

$$\text{GDP} = C + I + G + (X - M).$$

This is measured at market prices.

A measurement of GNP has been illustrated in the **Table 1** below.

Item	Value of Current Market Price (Rs. Crores)
Consumption (C)	654
Investment (I)	334
Government Purchases (G)	123
Net Exports (X – M)	+ 15
Net Income from the rest of world (R – P)	+ 2
Total	1128

Table 1 : Final Output (GNP)

In measuring GNP, each finished product is multiplied by its price. Thus, the relative importance of particular good is expressed by its relative price. Further, with changes in prices the GNP also changes. During inflation, thus GNP appreciates simply on account of rising prices. To know the real GNP, therefore, we must deflate a given GNP total from the market price to the constant price.

GDP at factor cost is obtained as follows:

GDP at market price + (S – T),

Where,

S = Government subsidies, and

T = Indirect taxes.

GNP represents the measure of the economic output in an economic system. The final output included in the GNP is composed of the following uses:

1. Consumption,
2. Investment,
3. Government spendings, and
4. Net exports.

As Schultze points out, all output flows to one of these four uses.

The consumption expenditure component of national product constitutes the expenditure on durable goods, perishable goods, and services which are marketed during the year.

The investment component implies that part of the current product which is not consumed but used for adding further or replacing the real capital assets. It refers to gross investment. Gross investment minus depreciation (for replacement requirement) is equal to net investment.

Schultze lists the following main categories of investment in the GNP accounts:

1. Fixed investment, relating to the purchase of durable capital goods by firms.
2. Inventory investment, representing that part of output which is absorbed by firms as an increase in their stocks of finished goods, intermediary products and raw materials.
3. Residential building constructions for households. Here only new buildings are to be accounted for.

Full employment level of GNP is the potential GNP, Potential GNP is, thus, the value of final goods and services which a country can produce by operating at a point of its production possibility frontier by fully exploiting its available resources and industrial capacities. Actual GNP is rarely equal to potential GNP. Thus, potential GNP minus actual GNP is the measure of the size of unemployment or excess capacity in the economy.

7.2.3 Net National Product (NNP)

It refers to the value of the net output of the economy during one year. NNP is obtained by deducting the value of depreciation or replacement allowance of the capital assets from the GNP. To put it symbolically :

$$\text{NNP} = \text{GNP} - D, \quad \text{Where,} \quad D = \text{Depreciation allowances}$$

This value is measured at current prices, while GNP is expressed at current market prices. Net National Product, in fact, is the value of total consumption plus the value of net investment of the community.

What is the difference between GNP and NNP? In our definition of Gross National Product, we have not made any allowance for depreciation, capital appreciation and obsolescence. Depreciation means wear and tear of machinery in the process of production. Machines used for production have to be replaced at some future time, as due to their constant use they become useless over time. In other words, fixed assets are not everlasting and must be constantly renewed to keep production running smoothly and steadily. Similarly, some machinery becomes out of date with the passage of time. This old type of machinery needs to be replaced by an up-to-date one, if competitive efficiency is to be maintained. Capital appreciation means an increase in the value of fixed assets like machinery, building, tools, etc. due to rise in their prices. It usually happens during the period of inflation. A rise in the value of fixed assets does not mean that there is any increase in national income, because the total quantity of fixed assets remains the same. Thus, when the amount of estimated depreciation and obsolescence, i.e., capital consumption, is subtracted from Gross National Product, we get Net National Product.

However, national income, in its technical sense, is obtained by deducting indirect taxes from the net product measured at current market prices. Such a figure is also called NNP at factor cost, as it represents payments made to the factors of production during the process of production.

7.2.4 National Income at Market Price and National Income at Factor Costs

In the national income analysis, usually a distinction is made between national income at market price and national income at factor costs. National income at market price means the money value of goods and services produced. It is the price of the aggregate output and services at current market prices. This price also includes some element of taxes and subsidies. A simple example will illustrate this point.

Let us suppose that the price of a bottle of beer is Rs.6/-. In this case, the national income at market price is Rs.6/-. But there is some element of tax in the above price. Let us suppose, the tax is Rs.2/-. Then, the national income at factor cost is Rs.4/- because the factor of production which has contributed to the production of one bottle of beer will get only Rs.4/- and the balance of Rs.2/- will go to the government as tax.

Let us now analyse the implications of the elements of subsidy. Let us suppose the fair price of a kilogram of sugar is Rs.4/-, but its actual cost of production is Rs.5/-. The difference of Re.1/- between the actual cost of production (Rs.5/-) and the fair price shop price (Rs.4/-) is borne by the State. In this case, the national income at market price is Rs.4/-, but it is Rs.5/- at factor cost because the factors of production would receive Rs.5/- for the production of one kilogram of sugar.

Gross domestic product at factor cost	=	Income earned by the factor of production + Depreciation
Net Domestic Product at factor cost	=	Income earned by the factor of production - Depreciation + Taxes - Subsidy

National Income at market price + National Income at factor cost + Taxes - Subsidies - Depreciation

We are now in a position to examine the interrelationship between the three definitions of national income given above. There is close relation between national income as a flow of goods, as a flow of expenditure, and as a flow of income. In fact, they are so interrelated that total production; total income and total expenditure are described as a circular flow of income activities. The firms hire the factors of production to produce goods and services. The factors of production create real income. The factors of production are paid out of this real income, in terms of money as a reward for their services. They, in turn, spend this income. Thus, income leads to expenditure, i.e., expenditure creates demand for goods.

This demand, in turn, leads to production. The flow is from production to income generation to expenditure, and from expenditure to production. National income is, therefore, the total flow of wealth produced, distributed and consumed by the economy as a whole during the course of a year. These three things – total production, total income and total expenditure – are really one and the same thing when reviewed from different angles. Each approach with suitable adjustment, will give exactly the same GNP or NNP.

7.2.5 Other related Concepts and Relationships

1. Personal Income

Personal income is the total money income received by individuals in the community. Personal income is the aggregate earned and unearned income. Undistributed profits of the corporations reduce the personal income of individuals to that extent. Thus, personal income (PI = NI - undistributed profits, (U). Again personal income includes transfer payments made by government as well as the private business sector to individuals.

Thus, personal income (PI) = NNP + transfer payments (R)

$$\therefore \text{PI} = \text{NI} + \text{R} - \text{U}$$

2. Disposable Personal Income

Disposable personal income is the sum of the consumption and saving of individuals.

Thus, DI = C + S

Disposable personal income (DPI) rather than National Income is the determinant of consumption, because the consumption of a person depends on his take home pay.

Disposable income includes an unearned element (transfer payments) which is excluded in community's earned income estimates, i.e., national income. Disposable income is the total income, earned and unearned, of individuals minus direct taxes.

Thus, DPI or simply DI = $PI - T_d$,

where T_d = direct personal taxes such as income tax, wealth tax, etc.

DPI is also symbolized as Y_d by money economists.

$$PI = Y_d = C + S$$

Keynes, however, assumed that $T_d = 0$.

$$\therefore Y = Y_d \quad \therefore Y = C + S$$

3. Personal Savings

Personal savings refer to the difference between disposable personal income and personal consumption expenditure.

A bird's eyerview of the calculation of related concepts in national income data is presented in **Table 2**.

	Rs. Crores
GNP	500
Capital Consumption allowance	- 50

Net National Product (NNP)	450
Indirect Taxes	- 60
Subsidies	10

National Income (NI)	400
Corporate Profits	- 70

Dividends	15
Government Transfer payments and business transfer payments	25

Personal Income	370
Personal direct taxes	- 70

Disposable personal income (DPI)	300
Personal Consumption expenditure	- 275

Personal savings	25

Table 2 : Relation of GNP, NI, Personal Income Saving (Imaginary Data)

7.3 Methods of Estimating National Income

In national income estimates, by definition, we have to count all those goods and services produced in the country and exchanged against money during a year. Thus, whatever is produced is either used for consumption or for saving. Thus, national output can be computed at any of the three levels, viz., production, distribution and expenditure. Accordingly, we have three methods of estimating national income: (i) the census of products method, (ii) the census of income method, and (iii) the expenditure method.

7.3.1 The Census of Products Method or Output Method

This method measures the output of the country. It is also called the inventory method and involves the assessment, through census, of the gross value of production of goods and services produced in different economic sectors by all the productive enterprises in the economy. (For instance, the producing sectors in India are agriculture, forestry, fisheries, mining, industries, transport, commerce and other services.)

To the aggregated value of total output, real income earned from abroad is added (i.e. add the net difference between the value of exports and imports). And indirect taxes like excise and customs duties, plus depreciation allowances are to be reduced from the total obtained. Thus, to this net difference of the income earned from the rest of the world, a symbolic expression for this method may be given as follows:

$$Y = (P - D) + (S - T) + (X - M) + (R - p)$$

Where,

Y	=	Total income of the nation,
P	=	Domestic output of all production sectors,
D	=	Depreciation allowance,
S	=	Subsidies,
T	=	Indirect taxes,
X	=	Exports
M	=	Imports
R	=	Receipt from abroad, and
p	=	Payments made abroad

Mostly, this method is adopted in the calculation of national income. However, there are certain precautions against the danger of double counting, etc., which must be strictly avoided if a correct result is to be achieved.

The following precautions are necessary:

1. To avoid double counting, we must add only the final products. Raw materials and intermediate goods should not be included, as that would lead to double counting.
2. Goods for self-consumption by the producer should be excluded; they have not been marketed, so it is difficult to ascertain their true market value.
3. While evaluating the output, changes in the price levels between the years must be taken into account. It is usual to denote national income with reference to prices of a particular year.
4. Indirect taxes, included in prices, are to be deducted for getting the exact value of the products. Similarly, subsidies given by government to certain products should be added in evaluation of the product.
5. Add the value of exports or the income earned abroad and deduct the value of imports.

This method is widely used in the underdeveloped countries, but it is less reliable because the margin of error in this method is large. However, in India, this method is applied to agriculture, mining and manufacturers, including handicrafts. But the census of product method is not applied for the transport, commerce and communication sectors in India.

Value Added vs. Final Goods Approach

There are two approaches to avoid the possibility of double counting in the measurement of GNP:

- (i) Final goods method, and
- (ii) Value added method.

In the final goods method of estimating GNP, only final values of goods and services are computed, ignoring all intermediate transactions. Intermediate goods are involved in the process of producing final goods – the final flow of output purchased by consumers. Thus, the value of final output includes the value of intermediate products. Hence, to avoid double counting, only final values relating to final demand of the consumers should be reckoned.

For example, the price of bread incorporates the cost of wheat, flour etc. Wheat and flour are both intermediate products and are not treated as the final consumer's demand. Their values are paid up during the process of production. In the value of final product, bread, the values of these intermediate goods are hidden. Hence, a separate accounting of the values of intermediate goods, along with the accounting of the value of final product, would mean double counting. To avoid this, the computation of the value of final products only has been suggested.

Another method, however, is the "value added" method in which a summation of the increase in value (the value added), at each separate production stage, leading to output in final form, gives the value of GNP.

To avoid double counting of intermediate goods, one must carefully estimate the value added at each stage, of the production process. From the total value created at a given stage, we should thus subtract all the costs of materials and intermediate goods not produced in the stage.

Or, the value of inputs, at a given stage, should be deducted from the value of output. Even the value of inputs purchased from other firms or sectors should be subtracted. In short, GNP is obtained as the sum total of the values added by all the different stages of the production process till final output is reached in the hands of consumers to meet the final demand. The point may be clarified further with the help of an illustration as given in **Table 3**.

	(1) Production Stages	(2) Firm	(3) Sales Receipts	(4) Cost of intermediate	(5) Value added (Net Income) (3) - (4)
1.	Wheat	Farmer	500	0	500
2.	Flour	Flour Mill	700	500	+ 200
3.	Bread	Baker	900	700	+ 200
4.	Trading	Merchant	1000	900	+ 1000
		Total :	Sum of value added		= 1000

Table 3 : Value Added Method

In **Table 3** we have assumed a much simplified method or model of an economy, producing only a single final product, bread. In satisfying the consumer final demand for bread, it is assumed that there are four productive stages. First, a farmer cultivates wheat and sells it at Rs.500/-. Thus, Rs.500/- is the value added to the economy's output. We assume that this wheat is purchased by the flour mill to grind into flour. The mill sells the flour to the baker and fetches Rs.700/-. So, its net income is Rs.700/- - Rs.500/- = Rs.200/-. Thus, in turning wheat into flour (that is, the creation of form utility), the value added is Rs.200/-. The baker bakes a quantity of bread out of the flour and sells it to the merchant for Rs.900/-. In the process, the value added is Rs.200/-. The merchant renders trading service of creating place and time utility, and thus sells the stock of bread to the final consumer at Rs.1,000/-. The net income of the merchant is Rs.100/- which is his profit for merchandise business, a "productive" activity. Thus, the value added is Rs.100/- in the economic system. Obviously, the sum total of value added at each stage of production, Rs.500/- + Rs.200/- + Rs.200/- + Rs.100/- = Rs.1,000/- is the final value.

Evidently, the value of that product is derived by summation of all the values added in the path of the productive process. To avoid double counting, either the value of the final output should be taken in the estimate of GNP or the sum of values added should be taken. Value added is the difference between value of output and input at each given stage of production. The final product method reckons the quantum of goods and services and the aggregate of their values (measured at market prices) at the end of the year, while the value added method measures the flow of output and takes the sum total of net values created at each production stage during the year.

Apparently, both the methods given the same results, because both relate to the same phenomenon, though each in a different manner. Some economists, however, prefer the value added method on the following counts:

- (i) It provides a method to check up or tally the accuracy of GNP estimates.
- (ii) It enables us to know the contribution of each productive sector to the creation of GNP. Thus, national income at industrial origin can be easily compiled from the value added approach. Again, it is also helpful in constructing the input-output table and trading inter-industry transactions.

Circular Flow of Activity

Incidentally, the economic system contains the flow of goods and services in the transactions between two economic sectors: households and firms. There is a circular flow of economic activity. Households buy the final goods and services produced by the firms. Thus, households' total expenditure becomes the income of the firms which is equal to the value of final output by the firms. The range of transactions which take place within the boundaries of firms – "the productive area" – are regarded as intermediate transactions or inter-industry relations. Values are created in the productive area. All net values added together determine the value of the final output, i.e., GNP. The final output flows from the productive area of firms to the consumption area of households. This point has been illustrated diagrammatically in **Figure 1**.

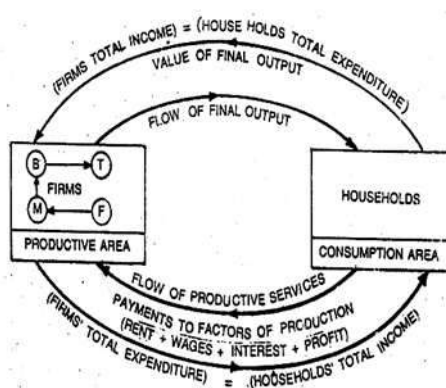


Figure 1: Circular Flow of Activity

In **Figure 1**, one can observe that intermediate transactions occur within the productive area or firms. It represents intermediate transactions from the farmer (F) to the flour mill (M), to the baker (B), to the trader or merchant (T) – all taking place within the boundaries of the firms. The firms sell their final output to consumers – the households. Thus, there is a flow of final goods from the productive area or firms to the consumption area of households. Households' total expenditure = the value of final output - the income of the firms' sector. Again, there is a flow of productive services of factors from households to firms. The factors are rewarded in the form of rent, wages, interest and profits. The total factor income = the aggregate value of factor services = the total expenditure of firms = the total income of households. In short, total expenditure of firms = total income of households and total expenditure of households = total income of firms = the value of final output. Thus, the final value of output is just the same as final expenditure. It follows thus:

Total output = Total expenditure
 Again, total expenditure = Total income
 \therefore Total output = Total income

7.3.2 Census of Incomes Method

In this method, income of all factors of production is added together. The data are compiled from books of accounts, reports, and published accounts. The following classification of incomes is considered as comprehensive:

- (a) Wages and salaries,
- (b) Supplemental labour income (social security, etc.),
- (c) Earnings of self-employed or professional incomes,
- (d) Dividends,
- (e) Undistributed profits,
- (f) Interest,
- (g) Profit of state enterprises.

However, transfer payments like gift subsidies etc. are to be deducted from the total of factor incomes. Thus, National Income is equal to the factor incomes minus transfer payments.

This method is also called the Factor Cost Method. Thus, the national income of a country, at factor cost, is equivalent to the sum total of the disbursements of their (factors) income. The symbolic expression of this method is as follows:

$$Y = (w + r + i + n) + (X - M) + (R - P)$$

Where,

- w = wages
- r = rent
- i = interest
- n = profits

However, certain precautions are necessary while following this method.

1. All transfer payments (government and personal) like gifts, pension etc., are to be deducted. Similarly, gambling, being transfer activity, is to be excluded.
2. All unpaid services (like services of housewife) are to be excluded. Thus, only those services for which payments are made should be included.

3. Financial transactions and sales of old property (including land) are to be excluded, as they do not add anything to the real national income. Thus, all capital gains and losses which are related to wealth, but not to real income, should be excluded.
4. Direct tax revenue to the government should be subtracted from the total income as it is only a transfer of income. Or else, it should not be reckoned at all.
5. Similarly, government subsidies should be deducted.
6. Add the value of exports and deduct the value of imports.
7. Add undistributed profit of companies, income from government property, and profits from public enterprises.

In India, the National Income Committee used the income method for adding up the net income from trade, transport, public administration, professional and liberal arts, and domestic services. Since, under Indian conditions, due to lack of popularity of personal accounting practices, it is difficult to ascertain the personal income of individuals, the income method is not wholly practicable

7.3.3 The Expenditure or Outlay Method

National income on the expenditure side is equal to the value of consumption plus investment. In this method, we have to :

- (i) estimate private and public expenditure on consumer goods and services.
- (ii) add the value of investment in fixed capital and stocks, with due consideration for net positive or negative inventories, and
- (iii) add the value of exports and deduct the value of imports.

This method is not as popular as the previous ones.

To express it in symbolic terms,

$$Y = (C + I + G) + (X - M) + (R - P)$$

Where,

C = Consumption expenditure,

I = Investment expenditure, and

G = Government purchases

The Bowley-Robertson Committee has suggested the adoption of the Census of Products Method for major sectors of India, and the Census of Income Method for some minor sectors, while the National Income Committee relied mainly upon the Census of Income Method. However, none of the above methods alone is perfect. Therefore, an integrated computation of them will give a wider perspective of the estimate.

The process of calculation of national income (by using the above discussed three methods) has been illustrated in a summarized way, with hypothetical data of an imaginary economy, in **Table 4 (A, B and C)**.

A.	Income Method	Rs. (Crores)
	Income: Wages, salaries, etc.	1,000
	Profits: Private and Public operations	500
	Rent	200
	Interest	100

	Total domestic income :	1,800
	Less: Stock appreciation	- 250
	Residual error	- 50
	Net property income from abroad	100

	FNP	1,600
	Less: Capital consumption	- 150

	National Income	1,450

B.	Expenditure Method	Rs. (Crores)
	Consumer's expenditure (C)	1,100
	Public authorities' current expenditure on goods/services (G)	600
	Gross Capital formation (Investment) at home including increase in stocks (I)	500

	Total domestic expenditure at market prices	2,200
	Plus: Exports and income from abroad	600
	Minus: Imports and income paid abroad	- 200
	Less: Taxes in expenditure	- 1,000
	Plus: Subsidies	50

	GNP at factor cost	1,600
	Less: Capital consumption	- 150

	National Income	1,450

C.	Output Method	Rs. (Crores)
	Agriculture, Forestry and Fishing	250
	Mining and quarrying	100
	Manufacturing	200
	Construction	100
	Gas, electricity and water	50
	Transport and communication	200
	Distributive traders	300
	Insurance, banking and finance	200
	Public administration and defence	150
	Other services	100

	Total domestic output	1,800
Less:	Stock appreciation	- 250
	Residual error	- 50
	Net property income from abroad	100

	GNP at factor cost	1,600
	Less: Capital consumption	- 150

	National Income	1,450

Table 4 : Estimate of the National Income of Country X during a given year

To be more realistic on this account, we have purposely assumed that the results in these three methods are not identical due to incomplete information. Thus, the expenditure statistics are taken as data. The difference between expenditure statistics and income and output statistics is regarded as a residual error in the above table.

7.4 Difficulties in National Income Estimate

While estimating national income statisticians and economists usually encounter the following sets of difficulties :

- (i) conceptual and
- (ii) statistical or practical

The conceptual problem relates to how and what is to be included and what is not in the measurement of national income. Logically, the concept of national income would imply that everything that is produced must be reckoned.

However, by definition, we consider only those things which are exchanged for money or carry some price. By convention, on the basis of the availability of information, certain guidelines have been laid down in the process of national income estimates.

A few of them are:

1. Farm products kept for self-consumption. These are to be included as national income and estimated by a guess and at the rate of market price of agricultural products that have been marketed.
However, output of food from domestic poultry keepings or vegetables grown in the home or terrace gardens etc. are not included in national income, as no accurate estimate of their production is available.
2. Services of housewives. These are not to be included in national income as they have no price and no market for the services rendered for their own household work. But the value of the services of domestic servants are to be considered as national income. Obviously then, a person who marries his maidservant reduces the national income to that extent.
3. Unpaid services are not reckoned as national income.
4. Defence services, being indirectly productive must be included as national income. Their value will be equivalent to the defence expenditure incurred by the government.

There are statistical problems too. Great care is required to avoid double counting, otherwise there will be an exaggerated valuation of national output. Again, statistical data may not have perfect reliability when they are compiled from numerous sources. Skill and efficiency of the statistical staff and co-operation of people at large are also equally important in estimating national income.

In India, a special conceptual problem is posed by the existence of a large, unorganized and non-monetised subsistence sector where still barter system prevails for transacting goods. Here, a proper valuation of output is very difficult. A large part of India's national income is, therefore, as guess work without much accuracy.

Further, rural folk in India have no specific employment. Their occupation is of divergent nature. A person is a farmer as well as a carpenter at one and the same time. So, it is very difficult to decide the structure of national income by industrial origin.

Further, in a country like India, statistical difficulties are still more severe. Some of these are:

1. Accurate and reliable data are not adequate, as far as output in the subsistence sector is not completely informed. Small-scale and cottage industries also do not report their targets. Indigenous bankers do not furnish reliable data and so on.
2. India, is a country with large regional diversities. Thus, different languages, customs, etc. also create a problem in computing the estimates.
3. People in India are indifferent to the National Income Committee's inquiries. They are non-co-operative also.
4. Statistical staff is also untrained and inefficient.

Therefore, national income estimates in our country are not very accurate nor are they adequate.

7.5 Method of Deflating National Income

Usually, national income estimates are computed at current market prices. To know the real changes, therefore, we have to deflate them. That is, convert the given national income figures at market prices into constant prices.

Deflation is done with the help of wholesale price index number or the cost of living index number. Usually, cost of living indices are used for deflating per capita income series.

The following formula may be used for the purpose:

$$R = \frac{P_0}{P_t} \times Y$$

Where,

P_0 = base year price index

P_t = current year price index

Y = national income, or GNP at current price for the current year

The following illustration clarifies the point:

Example: Deflate the following:

Year	1970	1971	1972	1973	1974
National Income (Rs. '00 crores)	250	280	300	350	360
Wholesale price index	100	120	150	160	180

Solution:

*National income
at constant prices*

<i>Year</i>	γ	P	$R = \frac{P_0}{P_t} \times \gamma$		
1970	250	100	$\frac{100}{100} \times 250$	=	250.00
1971	280	120	$\frac{100}{120} \times 280$	=	233.00
1972	300	150	$\frac{100}{150} \times 300$	=	200.00
1973	350	160	$\frac{100}{160} \times 350$	=	218.75
1974	360	180	$\frac{100}{180} \times 360$	=	200.00

7.6 Importance of National Income Data

Thus, national income data are a collection of facts or estimates of the total real income of a country expressed in terms of money. They provide a quantitative measurement of the country's economic activity during a defined period. They are the most important statistical measures of the economic activity of a nation and are very useful in analyzing current economic conditions. National income data furnish a comprehensive view of the country's economic functioning.

The national income statistics may be said to be the index numbers of the economic progress of a nation. A continuous series of annual estimates of national income would suggest the trend of economic growth of the nation and how rapidly it is taking place. National Income trend clearly reveals the basic changes in the country's economy in the past and suggests trends for the future.

Simon Kuznets says: "Since the end product of each country's economic system is an index of its producing power, national income estimates furnish a comparison of the productivity of nations, per capita income figures, especially when adjusted for differences in the purchasing power of money, appear to measure the nation's economic welfare."

National income statistics contain data on consumption and investment expenditure. Hence, for studying changes in the disparities, the standard of living can easily be compared with the help of such statistics. Fiscal authorities can use them to study the incidence of taxation as well as for projecting the tax yields. For the purpose of economic planning, national income data furnish information about the aggregate and per capita income, the rate of capital formation and industrial sectional breakdown and the relative contribution of each sector.

7.7 National Income Accounts

National income accounts are the systematic records and presentation of national income statistics. Thus, national income accounting, also known as "economic accounting" or "social accounting," transcends the mere compilation and publication of statistical information. Its purpose is to present data in such a form that interrelations among items are most easily discerned from the structure of statements.

Thus, national income accounts and statistics are two related but different things. Statistics are a collection of facts which are useful in themselves but which do not depend uniquely on the values expressed in other statistical collections. An accounting statements, on the other hand, is an integral grouping of statistical series, each of which is functionally connected to all others. National income accounts or social accounting means a systematic arrangement of data relating to the economic activity of the country.

A social accounting framework is useful for economists as well as policy-makers, as it represents the major economic flows and statistical relationships among the various sectors of the economic system. It is of particular interest and significance to the policy-makers because by studying national income series over a period of time, it becomes possible to forecast the trends of the economy more accurately. In many countries, annual economic planning is in the form of national budgets which are in fact nothing but forecasts of social accounts.

7.8 Social Accounting Method

Recently, with the development of social accounting, national income is also being measured by the social accounting method. In the social accounts, transactions among various sectors such as firms, households, governments, etc. are recorded and their interrelationships are traced. From the total value of these transactions recorded in matrix form, the national income value is known.

The social accounting framework is useful for economists as well as for policy-makers, because it represents the major economic flows and statistical relationships among the various sectors of the economic system. It is of particular interest and significance to the policy-makers because by studying the national income series over a period of time, it becomes possible to forecast the trends of economy more accurately. In many countries annual economic planning is in the form of national budgets which are, in fact, nothing but forecasts of social accounts for the following years.

Sectors for Social Accounts

In social accounting, the economy as a whole is divided into certain parts called “sectors.” “Sector” is a group of individuals or institutions having common interrelated economic transactions. Thus, sectors are usually delineated in such a manner that economic entities whose functions are similar are contained in one group. Thus, sectors are distinguished on a functional basis and not on any institutional criterion.

Conventionally, under the scheme of social accounting, the economy is divided into the following sectors:

- (i) Firms,
- (ii) Households,
- (iii) Government,
- (iv) Rest of the world, and
- (v) Capital sector.

“Firms” are producing entities of the economy. They undertake productive activities. Thus, they are all organizations which employ the factors of production to produce goods and services.

“Households” are consuming entities and represent the factors of production, who receive payments for services rendered to firms. Households consume the goods and services that are produced by the firms.

Thus, firms make payments to households for their services. Households spend money income so received, again on the goods/services produced by the firms. There is, thus, a circular flow of money between these two groups.

“The Government sector” refers to the economic transactions of public bodies at all levels, center, state and local. In their work concerning social accounting, Edey and Peacock have defined government as a “collective person” that purchases goods and services from firms. These purchases may be financed through taxation, public borrowings or any other fiscal means. The main function of the government is to provide social goods like defence, public health, education, etc. means to satisfy the collective wants of society. However, public enterprises like post offices and railways are separated from the government sector and included as “Firms.”

“The rest of the world sector” refers to saving and investment activities. It includes the transactions of banks, insurance corporations, financial houses, and other agencies of the money market. These are not included as firms. These agencies merely provide financial assistance to the firms’ activities.

The System of Social Accounts

Social accounting is based on double-entry book-keeping principles. Like debit and credit sides, each sector account contains a balancing item (credit) of one sector is the allocation item (debit) of the other related sector.

A Firm’s account usually contains the following items:

Debit side

1. Payments to factors of production – households in the form of wages, interest, rent, dividend, profits.
2. Imputed cost retained by the firm such as depreciation allowances and undistributed profits.
3. Payment of corporate taxes, excise duties and licence fees, etc. to the government sector.
4. Payment to the government for buying its factor services.
5. Payment to firms for buying raw materials, machines etc.

Credit side

1. Households spending on goods and services produced by firms.
2. A firm’s items sold to other firms.
3. Government spending in buying goods from the firms.
4. Net export earnings.
5. Net income earned from abroad.

A Household account usually contain –

Debit side

1. Payment to firms for buying their goods and services.
2. Tax payment to government.
3. Transfer payments.
4. Individual saving.

Credit side

1. Income received by selling factor services to the firms.
2. Transfer payment made by the government to individuals.
3. Transfer payment made from a foreign country.

A Government sector account usually contains the following items:

Debit side

Public spending on goods and services of firms.

1. Government payment to administrative staff.
2. Amount of subsidies given to producers.
3. Debt servicing charges.
4. Transfer payments to individuals.
5. Transfer payments made abroad.

Credit side

1. Taxes received from firms and households.
2. Collection of fees, penalties, etc.
3. Interest, rent, dividend, etc. receipts of the government.
4. Foreign aid.

A Capital sector account will have the following items:

Debit side

1. Firms' savings
2. Households' savings.
3. Savings of the government.
4. Net external public borrowings.

Credit side

1. Aggregate expenditure on capital assets (investment in capital goods industries).
2. Net change in business inventories.

Assuming a close economy with only two sectors, firms and households, we may illustrate the sectoral accounting as shown in **Table 5**.

(Rs. Crores)

Firms' Account			
Payments	(Dr.)	Receipts	(Cr.)
	Rs.		Rs.
Purchase of factors services from households	1,000	Sale of consumption goods and services to households	1,000
Households' Account			
Payments	(Dr.)	Receipts	(Cr.)
	Rs.		Rs.
Purchase of consumption Goods and services from firms	1,000	Sale of factor services to firms	1,000

Table 5 : Sectoral Accounts

Another method is to present these data in the form of a matrix, a rectangular arrangement of entries into a set of rows and columns. Receipts or credit items of a sector are placed in the rows of the matrix, while payments or debit items are presented in the columns. A single matrix may be used for all sectoral items.

The above given data can be represented in a matrix form as shown in **Table 6**.

	(Rs. Crores)		Matrix
Receipts by:	Firms Payments by:	Household	Total
	(1)	(2)	(3)
(a) Firms	-	1,000	1,000
(b) Households	1,000	-	1,000
(c) Total	1,000	1,000	2,000

Table-6 : Matrix

Matrix is very important for tracing the inter-relationship between different economic entities or sectoral transactions.

While measuring the national income of any country, it must be remembered that –

- (i) Income is a “flow” concept. Thus, we do not measure the stock of economic goods or wealth at a given moment of time, but we measure the flow of economic goods produced by the nation in a year. Actually, there is a continuous flow production. But we, for the sake of convenience, take a time interval of one year into account and measure national income every year.

- (ii) The national income is measured as a “realized” flow. Thus, final goods which have already been produced during the year are to be accounted for. The value of incomplete goods are therefore to be excluded. We should not predict the values of the goods yet to come. We measure only what has already been produced. Remember, national income is a realized flow of goods and services. Thus, we can estimate national income for the year 1981 only in 1982, because then only can we have data of production between January, 1981 and December, 1981.

Exercise :

1. What is 'national income' interpreted in terms of (1) national product, (2) national dividend and (3) national expenditure?
2. What is Gross National Product as distinguished from Net National Product?
3. What is Disposable Personal Income? Is it relevant in the field of determination of National Income? Explain the difficulties of estimating National Income.
4. Explain the method of measuring National Income by the social accounting process system based on double-entry book-keeping principles.
5. Write short notes :-
 - (a) Base year price index
 - (b) Personal Savings
 - (c) National Income at Factor Costs
 - (d) Circular flow of activities

UNIT – VIII

THEORY OF MONEY

8.1 What is money?

'Money' is a generic term which denotes primarily the currency in vogue in any particular country.

History of the world indicates that man found it necessary to use money at an early stage of man's development because of the difficulties and inconveniences of exchange by direct barter. The inconvenience of barter system could be avoided by the use of money. Money is demanded because it is useful and does away with difficulties of barter system. Therefore, money is regarded as one of the most important discoveries of mankind. Since money represents generalized purchasing power, it has been the object of man's desire through ages.

Prof. Walker defines money as "Money is what money does".

Robertson defines it as "A commodity which is used to denote anything which is widely accepted in payment for goods or in discharge of other business obligations."

Economists stress that a thing which could be considered as money should be such that it should command general acceptability. Without general acceptability there could be no free and smooth exchange transactions.

Crowther holds "Anything that is generally acceptable as a means of exchange and that at the same time acts a measure and as a store of value is money". The analysis of this definition implies that money should perform three important functions, namely, it should be capable of being used as a medium of exchange, as a measure of value and a store of value. That does not mean that the role of money ends with the performance of these functions. In addition to these three functions, it performs other functions, the important among which is that also action the standard of deferred payment. Thus, primarily money is said to have functions four - medium, measure, standard and store.

(i) Medium of Exchange

The quality of general acceptability of money facilitates exchange. People want goods and services for various purposes. They can obtain them in exchange of money. Under the barter system, goods were exchanged against goods. However, it was very inconvenient to people from various angles such as lack of double coincidence of wants, difficulty of divisibility, storing of value etc. Consequently, the system had to be replaced by money. Money has removed all these difficulties. That's why now with the use of money buying and selling of goods has become easy and possible.

(ii) Measurement of Value

The another important function of money is the measurement of value of various goods and services which are exchanged. Money is the common measure of value. This has facilitated the determination of rate of exchange between money on one side and goods and services on the other. Now-a-days prices of various goods and services are expressed in terms of money which is an indication of the fact that money has been accepted as a common measure of value of goods and services.

(iii) Store of Value

Money serves as a store of value of goods and services. Man wants to provide for the future out of rewards he receives for his labour. He wants to keep some part of his earnings for tomorrow. This would possible only if the means through which savings is to be made is non-perishable not only physically but also from the point of its future value. Money has become a convenient means through which savings can be done easily. This facilitates capital formation too which is essential for economic development of the country. Thus, money plays a paramount role in capital formation and standard of storage of savings.

(iv) Standard of Deferred Payment

Payments which are made at some future dates are made in money since the value of money remains stable over a period of time. Lending involves future payment. Development of trade and commerce has also necessitated future payments. Thus, deferred payments have become a normal feature of modern commercial world. Since money remains stable in value and is non-perishable along with its general acceptability, deferred payment becomes possible. Thus, the money acts as a standard of deferred payment and thereby it has made a great contribution not only to modern commercial world but to transactions promoting human civilization.

8.2 CONTINGENT FUNCTIONS

There are also some contingent functions that money perform in an economic world.

(i) Equalization of Marginal Utilities

A rational person tries to spend his limited money income in such a manner that he obtains the maximum satisfaction or utility there from. If he were to spend his money on only one commodity, the problem would have been easy. But he has to spend his money upon a choice over various goods and services as well as various purposes in such a way that the spending yields maximum satisfaction to him. This could be done by equalizing marginal utilities in all directions as derived from consumption of various commodities. A principle of equi-marginal utility has to be applied and in doing so, money comes to our rescue because prices are measured in terms of money.

(ii) Equalization of Marginal Productivity

Producer is concerned with the marginal productivity. He would maximize production and profit when marginal productivity of factors of production is equalized. Even here, money plays an important role in determining rewards of the factors of production because factors of production are paid in terms of money equal to their marginal productivity.

(iii) Distribution of National Income

Distribution of national income is also undertaken in terms of money. National Income is generated by the four factors of production. It is to be distributed among the factors in accordance with their contribution. This is done in terms of money. Thus rent wages, interest and profit, as the share of remuneration for land, labour, capital and entrepreneurship is respectively determined in terms of money out of generated national income.

(iv) Development of Credit System

In the modern economic system with fast growing industrialization credit system has become very important. It is this credit system that gave rise to rapid development of industrial and commercial advancement. In business and commercial activities, instrument of credit is at the center and money is the basis of the credit system. Thus, money plays a great role in the development of credit system and also the banking system.

8.3 RESIDUARY FUNCTIONS

(i) Capital is given liquid form

Money is the most liquid form of capital. Money imparts liquidity to other forms of capital. People need to keep capital in liquid form for various purposes or motives such as transaction, precautionary and speculative. All this become possible because of money.

(ii) Full utilization of resources

It is also possible to ensure full utilization of various resources by means of money. Idle resources can be mobilized and harnessed for the productive purpose with the help of money. If these resources are not mobilized, they cannot be properly utilized so as to increase production of goods and services.

In the light of functions of money discussed above, one would come to know the importance and dynamic role played by money. Economic and commercial development in modern times is made possible by the introduction of money. Through suitable changes in monetary policy of the country desired direction can be given to the economy to achieve socio-economic objectives. Thus money has occupied extra-ordinary place in the modern economy and so in the life of people.

8.4 INFLATION

Types and Causes of Inflation

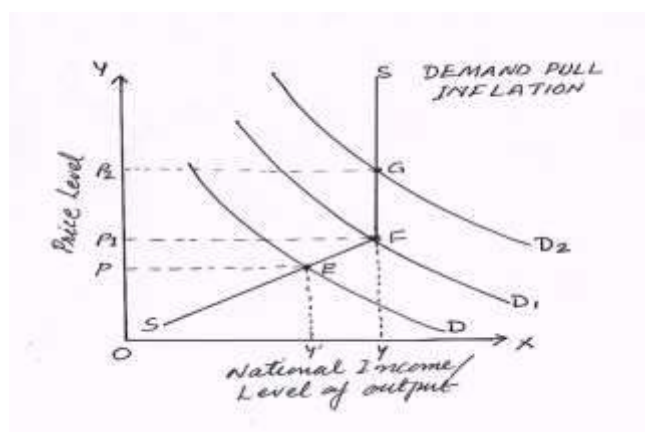
Basically, there are two types of inflations. They are also termed as the causes of inflation because of changes in demand have been identified, namely:

Demand-pull inflation

Cost-push inflation

Demand-pull Inflation:

This type of inflation is caused by an increase in the conditions of demand. It may be defined as a situation where total monetary demand persistently exceeds total supply of goods and services at current prices, so that prices are pulled upwards by the continuous upward shift of the aggregate demand function. It arises as a result of an excessive aggregate effective demand function and aggregate supply of goods and services in a slowly growing economy. Supply of goods and services will not match with rising demand. The productive ability of the economy is so poor that it is difficult to increase the supply at a quicker rate to match the increase in demand for goods and services.



In the above diagram on X axis we are measuring national income or level of output produced and on Y axis we are measuring price level. SS is the aggregate supply curve of economy. In the initial level the aggregate demand curve D intersects the aggregate supply curve SS at point F which is equilibrium position and equilibrium price is determined at OP level and Oy indicates the supply of goods and services.

As aggregate demand increases further, supply being constant, the price level will start increasing from OP to OP1 and OP2. But output will remain O_y as it indicates the full capacity utilization.

FOLLOWING ARE THE FACTORS THAT CAUSE THE INCREASE IN THE AGGREGATE DEMAND

1. Increase in money supply: Supply of money in circulation increases on account of the following reasons; deficit financing by government, expansion in public expenditure, expansion in bank credit and repayment of past debt by the government to the people, increase in legal tender money.

2. Increase in disposable income: Aggregate effective demand rises when disposable income of the public increases. Disposable income rise due to; reduction in the tax rate, increase in national income while tax level remains constant and decline in the level of savings.

3. Increase in private consumption expenditure and investment expenditure: An increase in the private expenditure, both on consumption and investment leads to the emergence of excess demand in an economy. When business is prosperous, business expectations are optimistic and prices are rising, more investment is made by private entrepreneurs causing an increase in factor prices. When the income rise, expenditure on consumer good rises.

4. Increase in Exports: An increase in the foreign demand for a country's exports reduces the stock of goods available for home consumption. This creates shortage in the country leading to the price rise in the country.

5. Existence of Black Money: The existence of black money in the country due to corruption, tax evasion, black marketing etc. increases the aggregate demand. People spend such unaccounted money extravagantly thereby creating unnecessary demand for goods and services, causing inflation.

6. Increase in population growth causes an increase in the demand for everything in a country.

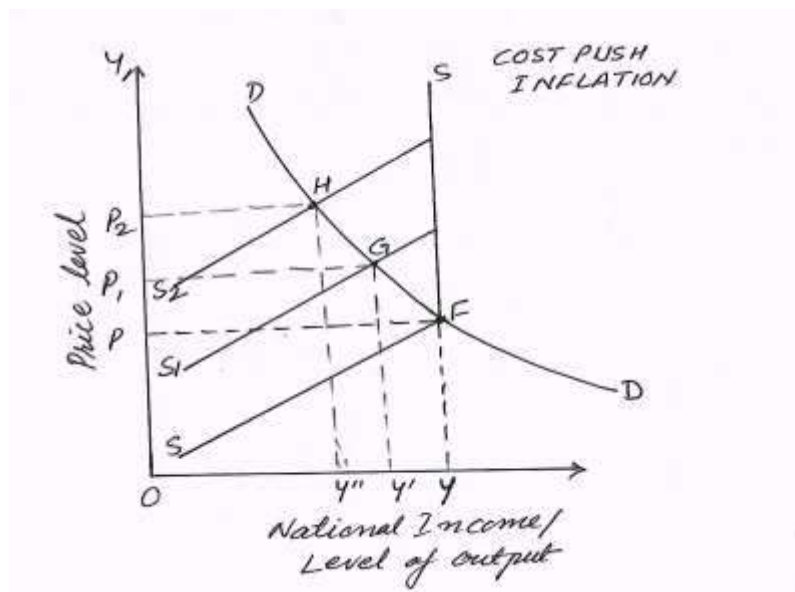
7. High rates of indirect taxes would lead to rise in prices.

8. Reduction in the rates of direct taxes would leave more cash in the hands of people including them to buy more goods and services leading to an increase in prices.

9. Reduction in the level of savings creates more demand for goods and services.

Cost-push Inflation: Cost-push inflation arises from anything that causes the conditions of supply to decrease. Some of these factors include a rise in the cost of production, an increase in the government taxation and a decrease in the quantity of goods produced. It refers to the situation where the prices are rising on account of increasing cost of production. Thus in this case, the rise in price is initiated by the growing factor costs. Such a price rise is termed as “Cost Push Inflation” as prices are being pushed by the growing factor costs. There are number of factors causing the increase in cost of production. Cost-push inflation may occur due to wage-push or profit-push.

1.



- Demand for higher wages by the labour class.
2. Fixing up of higher profit margins by the manufacturers.
 3. Introduction of new taxes and raising the level of old taxes.
 4. Increase in the prices of different inputs in the market.
 5. Rise in administrative prices by the government etc.

These factors in turn cause prices to rise in the market. Out of many causes, rise in wages is the most important one. It is estimated and believed that wages constitute nearly 70% of the total cost of production.

A rise in wages leads to a rise in the total cost of production and a consequent rise in the price level. Thus cost-push inflation occurs due to wage push or profit push.

The phenomenon of cost-push inflation is graphically illustrated in above figure. In the above figure, the **D** curve represents the aggregate demand function, and the **S** curves, the aggregate supply function. The full-employment level of income is **Oy**, which can be maintained only at rising price levels, **P**, **P₁** and **P₂**.

Now, if we begin with price level **P**, **F** is the point of intersection of the aggregate supply curve; **SS** and **D**. Let us assume that the aggregate supply function shifts upward as **S₁**, which becomes a vertical straight line at point **E**, and merges with the **SF** line (the previous supply curve at full-employment level). The leftward shift in the supply curve may be due to either an increase in money wages due to trade union's successful collective bargaining, or to the profit-motivated monopolists or oligopolists, who might have raised the prices of goods.

As the aggregate supply curve shifts to **S₁**, the new equilibrium point **A** is determined through the intersection of **S₁** and **D** and **Oy'** will be the level of real output, which is less than the full-employment level. This means that with a rise in the price level, unemployment increases. It is regarded as the cost of holding the price level close to **P**.

Similarly, a further shift in the aggregate supply curve to **S₂** on account of a further wage-push implies a new equilibrium point **B**. This causes the income level to fall further to **y''**, and prices to rise to **P₂**.

However, if the government or the monetary authority is committed to maintain full employment, there will be more public spending or more credit expansion, causing the price level to rise to much more – such as from P to P_3 and P_4 . In the case, the sequence of equilibrium points become F-G-H.

K) Effects of Inflation

Inflation affects different people or economic agents differently. Broadly, there are two economic groups in every society, ***the fixed income group and the flexible income group***. During inflation, those in the first group (fixed income) lose while those in the second group (flexible income) gain. The reason is that the price movement of different goods and services are not uniform. During inflation, most prices rise, but the rates of increase of individual prices differ. Prices of some goods and services rise faster than others while some may even remain unchanged.

The poor and the middle classes suffer because their wages and salaries are more or less fixed but the prices of commodities continue to rise. On the other hand, the businessmen, industrialists, traders, real estate holders, speculators and others with variable incomes gain during rising prices. The persons with flexible income become rich at the cost of the fixed income group. There is transfer of income and wealth from the poor to the rich.

To further determine the effect of inflation on individuals, it will be necessary to discuss the effect of inflation on different groups:

a) Creditors and Debtors: When there is inflation, creditors are generally worse off because, the real value of their future claims is reduced to the extent of the rate of inflation. On the other hand, when inflation occurs, debtors tend to pay less in real terms than they had borrowed. Therefore, it could be said that inflation favours debtors at the detriment of creditors.

b) Salaried Persons: Those with white-collar jobs lose during inflation because their salaries are slow to adjust when prices are rising.

c) Wage Earners: Wage earners may gain or lose depending on the speed with which their wages adjust to rising prices. If their union is strong, they may get their wages linked to the cost of living index. In this way, they may be able to protect themselves from the negative effects of inflation. Most often in real life there is a time lag between the rise in the wages of employees and the rise in price.

d) Fixed Income Group: These are recipients of transfer payments such as pensions, unemployment insurance, social security, etc. Recipients of interest and rent also live on fixed incomes. These people lose because they receive fixed payments while the value of money continues to fall with rising prices.

e) Equity Holders and Investors: These group of people gain during inflation as the rising prices expand the business activities of the companies and, consequently, increase profit. Thus, dividends on equities also increase.

However, those who invest in debentures, bonds, etc, which carry fixed interest rates, lose during inflation because, they receive fixed sum while purchasing power is falling.

f) Businessmen: Producers, traders, and real estate holders gain during periods of rising prices. On the contrary, their costs do not rise to the extent of the rise in prices of their goods. When prices rise, the value of the producer's inventories rise in the same proportion. The same goes for traders in the short run. The holders of real estates also make profit during inflation because the prices of landed property increase much faster than the general price level. However, business decisions are difficult in an environment of unstable price. In the long-run, there could be an increase in wages which will reduce profit thereby, having an adverse effect on future investment.

g) Agriculturalists: Agriculturalists are of three types, namely, landlords, peasant proprietors and landless agricultural workers. Landlords lose during rising prices because they get fixed rents. Peasant proprietors who own and cultivate their farms gain. Prices of farm products increase more than the cost of production. Prices of inputs and land revenue do not rise to the same extent as the rise in the prices of farm products. On the other hand, the wages of the landless agricultural workers are not raised by the farm owners, because trade unionism is absent among them. But the prices of consumer goods rise rapidly. So landless agricultural workers are losers.

h) Government: Inflation will have both positive and negative effects on the government. The government as a debtor gains at the expense of households who are its principal creditors. This is because interest rates on government bonds are fixed and are not raised to offset expected rise in prices. The government in turn levies less tax to service and retire its debt. With inflation, even the real value of taxes is reduced. Inflation helps the government in financing its activities through inflationary finance. As the money income of people increases, government collects that in the form of taxes on incomes and commodities. So the revenue of the government increases during rising prices.

i) Measures to Control Inflation

Inflation is caused by the failure of aggregate supply to equal the increase in aggregate demand. Therefore, inflation can be controlled by increasing the supplies of goods and reducing money income. The various measures to control inflation are discussed below:

Monetary Measures:The monetary measures to control inflation generally aims at reducing money incomes. These are:

(a) Credit Control: The central bank could adopt a number of methods to control the quantity and quality of credit to reduce the supply of money. For this purpose, *it raises the bank rates, sells securities in the open market, raises reserve ratio, and adopts a number of selective credit control measures, such as raising margin requirements and regulating consumer credit.*

(b) Demonetization of Currency: Another monetary measure is to demonetize currency of higher denominations. Such a measure is usually adopted when there is abundance of black money in the country.

(c) Issue of New Currency: The most extreme monetary measure is the issue of new currency in place of the old currency. Under this system, one new note is exchanged for a number of the old currency. Such a measure is adopted when there is an excessive issue of notes and there is hyperinflation in the economy.

Fiscal Measures: Monetary policy alone cannot control inflation. Therefore, it should be supplemented by fiscal measures. The principal fiscal measures are discussed below.

(a) Reduction in Unnecessary Expenditure: The government should reduce unnecessary expenditure on non-development activities in order to curb inflation.

(b) Increase in Taxes: To cut personal consumption expenditure, the rates of personal, corporate and commodity taxes should be raised and even new taxes should be levied, but the rates of taxes should not be too high as to discourage saving, investment and production.

(c) Increase in Savings: Another measure is to increase savings on the part of the people so that their disposable income and purchasing power would be reduced. For this the government should encourage savings by giving various incentives.

(d) Surplus Budgets: An important measure is to adopt anti-inflationary budgetary policy. For this purpose, the government should give up deficit financing and instead have surplus budgets. It means collecting more in revenues and spending less.

- (e) **Public Debt:** In addition, the government should stop repayment of public debt and postpone it to some future date till inflationary pressures are controlled. Instead, the government should borrow more to reduce money supply with the public.

Other (Direct) Measures

Other measures to control inflation generally aims at increasing aggregate supply and reducing aggregate demand directly. These are:

(a) To Increase Production. The following measures should be adopted to increase production:

(i) The government should encourage the production of essential consumer goods like food, clothing, kerosene oil, sugar, vegetable oils, etc.

(ii) All possible help in the form of latest technology, raw materials, financial help, subsidies, etc. should be provided to different consumer goods sectors to increase production.

(b) Rational Wage Policy: Another important measure is to adopt a rational wage policy. The best course for this is to link increase in wages to increase in productivity. This will have a dual effect. It will control wage and at the same time increase production of goods in the economy.

(c) Price Control: Price control and rationing is another measure of direct control to check inflation. Price control means fixing an upper limit for the prices of essential consumer goods.

(d) Rationing: Rationing aims at distributing consumption of scarce goods so as to make them available to a large number of consumers. It is applied to essential consumer goods such as wheat, rice, sugar, kerosene oil, etc. It is meant to stabilize the prices of necessities and assure distributive justice.

Conclusion: From the various monetary, fiscal and other measures, discussed above, it becomes clear that to control inflation, the government should adopt all measures simultaneously.

8.4 DEMAND FOR MONEY

According to J.M. Keynes, money is demanded by the people to fulfill three important motives. These motives are the transaction motive, precautionary motive and speculative motive.

1. The Transaction Motive

People receive their income monthly, quarterly or even yearly. They spend this money income at much shorter intervals. Individual is required to spend money on his various wants throughout the month but income he receives once a month. Therefore, he needs to have stock of money to meet his all needs until the next pay day. The transaction motive can be sub-divided into (i) income motive and (ii) business motive.

(i) Income motive

The amount of money which a consumer holds to satisfy the transaction motive depends upon (i) the size of his income and (ii) the interval of payment. If the size of income is larger he would keep larger amount of his income for this motive and vice-versa. Similarly, it depends upon the length of the interval of time between successive pay days. The greater the interval, the larger is demand for money for transaction motive. In conclusion, it can be said community's demand for money under the income motive is the function of the size of personal incomes and of the average time between successive pay days.

(ii) Business motive

Business men also wish to hold a certain amount of money to meet day-to-day requirement of money. This stock of money held would be used for payment of raw materials, wages, transport and other current expenses incurred by the businesses. The amount of money held for this purpose is the function of the turnover of the firm. The larger the turnover, the greater would be the amount of money, the firm needs. It would be proportional to the total volume of business transactions carried out. However, the demand for money for transaction motive is a constant function of rate of interest. It is not affected by the changes in rate of interest.

2. The Precautionary Motive

The money people demand for this purpose arises out of its function as store of value. Money held under this motive is kept to provide for uncertainties and

emergencies. The individual needs a certain amount of money to keep provisions against unemployment, sickness, accident and many other eventualities. The amount of money held for this purpose depends upon the individual and on the conditions in which he lives. How much money is held for this motive depends upon social security measures of the government, size of income and man's attitude towards safety of future. It is also a constant function of rate of interest. What is true in case of individual, it is as well as true in case of firms also.

3. The Speculative Motive

Money held under the speculative motive constitutes a store of value just as money held under the precautionary motive does, but it is a store intended to fulfill a different purpose. It constitutes a liquid store of value. The money demanded for this motive is generally used for gambling to make speculative gains. Therefore, it is a negative or decreasing function of rate of interest. More liquidity is demanded at a low of rate of interest and less at a high rate of interest.

8.5 SUPPLY OF MONEY

The constituents of Money Supply

Money is just like one of the commodities but its supply cannot be increased like any other commodities. The supply of money is adamantly determined by the monetary authority of the country i.e. central bank of the country and treasury department. The supply of money depends upon the decision of the monetary authority whether to increase or decrease the quantity of money in the economy. In case of money, instead of supply getting adjusted to demand, demand will get adjusted to the supply of money. The total money in the economy refers to the total volume of money held by the people in the form of coins and currency notes, bank money and other such liquid assets. Total of all these constitutes the supply of money in the economy. Bank money includes demand deposits, time deposits and current deposits.

Supply of money indicates the demand for goods and services because money represents purchasing power. Under bank money, ready cash held by all the banks is not included because it forms the basis of credit. Likewise, stock monetary gold with Central Bank is also excluded from the total supply of money. It is because gold reserves forms the basis of international money supply and it is not permitted to circulate in the country. In the same manner, ready cash with Central Bank and the government is also not included in money supply of the country. The reason is that it constitutes the reserves on which the demand deposits of the public are supported. Lastly, the liquidity preference of the people also influence money supply in the economy. If it is high, then in that case volume of bank deposits will get reduced and vice-versa. So, even the general public can influence supply of money depending upon their liquidity preference.

Deflation – concept, causes, effects and Measure to control Deflation.

The concept of deflation is opposite to inflation. It is defined as *a situation when the general income level and price level are falling*. It is also known as negative inflation. During deflation the income level falls against the available supply of goods and services. The stage of deflation arises when -

- Prices are falling continuously
- People prefer to hold money with them and do not keep goods.
- The available supply of goods does not dispose off on the prevailing prices.
- People expect more reduction in prices thus reduce their consumption to bring prices down.

The main causes of deflation are -

- Primary causes are fall in demand for goods and services.
- *People* due to one reason or the other reduce their consumption on the purchase of goods & services due to which *prices* start falling.
- Sometime people start saving more than before which causes reduction in the aggregate demand and *the* available supply is sold at falling prices.
- If due to some reason the level of investment in all economy is falling. It will negatively affect the economy. The demand for capital goods will fall and prices will tend to come down.
- Decline in incomes of the people can also cause deflation in the economy. Due to reduction in the income level of the people the aggregate demand for goods services falls short of the aggregate supply, thus prices start falling.

- Excess of supply due to some reasons can also cause deflation because in this case the aggregate supply will exceed the aggregate demand *hence* the price level will fall.

Effects of Deflation

Consistent fall in the general price level in the economy (deflation) might not be good for the economy. Effects of long term deflation are as follows

Cyclical unemployment: Deflation usually happens due to a fall in Aggregate Demand in the economy. This will lead to businesses cutting the output levels which will result in retrenchment/laying off of workers. Moreover, if consumers delay spending in anticipation of falling prices economic activity falls, unemployment increases.

Bankruptcies: As the value of money is increasing, it becomes difficult for debtors to repay the load. Moreover, during deflation firms will be having lower profits due to falling prices and will find it difficult to meet their liabilities. This might lead to greater number of bankruptcies. Businesses see profits fall; as they do so dividends and investment returns fall and so share prices fall.

Deflationary spiral: Consistent fall in prices may trigger deflationary spiral. As firms make less revenue, this leads to less profits, they might not be willing or able to invest which will have negative implications on the economic growth. Further, as firms cut cost by lay off of employees, there is less income for the households and the aggregate demand might fall. Due to a fall in consumer and business confidence the economy might fall into a deflationary spiral.

The principle problem of deflation is that it leads to a **rise in the real value of debt**. In the early stages low interest rates and low prices encourage borrowing but as the real weight of the borrowing is recognised so borrowing is reduced.

It is sometimes difficult to control deflation and **Monetary policy can prove ineffective** when interest rates (nominal) are already low.

Measure to control Deflation

Following are the remedies suggested to control deflation.

- If the central bank reduces the interest rate then the commercial banks will also advance loans at a lower interest rate which will boost up the investment, resulting increase in demand for capital goods and employment. Thus incomes will increase price level will start rising.

- In order to increase the aggregate demand the government has to increase its expenditures. By increasing expenditures incomes of the people will rise and price level will tend to move upward.
- By Printing extra money through the central bank and injecting in the economy the government can increase the aggregate demand which will further enhance the price level.
- By encouraging the private sector for investment through various immunities like subsidies or tax reduction the aggregate demand can be used
- People should start using their savings on consumer goods or investment.
- To increase exports and reduce the imports, the income level of the people and prices level can be raised

Exercise :

1. Define and explain the concept of money.
2. What are the functions fo money?
3. Explain the role of 'money' in an exchange economy. What are it's contingent and residuary functions?
4. Discuss various motives for demand of money.
5. Wht is inflation? What are the types and causes of inflation?
6. Discuss the effects of inflation.
7. Explain measures to control the inflation?
8. What do you understand by deflation? Explain its causes, effects and suggest remedies to solve the problem of deflation.

UNIT – IX

SAVING, INVESTMENT AND BANKING

8.1 THE CONCEPT OF SAVINGS

Saving means economic surplus. It may be defined as an accounting difference between current income and current consumption. Keynes defined savings as an excess of income over expenditure of consumption.

In the case of an individual, saving is that part of income which is not consumed by him. And in the case of the community, the aggregate of the unconsumed part of the community, the aggregate of the unconsumed part of national income of all members of the community represents saving. Symbolically,

$$S = Y - C$$

where, S - denotes saving
 Y - stands for income, and
 C - stands for consumption.

This symbolic expression of saving is applicable both to the individual as well as to the community.

According to Keynes, saving is the function of income, *i.e.*, $S = f(Y)$. That is to say, as income increases, saving also increases and *vice versa*. Saving depends on the propensity to save, which can be derived from the propensity to consume.

Thus, propensity to save (S/Y) is equal to 'one minus the propensity to consume (C/Y)' symbolically, therefore:

$$S/Y = 1 - (C/Y)$$

According to Keynes, the consumption function (or the propensity to consume) is a stable function of income in the short period. It follows from this that the saving function (or the propensity to save) would also be a stable function of income.

It should be noted that though the propensity to save is stable function of income, saving (individual or aggregate) is an increasing function. Thus, the marginal propensity to save ($\Delta S/\Delta Y$) is always greater than zero, but less than unity

Symbolically, $1 > (\Delta S/\Delta Y) > 0$.

Aggregate domestic savings are the sum of savings made by the households, firms and government.

- (1) Household's saving = Disposable personal income - Consumption expenditure.
- (2) Firms' saving = Profits (or gross income) - (Dividends + Business taxes).
- (3) Government's saving = Public revenue - current expenditure.

Savings of households and firms taken together constitute private savings. Government's savings constitute public savings. Therefore, Total Saving = private saving + public savings. Again, personal savings or household savings is the vital component of aggregate savings. According to RBI's report of Currency and Finance, in India, in 1980-81, of the total savings in the country, the household sector accounted for 80.3 per cent, domestic private corporate sector 5.4 per cent, and government sector 14.3 per cent.

8.1.1 Personal Savings

The household sector's savings are called personal savings or the savings of individuals. Professor Irwin Fisher defines individual's savings as "the difference between their current income and their current expenses, the latter including personal tax payment as well as consumption expenditures."

While considering the sum of individuals' savings, it must be noted that there are savers and dissavers. Usually, young people save and old people dissave. A considerable part of all personal saving is done with a view to future liquidation. People save with a view to have assets to spend after retirement or to provide financial help to their dependents in the event of their deaths, which means liquidation of savings in the future.

Therefore, Net individuals' saving of the community = Total personal saving – Total dissavings.

In a modern society, personal savings may take one or more of the following forms.

- (i) Contractual saving such as life insurance premiums, contributions to provident funds, etc. These kinds of savings are obligatory in nature. They are relatively stable.
- (ii) Holding of liquid assets. Individuals may increase their holdings of liquid assets such as cash balances, bank deposits, shares, bonds and securities.
- (iii) Liquidation of old debts. When an individual pays a sum of money to his creditor for cancellation of a debt, it amounts to a saving of his income.
- (iv) Direct investments. Some individuals may invest part of their income directly in farm activity, business or purchasing a home. This is also saving.

In rural areas, such savings are found in the form of land improvements, irrigation works, construction of dwellings, etc.

8.2 DETERMINANTS OF SAVINGS

The rate and size of savings in an economy are determined by a multitude of factors. A humble attempt is made to analyse a few of them which are vital determinants.

8.2.1 The Level of Income

As Keynes stresses, saving is basically a function of income. Saving increases with income. Of course, there can hardly be a proportionate relationship between the size of income and savings, but empirical evidence has proved that there is a marked correlation between the two. However, the amount of personal savings depends primarily on the disposable income. Thus, the saving income ratio (S/Y) tends to rise with an increase in income. It has been observed that the marginal propensity to save ($\Delta S/\Delta Y$) tends to be high in high-income group sectors of community. Indeed, in developed countries, where per capita income is high, the saving income ratio is also high. According to the world Economic Survey 1960, gross domestic saving in the U.S.A. amounted to 18.6 per cent and that of India less than 7 per cent.

- (i) *Absolute Income Hypothesis:* According to Keynes, saving is a function of the absolute level of income. Other things being equal, a rise in absolute income causes an increase in fraction of that income to be saved. The absolute income hypothesis of savings was further developed by J. Tobin and A. Smithies as "Drift Hypothesis." In the "Drift Hypothesis", it has been argued that the level of National Income increases over a period of time and along with it, the average propensity to consume tends to diminish so that average propensity to save increases over a period of time.
- (ii) *Relative Income Hypothesis:* Rose Friedman and Dorothy Brady have tried to furnish an answer to this inconsistency by propounding the concept of relative income hypothesis. According to them, the rate of savings depends on the relative position of the individual on the income scale rather than on his absolute level of income. That is to say, the consumption spending of a family depends on its relative position in the income distribution of approximately similar families.
- (iii) *Permanent Income Hypothesis:* Keynes believed that the current income determines current consumption and savings. Modern economist to like Milton Friedman, however, observe that the expectations of income in the future do have a significant bearing upon the present consumption spending and savings out of a given income of community. Kisselyoff, for instance, mentions that the present dissaving among those people who expect their incomes to rise in future is found to be more frequent. In view of this, Mr. Friedman propounded the "Permanent Income Hypothesis". Friedman holds that the basic determinant of consumption and savings is permanent income. The relationship between saving and permanent income is proportional. A person's permanent income, in any particular year, is not revealed by his current income in that year, but is dependent upon the expected income to be received over a long period of time. Permanent income is the amount which the consumer unit could consume (or believes that it could) while maintaining its wealth intact. Friedman states that permanent income may be interpreted as the mean income regarded as permanent by the consumer unit in consideration. Permanent income depends on the far-sightedness of a person. Indeed, a person's actual income, in any specific year, may be greater than or less than his permanent income.

8.2.2 Income Distribution

Aggregate savings rate also depends upon the distribution of income and wealth in the community. If there is a greater degree of inequality of income among the people, that aggregate savings rate, would tend to be high, as the richer section of the community has a high propensity to save. A country with a low per capita income and a fair distribution of national income would imply a low savings rate. Thus, with an improvement in the distribution of income or correction of income inequalities through fiscal and other measures, the aggregate savings rate may tend to decline in the initial stage. Thus, the egalitarian goal of redistribution of income and wealth may come in the way of capital formation by causing a reduction in the domestic aggregate savings. Nonetheless, the ideal of just and fair income distribution cannot be sacrificed on this ground.

8.2.3 Consumption Motivations

Saving is the residual part of income left after consumption. Thus, to know the factors affecting saving, we must know what factors determine consumption. The consumption of the community depends upon a variety of factors and motivations. According to Duesenberry, the consumption pattern and its size are determined by (i) the consumption of certain types of goods required by physically and socially generated needs, (ii) these needs can be satisfied alternatively by a large number of qualitatively different kinds of goods, (iii) these different kinds of goods have qualitative variations and ranking which form the community's scale of preference.

In fact, the pattern of consumption and its volume depends, in general, upon the standard of living of the people. Duesenberry, thus, states that "the level of saving actually achieved by anyone represents the outcome of the conflict between his desire to improve his current standard of living and his desire to obtain future welfare by saving." In this context, therefore, motivations regarding saving and consumption expenditure must be analysed. Duesenberry points out that usually while choosing consumption goods, people prefer higher quality goods to lower quality goods with a view to improve their standard of living. A person's physical needs usually remain the same. But, his social need vary from time to time. The social needs of a person depend upon his age, occupation, social position, marginal position and marginal status. The consumption of certain goods – especially ostentatious articles - is caused by maintenance of self-esteem or the acquisition of prestige. In a society where there is a system of differential social status, this is a vital determinant of consumption expenditure.

In short, the consumption pattern of a person is based on his budget constraint and the desire to save. However, any rational balancing in consumption decisions is far from frequent.

8.2.4 Wealth

Holding of wealth or liquid assets by a person also affects his consumption decisions. Out of current income a person would consume more and save less if he possesses adequate amount of liquid assets like cash balances, bank deposits, etc. and feels that his life in future is well secured. Similarly, an appreciation in the value of financial assets also would induce the person to consume and save less.

8.2.5 Habit

Habit is a major determinant of consumption pattern. As a matter of fact, at anyone moment, a consumer already has a well-established set of consumption habits. The habit of consumption is formed by taste, likings, fashion, and other psychological influences on the minds of consumers. By nature of his habit, when a person is a spendthrift, his saving will be relatively less out of a given income than that of a person who considers saving as a virtue. Thus, aggregate saving in an economy depends upon the types of habits of the people in general.

Habit conforms to the standard of living of the community. Habit, in the long run, may not be a very constant factor. It is subject to change. In general, people want to improve their standard of living by improving the quality of the goods they consume. Public policies are also devised to improve the living standards of the masses. With an increase in income or otherwise, through dissaving, there may be a drive to spend more on superior goods. There is always a psychological impact of "superior effectiveness" of certain goods such as comfort, convenience, beauty, etc. which induces people to spend more and save less, in due course of time.

In this context, Duesenberry mentions that the "demonstration effect" in modern society serves as a powerful habit-breaker. The "demonstration effect" refers to an increase in consumption is reduction in saving through imitation of superior standards. According to Duesenberry the widespread imitation of superior standards causes an upward shift in the aggregate consumption function, thereby reducing the rate of saving.

The "demonstration effect" implies that a high frequency of contact of a person with superior consumption by others will break his habits and induce him to spend more on expensive goods by weakening his desire for saving. It has been observed that when people habitually use one set of goods, they tend to be dissatisfied if there is a demonstration of superior consumption by others. More knowledge of the existence of superior goods is not an effective habit-breaker. It is the demonstration effect which is a powerful habit-breaker. One may be reminded of a common saying here that "what you don't know won't hurt you, but what you do know does hurt you. ' "

Poor countries are saving-deficient. Their problem of low saving rate is further accentuated by their desire to imitate the superior consumption standard of developed nations induced by international demonstration effect.

8.2.6 Population

A high growth of population has an adverse effect on the per capita income which causes an adverse effect on the saving-income ratio.

Again, the age distribution of the population also affects the volume of aggregate saving in the economy. Aggregate personal saving depends upon the dissaving of old, retired people and the saving of the young group. A community's aggregate saving would be zero when the positive saving of the young people is just balanced off by the dissaving of the retired people to maintain their consumption expenses. If a society has a large proportion of young people in relation to old people, net aggregate saving will be positive. Thus, the aggregate saving ratio in a community tends to vary with the age structure of its population, even with constant per capita income. It follows thus that when the population is stable in all respects, net saving will rise with the increasing per capita income in an economy.

8.2.7 Objective and Institutional Factors

There are a number of objective factors - mostly institutional by nature which affects the capacity and willingness to save of the people at large. Political stability and security of life and property encourage people to save more. Similarly the existence of a good banking system and other developed financial institutions of money and capital market such as Unit Trust, Life Insurance Corporation, financial houses, shares of good corporations, government bonds and securities, etc. induce people to save more under the economics of interest-earning motive by providing a wide range of remunerative investment opportunities.

The taxation structure and fiscal policy also affect savings in the economy. A vigorously progressive direct taxation leads to a reduction in voluntary personal saving. Similarly, high and widespread indirect taxes will force the consumer to spend more on maintaining his given standard of living. This will cause a reduction in his personal saving. Similarly, high corporate taxation will reduce the net profit of business houses and curb their capacity to save.

On the other hand, certain concessions provided in the taxation schemes can help in promoting voluntary saving. For instance, exemption of interest-earning from bank deposits, outright deductions of life insurance premium, contribution to provident fund, etc. serve as good stimuli to saving.

Price stability or check on inflation by governmental effort can also sustain saving, while hyper inflation may lead to dissaving or reduction in saving.

Likewise, windfall gains and losses also effect saving. The former will lead to a rise in savings and the latter will induce dissaving.

8.2.8 Subjective Motivations for Savings

People are induced to save more when there are strong subjective factors which motivate them to save. Keynes enlisted the following main motives which lead to individuals to save:

- (1) Precaution - to build up a reserve against unforeseen contingencies.
- (2) Foresight - to provide for future needs.
- (3) Calculation - to enjoy interest and a larger real consumption at a future date.
- (4) Improvement - to improve standard of living gradually.
- (5) Independence - to enjoy a sense of independence and the power to do things with accumulated savings.
- (6) Enterprise - to make speculation or undertake business projects.
- (7) Pride - to bequeath a fortune.
- (8) Avarice - to satisfy pure miserliness. .

Likewise, savings of business firms are induced by the following motives:

- (i) Enterprise - to carry out further capital investment.
- (ii) Liquidity - to meet emergencies of business.
- (iii) Improvement - to expand business investments.
- (iv) Prudence - to have financial prudence in discharging debts.

8.2.9 Rate of Interest

According to classical economists, saving is the direct function of the rate of interest. To put it symbolically:

$$S=f(i)$$

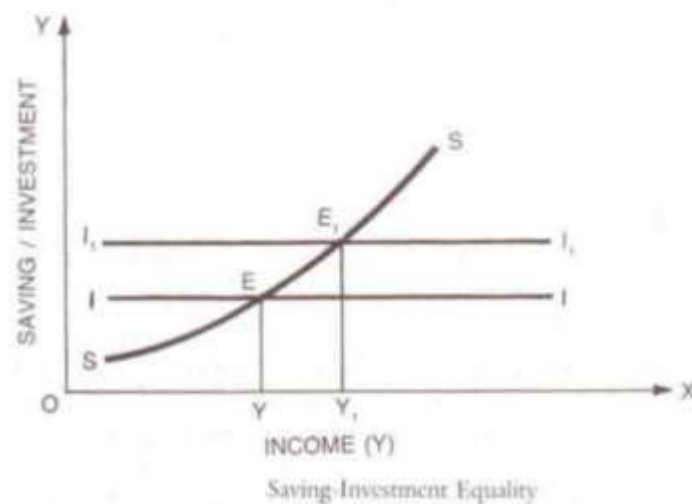
where S stands for saving and i stands for the rate of interest. It suggests that saving tends to rise with an increase in the rate of interest and vice versa. Keynes, however, did not agree with this view. He asserted that saving is a function of income.

But, it remains a fact that the personal saving of some individuals who are motivated by economic considerations is certainly induced to save more when the rate of interest rises. They may be willing to curtail their consumption or try to earn more income in order to save more. But, a mere rise in the rate of interest is not enough. Income also must rise. Income is the basic determinant of one's capacity to save. Saving comes out of income and not from rate of interest. But a high rate of interest may give a psychological push to the economic motive behind saving.

However, the rate of interest is an important factor in the mobilisation of saving. People would be induced to pass on their saving to those institutions which offer a high rate of interest. Thus, from the point of view of holding of near money assets, the rate of interest constitutes a significant influence. A person would like to keep his savings in that type of bond from which the relative yields will be highest as against any other type available.

8.3 SAVING-INVESTMENT RELATIONS

In Keynes's view, investment does not depend significantly upon the level of income. It mainly depends on dynamic factors such as population growth, territorial expansion, and progress of technology and above all, business expectations of the entrepreneur. Thus, it is unpredictable, unstable and autonomous as against savings which is stable, predictable and induced. Thus, it is fluctuations in investment that cause variations in income which in turn bring about equality between saving and investment. According to Keynes, varying levels of income cannot be sustained in an economy unless the amounts of savings at these levels of income are offset by an equivalent amount of investment. Thus, Keynesian theory draws the equilibrium relations between income, saving and investment. According to Keynes, varying levels of income cannot be sustained in an economy unless the amounts of savings at these levels of income are offset by an equivalent amount of investment. Thus, Keynesian theory draws the equilibrium relations between income, saving and investment. It stresses that the equilibrium level of income is realised where saving out of income is just equal to the actual amount of investment. This is depicted in Figure.



In Figure, I-I is the original investment schedule which is a horizontal straight line showing that investment is completely autonomous in the sense that it does not vary much with income. This is the fundamental postulate of Keynesian theory. 1-1 is the new investment schedule indicating a shift in the I-function due to the forces of certain dynamic factors. The curve SS is the saving schedule showing how the amount of saving increases with income. But, it is a stable phenomenon and, therefore, usually, there cannot be a shift in its curve. From the diagram it appears that the income is determined by the saving and investment schedules. Initially, 1schedule and S-schedule intersect at point E, and we have an income level OY, where obviously $S=I$. Thus, the Keynesian theory of shifting equilibrium shows the S and I equality at varying levels of income.

Of course, the Keynesian formulation of saving-investment relationship in its functional sense admits the divergences between saving and investment, but only at virtual levels and not at observable levels of income. The equilibrium level of national income is obviously the observable level of income where there is corresponding equality between "observable" savings and "observable" investment. And, for given savings and investment schedules, there is, of course, only one equilibrium level of income corresponding to the equality between S and I. In a static Keynesian system, there can be divergence between savings and investment only when the economy is not in equilibrium.

8.4 UNDEREMPLOYMENT EQUILIBRIUM

The classical economists held that saving being a function of the rate of interest; it automatically flows into an equal amount of investment, led by changes in the rate of interest which tend to generate a full employment level of income in the economy. Thus, in classical economics, full-employment condition was assumed to be a normal phenomenon. Keynes, however, pointed out that in a modern capitalist economy, usually, the saving-investment equality takes place at an income level which may be significantly below the full-employment level. Thus, more realistically, a modern free-enterprise economy tends to have under-employment equilibrium as its normal feature.

The Keynesian idea of "underemployment" equilibrium has been elucidated by Professor Kurihara in terms of the following strategic functions in the Keynesian theory of employment: (i) the interest-inelastic function, (ii) the interest-inelastic liquidity function.

Kurihara observes that from empirical investigation, it has been found that there is no significant correlation between the interest rate and the quantum of investment. Thus, a mere adoption of a cheap money policy cannot be very effective in stimulating the level of investment such that a rise in saving is automatically transmitted into investment to establish the saving-investment equilibrium at full-employment level.

Similarly, the saving schedule is income-elastic, but it is interest inelastic in practice. The interest-inelasticity in saving function suggests that with a fall in interest rate, in view of insufficient investment, demand for liquidity, however, cannot cause a decline in the propensity to save. As such, saving-investment equilibrium is likely to take place at less than full-employment level.

It has been said that drastic changes in the rate of interest can affect the saving schedule. This is true. But, here the liquidity function comes in the way. Kurihara points out that at a very low rate of interest, the liquidity function becomes perfectly interest-elastic, which has two unhealthy influences: *(i)* it tends to discourage inducement to invest, by its depressing effect on the marginal efficiency of capital of high rate of interest, which is essential to overcome a strong liquidity preference of some people, and *(ii)* it is neither feasible nor advisable for the monetary authority to expand money supply indefinitely and lower the rate of interest to the bottom, just for the sake of stimulating private investment. Consequently, the investment functions at a point of full-employment level. The point of effective demand, thus, tends to materialise at an under-employment equilibrium level in a real economy. It must be noted that Keynesian theory refers here to privately induced investment only. Public investment which is autonomous depends on the plan and public policy can be shifted upward up to the full-employment ceiling in a decided manner.

8.5 Indian Capital Market

8.5.1 MEANING AND FUNCTIONS OF CAPITAL MARKET

Capital market is a growing component of the financial, system in India. The capital market differs from the money market in terms of maturity, structure and liquidity. The money market comprises financial instrument having a maturity period of one year or less than one year. It involves short-term transactions.

Capital market contains financial instruments of maturity period exceeding one year. It involves long-term transactions. Capital market instruments are relatively less liquid in comparison to the money market instruments. Capital market in a broad sense encompasses all kinds of arrangements and financial institutions involved in long term funding. Capital market is, however, commonly referred to the stock markets in the country. From the stock markets point of view, capital market comprises both primary and secondary market. The primary market deals with new issues made by the companies. The secondary market relates to the trading in the existing securities. An investor can buy securities in the primary market, but can sell only in the secondary market.

Functions of Capital Markets

Capital market is the financial pillar of industrialized country. It is the catalysts agent of development. It renders several functions, such as:

- Transformation of savings into investment. Capital market mobilizes savings from the households to the producers who are the investors. It provides inter-mediation between savers and investors on a long-term basis.
- Flow of funds. It channelises the allocation of the funds from less profitable to more profitable channels. It thus leads to optimum utilization of resources. It enables surplus and idle funds to be used more effectively, efficiently and productively.
- Macro-economics financial balancing. Capital market mobilises funds from surplus units to deficit units through appropriate financial inter-mediation.
- It facilitates the project financing and growth of corporate sector.
- It provides better returns to the savers by offering numerous alternatives in the portfolio investments.

India is heading on to the growing private sector in its mixed economy. As such, private savings and capital plays pivotal role in its growth process. A healthy growth of capital market is, therefore, essential to promote expanding savings and investment in the country.

8.5.2 STRUCTURE OF THE INDIAN CAPITAL MARKET

Usually, capital markets are classified in two ways:

- On the basis of issuer,
- On the basis of instruments.

In terms of issuer type, these are:

- (a) Markets for corporate securities, and
- (b) Markets for government securities.

In terms of instruments, these are:

- (a) Equity markets, and
- (b) Debt markets.

Over the years, there has been a substantial development of the Indian capital market. It comprises various sub-markets. In recent years, its structure has grossly changed. Various new instruments and new institutions have cropped in. Broadly speaking, there are the following sub-markets:

- (1) Corporate market for both securities (both new and old);
- (2) Government securities market;
- (3) Debt instrument market; and
- (4) Market for institutional schemes. (Such as mutual funds, etc).

There are both primary and secondary markets for all kinds of these markets. The primary market is the source of raising funds directly from the public. The secondary market is meant to provide liquidity and trading facilities.

The Indian secondary market structure comprises:

- Regular stock exchanges. Presently 21 in numbers in major Indian cities.
- Over the Counter Exchange of India (OCEI). This is meant for smaller companies. It has no trading ring.
- National Stock Exchange.

8.5.3 CAPITAL MARKET FOR CORPORATE SECURITIES

There has been a growing trend of corporate sector in India. Nearly 2 lakh companies have registered in the country. Exceeding 8,000 companies are listed on all stock exchanges of the country.

Companies enter into the capital market for the following reasons:

- Modernization
- New projects
- Expansion
- Assets acquisition
- Capital restructuring
- For listing their securities on stock exchanges

Sub-brokers

With the establishment of Securities and Exchange Board of India (SEBI) and abolition of Controller of Capital Issues, there has been a remarkable shift from 'control' to 'regulatory' system in the Indian capital market.

8.5.4 CAPITAL MARKET FOR GOVERNMENT SECURITIES

Indian government is a big borrower. It borrows through gilt-edged securities - i.e., repayments of principal and interest is totally secured with budgetary provisions.

The government securities are of three types:

- (i) Long-term : exceeding 10 years;
- (ii) Medium-term : ranging between 5-10 years;
- (iii) Short-term : between 1-5 years.

Government securities are held in the form of:

- Stock Certificates
- Bearer Bonds

Stock certificate certifies that the holder is registered in the book of the Public Debt Office of the government. It also indicates interest rate. Bearer bond certifies the entitlement to specified sum. It also indicates the interest rate.

Besides, the government of India floats securities called:

- (i) Social security certificate,
- (ii) Capital investment certificate,
- (iii) Deposit certificates,
- (iv) Annuity certificates,
- (v) Annuity deposit certificates,
- (vi) Zamindary compensation bonds and rehabilitation grant bonds,
- (vii) National savings certificates,
- (viii) National defense certificates, and
- (ix) National deposit certificates.

The growth of government securities market depends on the public debt programme of the government.

8.5.5 GROWTH PROSPECTS OF INDIAN CAPITAL MARKET

Indian capital market has a vast growth potential. Presently it has captured only about 10 percent of household savings in mobilisation for the corporate sector. In other developed countries more than 20-25 percent of household savings are tapped by their capital markets. Moreover, over 25 percent population goes for share holdings in these countries. In India such percentage is just less than 5.

In 1997-98, however, of the household sectors savings, 2 percent claimed by the UTI , shares and debentures, 12.4 percent by government securities, and 4.3 percent by the non-banking deposits. On the other hand, 45.6 percent share claimed by the bank deposits. This means bank-deposits are still popular avenues in India.

Liberalisation, financial regulations and activities of SEBI as well as positive industrial policy would help in attracting more funds into the Indian capital market.

Characteristics of Indian Capital Market

Indian capital has the following main features that may favour more savings mobilisation:

- Fast growth of mutual funds
- Banks subsidiaries for. financial services into the capital market
- Growth of the merchant banking
- Floatation of mega issues
- Growing debt instruments Issue of debentures
- Avoidance of underwriting
- Increased transparency through SEBI's regulations
- Liberalisation policy of the government
- Emerging new financial instruments such as convertible bonds, foreign currency rates, zero coupon bonds, discount bonds, warrants, etc.

Current Scenario

The SEBI is playing active role in its regulatory reform to further strengthen investors' protection and monitoring and modernising the Indian capital market. There has been enhancement of integrity, transparency and efficiency of operations of the securities market.

The government has established the National Venture Fund for Software and IT industry (NVFSIT) in the year 2000. It is managed by the Small Industry Development Bank of India (SIDBI) Venture Capital Ltd. (VCL).

In short, capital market in India is an important source of funds for public as well as private sector undertaking.

8.6 Commercial Banking

8.6.1 EVOLUTION OF BANKING

Banking, in its crude form, is an age-old phenomenon. It was in existence even in ancient times. Revilpout, a French writer, for instance, mentions about bank and bank notes in Babylon 600 B.C. In India, the references to money lending business are found in the *Manu Smriti* also. Chaldean, Egyptian and Phoenician history also records the existence of rudimentary banking in early days.

Prof. Marshall in his book, *Money, Credit and Commerce*, (1923) writes about the activities of money-changers in the temples of Olympia and other sacred places in Greece, around 2,000 B.C. To quote him, "Private money-changers began with the task of reducing many metallic currencies, more or less exactly, to a common unit of value, and even to accept money on deposit at interest, and to lend it out at higher interest permitting meanwhile drafts to be drawn on them."

As a matter of fact, the origin of banking lies in the business of money changing in ancient days. Another factor that supported the emergence of banks in the early period was the need for borrowing by the monarchical governments from finance companies. In the Middle Age, in Italy the first bank called the 'Bank of Venice' was established in 1157, on this ground, particularly, when the authorities of the state of Venice were in financial trouble due to war.

In England, however, the bankers of Lombardy had taken the initiative to start modern banking along with their trading activities in London. But, commercial banking began there only after 1640, when goldsmiths started receiving deposits from the public for safe custody and issued receipts for the acknowledgments which were being used as bearer demand notes later on.

Crowther, thus, speaks about three ancestors of a modern commercial bank, *viz.*, the merchant, the money-lender and the goldsmith. The merchants or traders issued documents like 'hundi' to remit the funds. Modern banks introduced cheques, or demand drafts for remittance purposes. Money-lenders gave loans. Bankers too gave loans. Goldsmiths received deposits and created credit. Banks also received deposits and adopted the process of credit in a similar fashion, by issuing cheques.

In short, the evolution of commercial banking is related to the practice of safe-keeping of gold and other valuables by the people with merchants/goldsmiths/ money-lenders.

Etymologically, however, the word 'bank' is derived from the Greek word *banque*, or the Italian word *banco* both meaning a bench - referring to a bench at which money-lenders and money-changers used to display their coins and transact business in the market place.

In England, initially the Bank of England was established in 1694 on Italian lines to support government with finance.

Modern joint-stock commercial banks, however, came into the picture with the passage of the Banking Act of 1833 in England.

In India, however, modern banking started when the English agency houses in Calcutta and Mumbai began to serve as bankers to the East India Company and the Hindustan Bank was the first banking institution of its kind to be established in 1779.

8.6.2 WHAT IS A BANK?

Commercial banks are the most important source of institutional credit in the money market.

A commercial bank is a profit-seeking business firm, dealing in money and credit. It is a financial institution dealing in money in the sense that it accepts deposits of money from the public to keep them in its custody for safety. So also, it deals in credit, *i.e.*, it creates credit by making advances out of the funds received as deposits to needy people. It thus, functions as a mobiliser of saving in the economy.

A bank is, therefore, like a reservoir into which flow the savings, the idle surplus money of households and from which loans are given on interest to businessmen and others who need them for investment or productive uses.

A bank is an important institution of the money market as it gives short-term loans to its customers.

Definition of Bank

On account of the multifarious activities of a modern bank, it becomes very difficult to give a precise definition of the word "Bank". The Oxford Dictionary defines a bank as "an establishment for the custody of money, which it pays out on a customer's order." This, however, is not a very satisfactory definition, since it ignores the most important function of a bank that of creating money or creating credit.

Most commonly, than, banks have been defined as dealers in debt. This definition, of course, more aptly describes a bank's activities. Sayers more clearly states: "We can define bank as an institution whose debts (bank deposits) are widely accepted in settlement of other people's debts to each other." Crowther, thus, puts it: "The banker's business is then, to take debts of other people, to offer his own in exchange and thereby to create money."

A banking company in India has been defined in the Banking Companies Act, 1949 as one "which transacts the business of banking which means the accepting, for the purpose of lending or investment, of deposits of money from the public, repayable on demand or otherwise and withdrawable by cheque, draft, order or otherwise. "

Acceptance of chequable demand deposits and lending them to others are the two distinctive features of a banking institution. On this account, Post Office Saving banks are not regarded as banks in the true sense of the term, since they do not lend money, even though some of them have introduced the cheque system. Similarly, there are other financial institutions like the Unit Trust of India (UTI), the Life Insurance Corporation (LIC), the Industrial Finance Corporation of India (IFCI);-the Industrial Development Bank of India (IDBI), etc. which lend money to others but do not accept chequable demand deposits. Therefore, they are not regarded as banks. They are called non-banking financial institutions.

Difference between Banking and Money-lending

A banking business is, however, distinct from a pure money-lending business. A money-lender usually advances his own funds. A bank accepts deposits from the public, which are withdrawable by cheques, and the funds so accumulated are lent to its needy customers against goods or securities or by discounting bills. Further, the bank pays interest to its depositors, and the deposits are withdrawable by cheques. Money-lenders generally do not receive deposits from public, and even if they receive such deposits, it is not obligatory on their part to pay a uniform interest rate on such deposits; and these deposits are not chequable. Further, very often; when there is credit stringency, bankers may borrow from other banks or central bank to lend to their customers. Money-lenders obviously do not do so.

8.6.3 KINDS OF BANKS

Financial requirements in a modern economy are of a diverse nature, distinctive variety and large magnitude. Hence, different types of banks have been instituted to cater to the varying needs of the community.

Banks in the organised sector may, however, be classified into the following major forms:

- (1) Commercial banks;
- (2) Co-operative banks;
- (3) Specialised banks, and
- (4) Central bank.

(1) Commercial Banks

Commercial banks are joint stock companies dealing in money and credit. A commercial bank may be defined as a financial institution that accepts chequable deposits of money from the public and also uses the money with it for lending. The most distinctive function of a commercial bank is that it accepts deposits called demand deposits from the public which are chequable, *i.e.*, withdrawable by means of cheques. Acceptance of chequable deposits alone, however, does not give it the status of a bank. Its another essential function is to make use of these deposits for lending to others.

Commercial banks usually give short-term loans and advances. They occupy a dominant place in the money market. They, as a matter of fact, form the biggest component in the banking structure of any country. The commercial banks in India are governed by the Indian Banking Regulation Act, 1949 brought up to date to include additional rules thereto. Under the law, commercial banks are not supposed to do any other business, except banking.

In capitalist countries, like the UK and the USA, commercial banks are usually in the private sector, owned by shareholders. In socialist countries like Russia, they are completely nationalised. In France, however, though it has a capitalist economy, all commercial banks are state-owned.

Commercial Banks in India

In India, however, there is a mixed banking system. Prior to July 1969, all the commercial banks-73 scheduled and 26 non-scheduled banks. except the State Bank of India and its subsidiaries - were under the control of private sector. On July 19, 1969, however, 14 major commercial banks with deposits of over 50 crores were nationalised. In April, 1980, another six commercial banks of high standing were taken over by the government.

At present, there are 20 nationalised banks plus the State Bank of India and its 7 subsidiaries constituting public sector banking which controls over 90 per cent of the banking business in the country.

(2) Co-operative Banks

Co-operative banks are a group of financial institutions organised under the provisions of the Co-operative Societies Act of the states. These banks are essentially co-operative credit societies organised by members to meet their short-term and medium-term financial requirements..

The main object of co-operative banks is to provide cheap credit to their members. They are based on the principles of self-reliance and mutual co-operation.

The co-operative banking system in India is, however, small sized in comparison to the commercial banking system, Its credit outstanding is just less than one-fifth of the total credit outstanding of the commercial banks. Nonetheless, cooperative credit system is the main institutional source of rural, especially, agricultural finance in India.

Co-operative banking system in India has the shape of a pyramid *i.e.*, a three-tier structure, constituted by: (i) primary credit societies; (ii) central co-operative banks; and (iii) state co-operative banks.

Primary credit societies lie at the total or base level. In rural areas there are primary agricultural credit societies (PACs), which cater to the short and medium-term credit needs of the farmers.

In urban areas, to provide non-agricultural credit, urban co-operative banks and employees' credit societies are formed. Urban banks usually provide short-term loans to their members, who are small borrowers. They also accept deposits from members and non-members, too. Thus, their functions and working are more or less similar to those of commercial banks. But by nature, their form is only co-operative and that is a major distinction between these and commercial banks which are joint stock companies.

The Central Co-operative Banks (CCBs) are federations of primary societies belonging to a specific district. By furnishing credit to the primary societies, central co-operative banks serve as an important link between these societies and the money market of the country. No central co-operative bank lends to individuals. It lends to societies only. The State Co-operative Banks (SCBs) lie at the apex of the entire co-operative credit structure. Every State Co-operative Bank's basic function is to furnish loans to the central co-operative banks in order to enable them to help and to promote the lending activities of the primary credit societies. The State Cooperative Banks, thus, serve as the final link between the money market and the cooperative sector of the country.

(3) Specialised Banks

There are specialised forms of banks catering to some special needs with this unique nature of activities. There are, thus, foreign exchange banks, industrial banks, development banks, land development banks etc.

Foreign Exchange Banks or simply exchange banks are meant primarily to finance the foreign trade of a country. They deal in foreign exchange business, buying and selling of foreign currencies, discounting, accepting and collecting foreign bills of exchange. They also do ordinary banking business such as acceptance of deposits and advancing of loans, but in a limited way. In India, there are 15 foreign commercial banks basically undertaking such activities only.

Industrial Banks are primarily meant to cater to the financial needs of industrial undertakings. They provide long-term credit to industries for the purchase of machinery, equipments etc.

In India, there are some special financial institutions which are called "development banks". Presently, at the all-India level, there are five such industrial development banks: (i) the Industrial Development Bank of India (IDBI), (ii) the Industrial Finance Corporation of India (IFCI), (iii) the Industrial Reconstruction Corporation of India (IRCI), for large industries, (iv) the Industrial Credit and Investment Corporation of India (ICICI), and (v) the National Small Industries Corporation (NSIC) catering to the needs of the small industries. All these institutions have been founded by the Government, except the ICICI which is owned by the private sector.

Similarly, at the state level, there are: (i) the State Financial Corporations (SFCs), (ii) the State Industrial Development Corporations (SIDCs), and (iii) the State Industrial Investment Corporations (SIICs) serving as industrial development banks.

Land Development Banks (LDBs) are meant to cater to the long and medium-term credit needs of agriculture in our country. They are mainly district level banks. Since the LDBs give loans to their members on the mortgage of land, previously they were called land mortgage banks. There are state land development banks at the top level and primary land development banks at the base or local level.

Agricultural Refinance and Development Corporation (ARDC) is a kind of agricultural development bank which provides medium and long-term finance to agriculture in our country. ARDC operates by making provisions of refinance to State Land Development Banks, State Co-operative Banks and Scheduled Commercial Banks which are its shareholders.

The Export-Import Bank of India (EXIM BANK) has been instituted for planning, promoting and developing exports and imports of the country.

In Western countries, there are specialised banks such as discount houses, investment banks, labour banks etc., catering to the specialised needs of the people.

(4) Central Bank

A central bank is the apex financial institution in the banking and financial system of a country. It is regarded as the highest monetary authority in the country. It acts as the leader of the money market. It supervises controls and regulates the activities of the commercial banks. It is a service-oriented financial institution primarily concerned with the ordering, supervising, regulating and development of the banking system in the country. As the central bank is able to influence monetary and credit conditions and financial developments in a country, it is charged with the responsibility of carrying out the monetary and credit policies.

India's central bank is the Reserve Bank of India, established in 1935.

A central bank is usually state-owned. But it may also be a private organisation. For instance, the Reserve Bank of India (RBI), was started as a shareholders' organisation in 1935, however, it was nationalised after Independence, in 1949.

Although the central bank is state-owned, it functions as a semi-government institution, free from parliamentary control.

8.6.4 FUNCTIONS OF COMMERCIAL BANKS

Commercial banks perform several crucial functions, which may be classified into two categories: (a) Primary functions, and (b) Secondary functions.

Primary banking functions of the commercial banks include:

1. Acceptance of deposits from the public;
2. Lending of funds;
3. Use of cheque system; and
4. Remittance of funds.

1. Acceptance of Deposits from the Public

Accepting deposits is the primary function of a commercial bank. By receiving deposits from the public, commercial banks mobilise savings of the household sector.

Banks generally accept deposits in three types of accounts: (i) Current Account, (ii) Savings Account, and (iii) Fixed Deposits Account.

Deposits in Current Account are withdrawable by the depositors by cheques for any amounts to the extent of the balance at their credit, at any time without any prior notice. Deposits of current account are, thus, known as demand deposits. Such accounts are maintained by commercial and industrial firms and businessmen, and the cheque system is the most convenient and very safe mode of payment.

Savings Accounts are maintained for encouraging savings of households. Withdrawals of deposits from savings accounts are not freely allowed as in the case of current account. There are some restrictions on the amount to be withdrawn at a time and also on the number of withdrawals made during a period. Indian commercial banks have, however, relaxed these rules of savings accounts to a certain extent in recent times. Banks pay a rate of interest on the savings account deposits as, prescribed by the central bank.

Deposits in fixed account are time deposits. In the normal course, deposits cannot be withdrawn before the expiry of the specified time period of the deposits. A premature withdrawal is, however, permitted only at the cost of forfeiture of the interest payable, at least partly. On these deposits commercial banks pay higher rates of interest, and the rate becomes higher with the increase in duration.

By creating such varieties of deposits, banks motivate savers and depositors in a variety of ways and encourage savings in the economy. Further, by keeping deposits with banks, depositors' money is not only secured and remains in safe custody, but it yields interest also. Moreover, banks' demand deposits are in the form of liquid cash, for they serve as money to the business community and, therefore, is called bank money.

2. Lending of Funds

Another major function of commercial banks is to extend loans and advances out of the money which comes to them by way of deposits to businessmen and entrepreneurs against approved such as gold or silver bullion, government securities, easily saleable stocks and shares, and marketable goods.

Bank advances to customers may be made in many ways: (i) overdrafts, (ii) cash credits, (iii) discounting trade bills, (iv) money-at-call or very short-term advances, (v) term loans, (vi) consumer credit, (vii) miscellaneous advances.

(i) Overdraft: A commercial bank grants overdraft facility to an account holder by which he is allowed to draw an amount in excess of the balance held in the account" up to the extent of stipulated limit. Overdraft is permissible in current account only, Suppose, a customer has Rs.50,000 in his current account with the bank. Bank grants him overdraft facility up to Rs.10,000. Then, this customer is entitled to issue cheques up to Rs.60,000 on his account. Obviously, the overdraft facility sanctioned up to Rs.10,000 by the bank in this case is as good as credit granted by the bank to that extent.

(ii) Cash Credit: Banks give credit in cash to business firms in industry and trade, against pledge or hypothecation of goods, or personal guarantee given by the borrowers. It is essentially, a drawing account against credit sanctioned by the bank and is operated like a current account on which an overdraft is sanctioned. It is the most popular mode of advance in the Indian banking system.

(iii) Discounting Trade Bills: The banks facilitate trade and commerce by discounting bills of exchange called trade bills. Traders often draw bill of exchange to meet their obligations in business transactions. Such a trade bill is payable in cash on maturity, after a stipulated date. But many times the holder of such bills may be in urgent need of cash before the maturity period. In such circumstances, he may seek help from the bank. Since trade bills are negotiable instruments, the bank will discount them. That is, the bank will pay cash to the endorser of trade bills, equivalent to the amount of bills minus the amount of discount. And, when the bill matures, the bank will claim the amount from the drawee (the person who is liable to honour the bill). Obviously, discounting of bills by the bank amounts to granting of credit to the party concerned till the maturity date of the bill. This method of bank lending is widely adopted for two reasons: *(i)* such loans are self-liquidatory in character; and *(ii)* these trade bills are rediscountable with the central bank.

(iv) Money at Call or Very Short-term Advances: Bank also grant loans for a very short period, generally not exceeding 7 days to the borrowers, usually dealers or brokers in stock exchange markets against collateral securities like stock or equity shares, debentures, etc., offered by them. Such advances are repayable immediately at short notice hence, they are described as money at call or call money.

(v) Term Loans: Banks give term loans to traders, industrialists and now to agriculturists also against some collateral securities. Term loans are so-called because their maturity period varies between 1 to 10 years. Term loans as such provide intermediate or working capital funds to the borrowers. Sometimes, two or more banks may jointly provide large term loans to the borrower against a common security. Such loans are called participation loans or consortium finance.

(vi) Consumer Credit: Banks also grant credit to households in a limited amount to buy some durable consumer goods such as television sets, refrigerators, etc., or to meet some personal needs like payment of hospital bills, etc. Such consumer credit is made in a lump sum and is repayable in installments in a short time. Under the 20-point programme, the scope of consumer credit has been extended to cover expenses on marriage, funeral etc., as well.

(vii) Miscellaneous Advances: Among other forms of bank advances there are packing credits given to exporters for a short duration, export bills purchased/ discounted, import finance - advances against import bills, finance to the self-employed, credit to the public sector, credit to the cooperative sector and above all, credit to the weaker sections of the community at concessional rates.

(3) Use of Cheque System

It is a unique feature and function of banks that they have introduced the cheque system for the withdrawal of deposits.

There are two types of cheques: (i) the bearer cheque, and (ii) the crossed cheque. A bearer cheque is encashable immediately at the bank by its possessor. Since it is negotiable, it serves as good as cash on transferability. A crossed cheque, on the other hand, is one that is crossed by two parallel lines on its face at the left hand corner and such a cheque is not immediately encashable. It has to be deposited only in the payee's account. It is not negotiable.

In modern business transactions, the use of cheques to settle debts is found to be much more convenient than the use of cash. Commercial banks, thus, render an important service by providing an inexpensive medium of exchange such as cheques. In fact, a cheque is also considered as the most developed credit instrument.

(4) Remittance of Funds

Commercial banks, on account of their network of branches throughout the country, also provide facilities to remit funds from one place to another for their customers by issuing bank drafts, mail transfers or telegraphic transfers on nominal commission charges. As compared to the postal money orders or other instruments, bank drafts have proved to be a much cheaper mode of transferring money and have helped the business community considerably.

In addition to these, commercial banks perform a multitude of other non-banking functions which may be classified as (a) agency service, and general utility services.

Agency Services

Bankers perform certain functions for and on behalf of their clients, such as:

- (a) To collect or make payments for bills, cheques, promissory notes, interest, dividends, rents, subscriptions, insurance premia, etc. For these services, some charges are usually levied by the banks.
- (b) To remit funds on behalf of the clients by drafts or mail or telegraphic transfers.
- (c) To act as executor, trustee and attorney for the customers will.
- (d) Sometimes, bankers also employ income-tax experts not only to prepare income-tax returns for their customers but also to help them to get refund of income-tax in appropriate cases.
- (e) To work as correspondents, agents or representatives of their clients.

Often, bankers obtain passports, traveler's tickets, secure passages for their customers, and receive letters on their behalf.

General Utility Service

Modern commercial banks usually perform certain general utility services for the community, such as:

- (a) Letters of credit may be given by the banks at the behest of the importer in favour of the exporter.
- (b) Bank drafts and traveler's cheques are issued in order to provide facilities for transfer of funds from one part of the county to another.
- (c) Banks may deal in foreign exchange or finance foreign trade by accepting or collecting foreign bills of exchange.
- (d) Banks may act as referees with respect to the financial standing, business reputation, and respectability of customers;

- (e) Shares floated by government, public bodies and corporations may be underwritten by banks;
- (f) Certain banks arrange for safe deposit vaults, so that customers may entrust their securities and valuables to them for safe custody.
- (g) Banks also compile statistics and business information relating to trade, commerce, and industry. Some banks may publish valuable journals or bulletins containing research on financial, economic and commercial matters.

Banks Play an Important Role in a Modern Economy

- (1) They constitute the very life-blood of modern trade, commerce and industry, as they provide the necessary funds for their working capital such as to buy raw materials, to pay wages, to incur current business expenses in marketing of goods, etc
- (2) Banks encourage people's savings habit through their various savings deposit schemes.
- (3) They also mobilise idle saving resources from household to business people for productive use.
- (4) They transmit money from place to place with economy and safety.
- (5) Their agency services are, no doubt, of immense value to the people at large, as they ease their difficulties, save their time and energy and provide them safety and security.

8.7 Central Bank and Instruments of Credit Control

Central banking is a comparatively new phenomenon. In most countries, except England, the central bank is a twentieth century financial institution. In the U.S.A., the Central Bank of the Federal Reserve System was established in 1913; in India, the Reserve Bank of India was set up in 1935.

8.7.1 CENTRAL BANK: AN APEX FINANCIAL AUTHORITY

The essential feature of a central bank is its discretionary control over the monetary system of the country. A bank is called a central bank because it occupies a pivotal position in the monetary and banking structure of the country in which it operates. Thus, the central bank acts as the leader of the money market and in that capacity; it supervises, controls and regulates the activities of the commercial banks. It is recognised as the apex monetary institution or the highest financial authority.

The central bank has been defined by R.P. Kent as "institution charged with the responsibility of managing the expansion and contraction of the volume of money in the interest of the general public welfare. Thus, we may define the central bank as an institution whose main function is to help, control and stabilise the monetary and banking system of the country in the national economic interest.

The above stated definition of a central bank clearly justifies its need and importance. The banking system can work as a system only if there is an institution at the top to direct its activities. Without such a direction, the system would be nothing but a collection of unconnected units, each following an independent policy, often contradictory to one another. Thus, the central bank is essential to regulate the activities of commercial banks, integrate them, and direct their policies according to the best national economic interest.

8.7.2 FUNCTIONS OF A CENTRAL BANK

The powers and range of functions of central banks vary from country to country. But there are certain functions which are commonly performed by the central banks:

1. It issues the currency notes of the country.
2. It is the custodian of the foreign exchange reserves of the country.
3. It serves as banker to the government.
4. It serves as banker to commercial banks.
5. Being a monetary authority, it regulates the banks' credit creation activity and performs the function of a controller of credit.
6. It promotes the economic development of the country.

1. Central Bank as a Bank of Note Issue

The central bank is legally empowered to issue currency notes - legal tender. Commercial banks cannot issue currency notes. The central bank's right to issue notes gives it the sole or partial monopoly of note issue, while in India, the Reserve Bank of India has a partial monopoly of note issue, for example, one rupee notes are issued by the Ministry of Finance, but the rest of the notes are issued by the Reserve Bank.

According to De Kock, following are the main reasons for the concentration of the right of note issue in the central bank:

- (a) It leads to uniformity in note circulation and its better regulation.
- (b) It gives distinctive prestige to the note issue.
- (c) It enables the State to exercise supervision over the irregularities and malpractices committed by the central bank in the issue of notes.
- (d) It gives the central bank some measure of control over undue credit expansion by the commercial banks, since expansion of credit obviously leads to an increased demand for note currency.

The central bank keeps three considerations in mind while issuing currency notes, namely, uniformity, elasticity and security. The right of note issue is regulated by law. According to law, every note issued must be matched with an asset of equal value (assets such as, government securities, gold and foreign currencies, and securities). This is necessary to inspire public confidence in paper currency.

2. Central Bank as a Custodian of Foreign Exchange Reserves

The central bank holds all foreign exchange reserves - key currencies such as U.S. dollars, British pounds, and other prominent currencies, gold stock, gold bullion, and other such reserves - in its custody. This right of the central bank enables it to exercise a reasonable control over foreign exchange, for example, to maintain the country's international liquidity position at a safe margin and to maintain the external value of the country's currency in terms of key foreign currencies.

3. Central Bank as Banker to Government

As the government's banker, the central bank maintains the banking accounts of government departments, boards, and enterprises and performs the same functions as a commercial bank ordinarily performs for its customers. It accepts deposits of commercial banks and undertakes the collection of cheques and drafts drawn on the bank; it supplies government with the cash required for payment of salaries and wages to their staff and other cash disbursements and transfer funds of the government from one account to another or from one place to another. Moreover, it also advances short-term loans to the government in anticipation of the collection of taxes and raises loans from the public. It also makes extraordinary advances during periods of depression, war, or other national emergencies. In addition, the central bank renders a very useful banking exchange required to meet the repayment of debts and service charges or for the purchase of goods and other disbursements abroad, and by buying any surplus foreign exchange which may accrue to the government from foreign loans or other sources.

The central bank also serves as an agent and adviser to the government. As agent of the government, it is entrusted with the task of managing the public debt and the issue of new loans and treasury bills on behalf of the government. It also underwrites unsold government securities. Moreover, the central bank is the fiscal agent to the government and receives taxes and other payments on government account. By acting as financial adviser to the government, the central bank discharges another important service: it advises the government on important matters of economic policy such as deficit financing, devaluation of currency, trade policy and foreign exchange policy.

The central bank also functions as a representative of the State in international financial matters. It is entrusted with the task of maintaining the nation's reserves of international currency.

4. Central Bank as Banker to Commercial Banks

Broadly speaking, the central bank functions as banker to commercial banks in three capacities: *(i)* as custodian of cash reserves of commercial banks; *(ii)* as lender of last resort; and *(iii)* as clearing agent.

Thus, the central bank acts, as a conductor and leader of the banking system of the country. It acts as a friend, philosopher, and guide to commercial banks.

(i) Custodian of cash reserves of commercial banks: Commercial banks find it convenient to keep their reserve requirements with the central bank because its notes command the greatest confidence and prestige and the government's banking transactions are conducted by this institution. Thus, in every country, commercial banks keep a certain percentage of their cash reserves with the central bank by custom or by law.

In fact, the establishment of central banks makes it possible for the banking system to secure the advantages of centralised cash reserves. The significance of centralised cash reserves lies in the following facts:

- (a)* Centralisation of cash reserves in the central bank is a source of great strength to the banking system of the country as it inspires the confidence of the public in the commercial banks.
- (b)* Centralised cash reserves can form the basis of a much longer and more elastic credit structure than those scattered among numerous individual commercial banks.
- (c)* Centralised cash reserves enable the central bank to provide additional funds to those banks which are in temporary difficulties. In fact, the central bank can function as lender of the last resort on the basis of the centralized cash reserves with it.
- (d)* Centralisation of cash reserves is conducive to the growth of the economy and to the increased elasticity and liquidity of the banking system in particular and of the credit structure in general.
- (e)* Centralisation of cash reserves also enables the central bank to influence and control credit creation of commercial banks by increasing or decreasing the cash reserves of the latter, that is, through the technique of the variable reserve ratio.

(ii) Lender of the last resort: As lender of last resort, in periods of credit stringency, the central bank gives temporary financial accommodation to commercial banks by rediscounting their eligible bills. The central bank is the ultimate source of money in the modern credit system. The function of the lender of last resort implies that the central bank assumes the responsibility of meeting directly or indirectly all reasonable demands for accommodation from commercial banks.

The central bank's function as lender of last resort has evolved out of its rediscounting function during emergency periods. The real significance of rediscount functions according to De. Kock, lies in the fact that it increases the elasticity and liquidity of the entire credit structure.

By providing a ready medium for the conversion in cash of certain assets of banks. It helps to maintain their liquidity. It also makes possible a considerable degree of economy in the use of cash reserves, since commercial banks can conduct a large volume of business with the same reserve and capital.

(iii) Clearing Agent: As the central bank becomes the custodian of cash reserves of commercial banks, it is but logical for it to act as a settlement bank or a clearing house for other banks. As all banks have their accounts with the central bank, the claims of banks against each other are settled by simple transfers from and to their accounts. This method of settling accounts through the central bank, apart from being convenient, is economical as regards the use of cash. Since claims are adjusted through accounts, there is usually no need for cash. It also strengthens the banking system by reducing withdrawals of cash in times of crisis. Furthermore, it keeps the central bank of informed about the state of liquidity of commercial banks in regard to their assets.

5. Central Bank as Controller of Credit

By far the most important of all functions of the central bank in modern times is that of controlling credit operations of commercial banks. Credit, the source of many blessings in a modern economy, also may become, unless we control it, a source of confusion and peril. The social and economic consequences of changes in the purchasing power of money are serious and since credit plays a predominant part in the settlement of business transactions, it is essential that it should be subjected to control. Monetary policy is implemented by the central bank through the weapon of credit control.

6. Central Bank as Promoter of Economic Development

The modern central bank accomplishes a number of development and promotional functions. Today, the central bank is regarded as an inevitable agency for promoting the economic growth of a country. It is an institution responsible for the maintenance of economic stability and for assisting the growth of the economy within the framework of the general economic policy of the State. Thus, the central bank has to take all such steps as are necessary, to meet the economic requirements of economic development of the country.

It is responsible for the development of an adequate and sound banking system to cater to the needs not only of the trade and commerce but also of agriculture and industry. The central bank has to ensure, in the interest of economic progress, that the commercial banks operate on a reasonably sound and prudent basis.

Thus, the major task of the central bank lies in the development of highly organised money and capital markets that may help accelerate economic progress by assisting the huge investment activities in capital formation and other productive sectors. During the planning era, the central bank's role as adviser to government on economic matters in general, and on financial matters in particular, is of considerable importance.

Thus, the central bank of a developing country has an important role to play in the process of development. In underdeveloped countries, the central bank has not only to provide adequate funds and to control inflation, through credit regulation, but it also has to undertake the responsibility of spreading banking facilities, providing credit at cheap rates to agriculture and industry, protecting the market for government securities and channeling credit into desirable avenues. Moreover, in underdeveloped countries, there are institutional gaps in the money and capital markets which hinder economic growth. The banking system is not properly organised as a large section of the money market consists of unorganised, indigenous bankers. Thus, promotion of sound, organised, well-integrated institutions and agencies of money and capital market becomes an important function of a central bank in a developing economy. From deficiency of non-existence of institutions such as savings banks, agricultural credit agencies, insurance companies, and the like to collect and mobilise savings and make them available for productive investments is the main cause of the low rate of capital formation. Hence, the growth of such institutions in these countries is a precondition for capital formation which is a key to economic development. Evidently, therefore, the central bank of a developing country has a vital role to play in building such financial infrastructure for rapid economic development.

As the Planning Commission of India puts it, central banking has to take "a direct and active role, first, in creating or helping to create the machinery needed for financing development activities all over the country and secondly, in ensuring that the finance available flows in the directions intended."

The central bank also collects and disseminates economic statistics of a wider range. As such, the government of the country has to lean heavily upon the central bank for seeking economic and financial advice in the course of development planning.

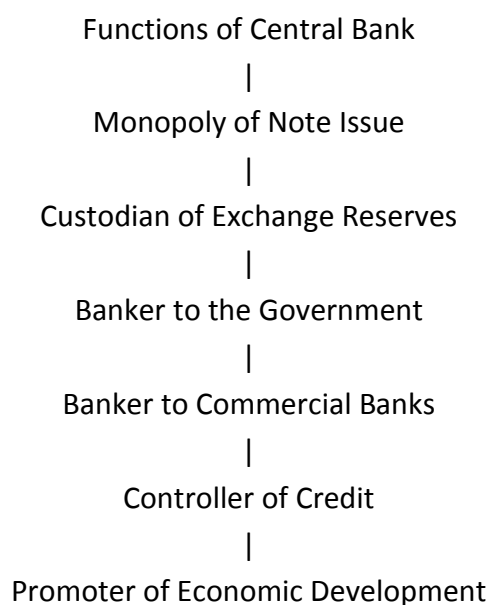
In addition, the central bank may also undertake miscellaneous functions such as providing assistance to farmers through co-operative societies by subscribing to their share capital, promoting finance corporations with a view to providing loans to large-scale and small-scale industries, and publishing statistical reports on trends in the money and capital markets.

In short, a central bank is an institution which always works in the best economic interests of the nation as a whole.

In view of all these functions, as discussed above, it follows that a modern central bank is much more than a Bank of Issue.

Chart 1 summarises the functions of a central bank.

Chart I: Functions of Central Bank



8.7.3 FUNCTIONS OF RESERVE BANK OF INDIA

The Reserve Bank of India was set up on 1st April, 1935. The central office of the bank is located in Bombay.

The Reserve Bank of India renders all the functions of a good central bank. Its major functions are as follows:

1. Monetary Management

The Reserve Bank of India is mainly constituted as an apex authority for monetary management.

According to the Preamble to the Reserve Bank of India Act, 1934, the basic function of the bank is to "regulate the issue of bank notes and the keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage."

The Reserve Bank controls and regulates the flow of credit in the economy. It uses quantitative controlling weapons, such as bank rate policy, open market operations, and the reserve ratio requirement. Since 1956, it has increasingly relied on and resorted to selective credit controls for accelerating the rate of growth and for checking inflationary spurts.

2. Issue of Bank Notes

The Reserve Bank has the sole right to issue currency notes, except one rupee notes - which are issued by the Ministry of Finance. The RBI follows a minimum reserve system in note issue. Initially, it used to keep forty per cent of gold reserves in its total assets. But, since 1957, it has to maintain only Rs. 200 crores of gold and foreign exchange reserves.

3. Custodian of Exchange Reserves

The Bank has been entrusted with the responsibility of maintaining the exchange value of the rupee. It has the custody and management of the country's international reserves.

4. Banker to the Government

It is obligatory for the RBI to transact government business. It has to maintain and operate the government's deposit accounts. It collects receipts of funds and makes payments on behalf of the government. It represents the Government of India as the member of the IMF and the World Bank.

5. A Banker's Bank

According to the Banking Companies' Act of 1949, originally, each scheduled bank has to maintain with the Reserve Bank of India a balance equal to five per cent of its demand liabilities and two per cent of its time liabilities. The Act, amended in 1962, specifies that three per cent of the total liabilities should be kept as reserve requirement.

The Reserve Bank of India also serves as lender of last resort, by rediscounting eligible bills of exchange of commercial banks, during the period of credit stringency.

6. Promoter of Development

The bank performs a number of developmental and promotional functions. Apart from credit regulation, the Reserve Bank effectively channelises credit, especially to priority sectors, such as agriculture, exports, transport operations, and small-scale industries. It makes institutional arrangements for rural and industrial finance. For instance, special agricultural credit cells have been set up by the bank. The Industrial Development Bank of India has been set up to solve the allied problems of the industries.

The bank also assists the government in its economic planning. The bank's credit planning is devised and coordinated with the five year plans of the country. The bank also collects statistical data and economic information through its research departments. It compiles data on the working of commercial and co-operative banks, on balance of payments, company and government finances, security markets, price trends, and credit measures. It publishes a monthly bulletin, with weekly statistical supplements and annual reports, which present a good deal of periodical reviews and comments pertaining to general economic, financial and banking developments, including the bank's monetary policy and measures, adopted for the qualitative and quantitative monetary management.

8.7.4 CENTRAL BANK AND MONETARY MANAGEMENT

The significance of a central bank lies in its function of managing the monetary system of the country. It also maintains the monetary standard for the country, internally as well as externally. In the absence of a central bank, the management of the monetary system lies in the hands of the government. But the government cannot carry out this function of monetary management as well as a central bank can, because the government does not have the requisite facilities, in the absence of an apex monetary institution, to know the money market intimately and to recognise its requirements under various changing conditions. Moreover, the government may pursue a monetary policy which is politically biased, and which is, therefore, undesirable in the general interest of the nation. Again, under a democratic set-up, the party in government is subject to change so that it is quite likely that there will be lack of continuity in the pursuit of a uniform and continuous monetary policy. Also, every political party has its own rationale, on fiscal and monetary objectives. Very rarely in history has a country been as fortunate as to be blessed with major political parties which have held nearly identical views on such objectives. This has been a characteristic of human life from the beginning but differences of opinion have deepened since the middle of the 19th century. This political disharmony has traveled like a tidal wave and, today, every country suffers from the uncertainty of a uniform fiscal and monetary policy. A discontinuous, irrational monetary policy followed by the government harms the nation as a whole. Thus, a permanent body, a financial institution, like the central bank acting as an autonomous organisation is inevitable. A central bank though it is nationalised in most cases and is a semi-government institution, is free from the influence of political parties or motives. By the nature of its business, it is intimately connected with the banking system and money market of the country and can definitely regulate the monetary system of the country in the general interest of the nation. Hence, a central bank is an indispensable institution for monetary and financial management in any economy. The mere establishment of a central, autonomous financial authority, however, does not guarantee freedom from political influences. Such an authority can only be created by statute, *i.e.* a law of the national legislature. This financial authority, therefore, is called a Statutory Body. However, a party in power, at a given time, can always amend, rescind or replace the statute by a new statute which will specify regulation aimed at making the central financial authority *a functionary of government (i.e., a party in a democracy) in power and not a functional institution.* This is the present position as it exists today.

The modern economy is a credit economy. Credit has assumed increasingly wide significance in sustaining the base of the modern economic system. The entire financial structure of the present money economy is founded upon the base of the credit system.

Although credit is a concomitant of modern economic advancement, it is like money, a weapon, the misuse of which spells disaster to the system. Credit, the source of many blessings in a modern economy, also becomes, unless we can control it, a source of confusion and peril. The social and economic consequences of changes in the purchasing power of money are serious and, since credit plays a predominant part in settlement of business transactions, it is essential that credit should be subjected to control. On the need for control of credit De Kock writes, "For many years it has been almost universally accepted that the creation and distribution of credit, under the intricate economic organisation existing in most countries, should be subjected to some form of control. The main reason for this was that credit comes to play a predominant part in the settlement of monetary and business transactions of all kinds, and thus to represent a powerful force for good or evil."

The control of credit is recognised as the main function of a central bank. It is a function which embraces, the most important questions of central banking policy. In fact, the heart of monetary policy lies in control, *i.e.*, monetary management.

Objectives of Credit Control

The important objectives of credit control may be listed as follows:

1. *Stabilisation of the general price level.* The traditional objective of credit control was that of keeping exchange rates stable through the medium of a mono-metallic or bi-metallic standard. But, in recent times, greater importance is attached to the stabilisation of prices as the ultimate goal of a central bank's credit control policy. Stabilisation of the general price level and hence stability of the value of money were considered essential for the smooth operation of the economic system and for national economic welfare.

2. *Stabilisation of the money market:* Some economists stress that the credit control policy of a central bank should aim at the stabilisation of the money market. Credit control should be such that demand and supply be adjusted at all times. However, this objective has not been widely recognised because it is incompatible with the goal of stabilising the other phase of economic activity.
3. *Promoting economic growth.* It is widely realised that credit control should be conducive to economic growth. It should not act as an inhibitory factor. It should promote and maintain a high level of employment and income.

8.7.5 INSTRUMENTS OF CREDIT CONTROL

Under the monetary management of the central bank, credit control stimulates expansion of credit at one time and checks it at another. The principal instruments of credit control, at the disposal of the central bank, may be classified as:

(1) quantitative or general, and (2) qualitative or selective.

The general instruments are directed towards influencing the total volume of credit in the banking system, without special regard for the use of which it is put. Selection or qualitative instruments of credit control, on the other hand, are directed towards the particular use of credit and not its total volume.

Quantitative weapons of credit control consist of (a) bank rate policy; (b) open market operations; and (c) variable reserve ratios.

These methods have a quantitative or a general effect on credit regulation. They are used for changing the total volume of credit or the terms on which bank credit is available, without regard for the purpose for which credit is used by borrowers. But the central bank today, also, makes use of certain qualitative or selective methods by which it controls, in addition to the aggregate volume of credit, the flow of credit in particular directions.

Selective credit control aims at regulating (stimulating or restricting) the uses to which credit are put. The main methods of selective credit control are: (a) margin requirements; (b) regulation of customer's credit; (c) control through directives; (d) rationing of credit; (e) moral suasion and publicity; and (f) direct action.

7.6 BANK RATE POLICY (BRP)

The bank rate is a traditional weapon of credit control used by a central bank. In order to perform its function as lender of last resort to commercial banks, it will discount first-class bills or advance loans against approved securities.

A specific idea regarding the technique of bank rate can be had from the Reserve Bank of India's definition of the bank rate policy which consists of varying the terms and conditions under which the market may have temporary access to the central bank through discounts of selected short-term assets or through secured advances. Thus, the bank rate policy seeks to influence both the cost and availability of credit to members of the bank. Cost, of course, is determined by the discount rate charged, and the availability depends largely upon the statutory requirements of eligibility of bills for discounting and advances, as also the maximum period for which the credit is available.

The bank rate obviously is distinct from the market rate. The former is the rate of discount of the central bank, while the latter is the lending rate charged in the money market by the ordinary financial institutions.

The "Modus Operandi" of Bank Rate

The bank rate policy signifies manipulation of the rate of discount by the central bank in order to influence the credit situation in the economy. The principle underlying the bank rate policy is that changes in bank rate are generally followed by corresponding changes in the money market rates, making credit costlier or cheaper, and affecting its demand and supply.

If the bank rate is raised, its immediate effect is to cause an increase in bank's deposit and lending rates. The prices which bankers are prepared to pay on the amounts deposited with them by their customers increase, so that the volume of the bank deposits increases. Commercial banks employ a substantial proportion of the funds deposited with them to form the basis of loans and advances that they make to their customers, and in as much as the banks are now paying more for these deposits, they must charge higher rates for loans and advances made to their customers. So when the central bank raises the bank rate, the cost of borrowing of the commercial banks will increase, so that they will also charge higher rates for loans and advances made to their customers.

So when the central bank raises the bank rate, the cost of borrowing of the commercial banks will increase, so that they will also charge a higher interest rate on loans to their customers and, thus, the market rate of interest will go up. This means that the price of credit will increase. As many business operations are normally conducted on the basis of bank loans, the price (interest) which has to be paid for this accommodation is, of course, a charge against profit to the business. In consequence, the sudden increase in the interest rate will reduce or wipe out the profit of the business, so that industrial and commercial borrowers reduce their borrowings.

In other words, increased market rate or increase in the cost of borrowing will discourage business activity, *i.e.*, their demand for credit falls. As a result of the contraction of demand for credit, the volume of bank loans and advances is appreciably curtailed. This, in effect, will check business and investment activity so that unemployment will ensue. Consequently, income in general will fall, people's purchasing power will decrease and aggregate demand will fall. This, in turn, will affect the entrepreneurs adversely. When demand falls, prices will come down, and, as a result, profit will decline. The rate of investment is basically determined by the rate of profitability, and thus, in view of falling profits, investment activities will contract further. So, a cumulative, downward movement in the economy sets in.

In brief, an increase in the bank rate leads to a rise in the rate of interest and contraction of credit, which, in turn, adversely affects investment activities and consequently, the economy as a whole.

Similarly, a lowering of the bank rate will have a reverse effect. When the bank rate is lowered, the money market rates fall. Credit, then, becomes cheaply available and the business community will come forward to borrow more. Thus, the expansion of credit will increase investment activities, leading to an increase in employment, income and output. Aggregate demand will increase, prices will rise, and profits will increase which, in turn, will boost production and investment activities further. Consequently, a cumulative upturn of the economy will develop.

Limitations of Bank Rate Policy

The following are the chief limitations of bank rate policy:

- (i) Existence of an Organised and Developed Money Market. Efficacy of the bank rate in controlling credit requires a close correspondence between the bank rate and the structure of interest rates in the money market, so that changes in the bank rate will be followed by changes in the market rates. This presupposes the existence of a highly organised money market. Unfortunately, most underdeveloped countries do not have an organised money market. The wide range and multiplicity of money rates in such an organised money market will make the success of the bank rate policy doubtful. The absence of any conventional relationship between the central bank and other segments of the money market will further add to the ineffectiveness of the bank rate policy.
- (ii) Existence of Well-developed Bill Market. The canons of eligibility for rediscounting bills by the central bank presupposes, in the operation of the bank rate policy, a soundly developed bill market. Underdeveloped bill markets, thus, limit the bank rate operations. Further, in an unorganised money market like that of India, where the indigenous, unorganised monetary sector lies beyond the ambit of control of the central bank.
- (iii) Banks' Need for Rediscounting. The need for commercial banks to approach the central bank for rediscounting facilities is an important factor in determining the successful working of the bank rate policy. But commercial banks will have no need to approach the central bank when they have ample liquid resources at their disposal, *i.e.*, when they have enough excess resources.
- (iv) Practice of Free Exchange Rate System. The successful operation of the bank rate policy in correcting the balance of payments disequilibrium of the country presupposes an economic system in which prices, wages, and interest levels are readily movable, *i.e.*, the economic structure is elastic, the country is on the gold standard and there are no artificial exchange restrictions on the international flow of capital. Obviously, due to the world-wide suspension of the gold standard, government control over prices, wages etc. and artificial exchange restrictions have considerably limited the influence of the bank rate policy.

- (v) Business Expectations. The psychological reaction to a change in the bank rate should also be considered for the effectiveness of the bank rate policy. If, in a boom period, businessmen are unduly optimistic, their demand for credit will be interest-inelastic and the bank rate will be ineffective. Similarly, during a depression, when businessmen are pessimistic, they will not respond favourably to the incentive of low interest rates.
- (vi) Interest-inelasticity of Bank Deposits. The axiom that a rise in the bank rate and, thus a rise in interest rates payable on deposits by commercial banks will cause an increase in bank deposits is questionable. A large majority of people save because of the precautionary motive, and their savings depend on their earning capacity, *i.e.*, their income. These savers do look for a rise in the interest rates on deposits, but they usually deposit with banks for the purpose of safety. Thus, it is actually the increases in income rather than interest rate that promote savings by the people which augment bank deposits.

Again, rediscounting of bills by commercial banks is a precondition for the effective working of the bank rate. If rediscounting is a regular practice, it will result in the establishment of a sensitive connection between the market rates and the bank rate. If the practice is only occasional, the market rates may be out of tune with the bank rate. In unorganised money markets, banks usually operate with high cash reserves, so that they do not feel the need to borrow from the central bank. In predominantly agricultural underdeveloped countries, with unorganised money markets, commercial banks find it difficult to secure sound proposals for the investment of their funds; to that extent they are forced to keep their cash balances idle. As a result, they do not need to borrow from the central bank. Besides, the lack of adequate papers eligible for rediscounting in underdeveloped countries also severely limits the significance and operational of the bank rate as a discount rate.

Moreover, commercial banks in such countries are accustomed to rely on themselves to ensure liquidity of their assets because of wide seasonal fluctuations and this has necessitated their keeping high cash reserves. A historical reason for this is that in most of these countries, the central banks were started in the thirties, when a cheap money policy had to be followed, for revival after the Great Depression, and conditions were not favourable to the growth of the practice of rediscounting.

The demand for bank advances being very low, banks had enough cash balances which rendered rediscounting or borrowing from the central bank unnecessary and superfluous. Prof. Sen summarises this fact in the following words: "The absence of rediscounting practices is, therefore, to be explained by the pursuit of a cheap money policy, the habit of banks of keep comparatively large cash reserves, and the lack of demand for bank advances following the onset of the world trade depression of the thirties."

Furthermore, in undeveloped money markets, the bank rate is not generally a "penal" rate, because interest rate in the indigenous banking sector are higher than the bank rate. Thus, the axiom that money rates should follow the bank rate scarcely materialises under such conditions.

Another important factor is that the efficacy of the bank rate demands sufficient elasticity in the economic system, so that cost reduction, prices, and trade tend to adjust with changed conditions. This condition is, however, rarely fulfilled even if developed economies. It is, therefore, meaningless to expect such an economic condition in underdeveloped countries with their bottlenecks and imperfections.

Sir Mitra has observed: "In developing nations with planned economies where the public sector accounts for the larger part of the nation's Investment is equipped with a set of more direct and powerful instruments, the bank rate loses much of its importance and is, in fact, relegated to a secondary place."

Anyway, the Bank rate has great psychological value as an instrument of credit control and enhances the prestige of the central bank. The bank rate is generally a reflection of the central bank's opinion of the credit situation and economic position in the country. As Gibson said, a rise in the bank rate may be regarded as "the amber coloured light" of warning to commercial credit and business activities while a fall in bank rate may be looked upon as "the green light" indicating that the coast is clear and the ship of commerce may proceed on her way with caution."

In conclusion, although it must be admitted that the bank rate policy has very limited significance in underdeveloped as well as developed money markets in view of the present day conditions and government policies, it has nevertheless a useful function to perform in conjunction with other measures of credit control. Central banks of the present day, however, have to rely more upon other instruments of credit control than the bank rate policy alone in regulating the cost, availability and supply of credit money.

8.7.7 OPEN MARKET OPERATIONS

Open market operations imply deliberate direct sales and purchases of securities and bills in the market by the central bank on its own initiative to control the volume of credit. In a broad sense, open market operations simply imply the purchase or sale by the central bank of any kind of eligible paper like government securities or any other public securities, or trade bills, etc. In practice, however, the term is applied, in most countries, to the purchase or sale of government securities (short-term as well as long-term) only by the central banks.

Working of Open Market Operations: When the central bank sells securities in the open market, other things being equal, the cash reserves of the commercial banks decrease to the extent that they purchase these securities; by selling securities, the central bank also reduces, other thing being equal, the amount of customers' deposits with commercial banks to the extent that these customers acquire the securities sold by the central bank. In effect, the credit-creating base of commercial bank is reduced and hence credit contracts.

In short, the open market sale of securities by the central bank leads to a contraction of credit and reduction in the quantity of money in circulation. Conversely, when the central bank purchases securities in the open market, if makes payments to the sellers by cheques drawn on itself, the sellers usually being commercial banks or customers of commercial banks. The banker's accounts are credited and, therefore, there is an increase in the commercial banks' cash reserve (which is the base of credit creation) and as also an increase in the customers' deposits with commercial banks (which is the principal constituent of money supply.)

In short, open market purchases of securities by the central bank lead to an expansion of credit made possible by strengthening the cash reserves of the banks. Thus, on account of open market operations, the quantity of money in circulation changes. This tends to bring about changes in money rates. An increase in the supply of money through open market operations causes a downward movement in the money rates, while a decrease of money supply raises money rates. Open market operations, therefore, directly affect the loanable resources of the banks and the rates of interest. Changes in rates of interest in turn tend to bring about the desired adjustments in the domestic level of prices, costs, production and trade.

In short, the central bank follows a policy of open market selling of securities when contraction of credit is desired, especially during a boom period when the stability of the money market is threatened by the over-expansion of credit by commercial banks. Conversely, during a depression when the money market is tight and expansion of credit is desired, the central bank follows the policy of open market buying of securities.

Limitations of Open Market Operations

The following are the major limitations of open market operations:

1. Lack of well-developed securities market. There must be a broad, strong and active securities market for large-scale and successful open market operations. Lack of such a market renders open market policy ineffective.
2. Contradictions between bank rate and open market operation. The sale of securities by the central bank may prove ineffective in curbing the loanable resources of the banks so long as the possibility of rediscounting leaves the door open to replenish the reserve as before.
3. Restricted dealings. The success of open market operations is limited by the preparedness of the central bank to incur losses. In the case of short-term securities, the loss is relatively less. Therefore, open market operations are often restricted to dealings in short-term securities only.
4. Difficulties in execution. To execute a purchase policy by the central bank is not as difficult as the sale of securities in open market operations. Similarly, for commercial banks, a policy of credit contraction is easier to implement than a policy of expansion. Thus, by the operation of money factors alone, "open market operations can stop booms but cannot prevent slumps."
5. Precautions for stabilising the government securities market. Another drawback of the open market operations policy is that when a large-scale of securities is effected by the central bank, the prices of securities adversely affect bank assets and upset the government's borrowing programme. In such conditions, the central bank has to stabilise the securities market and, to that extent, the scope of open market operations to influence the credit situation is limited.

6. Assumption of a constant velocity. The theory of open market operations assumes that the circulation of bank deposits and legal tender money has a constant velocity. However, in practice, these conditional relationships are difficult to obtain always. In the first place, neither will the cash reserve of commercial banks, nor the quantity of money in circulation always increase or decrease in proportion to the purchase or sale of securities respectively by the central bank. This can happen if there is another disturbing factor operating simultaneously. For instance, the effect of the purchase of securities by the central bank on the supply of bank cash may be neutralised, partly or fully, by the outflow of capital, or by an unfavourable balance of payments or by the withdrawal of deposits by the public for hoarding purposes. Likewise, an inflow of capital or dishoarding may neutralise the effect of the sale of securities by the central bank.

Secondly, commercial banks do not always either expand or contract credit in accordance with the change in their cash reserves. According to De Kock, "there are many circumstances of money, economic or political nature, which may deter a commercial bank from employing increased cash reserves fully, if at all or from contracting credit when its reserves are reduced." Moreover, with regard to the relation between an increase in the credit base, *i.e.*, cash reserves, and the creation of credit, there are certain technical factors which must be taken into consideration by all banks. For instance, unless the banking system, as a whole, adopts a policy of credit expansion, the expanding banks would tend to lose some part of their cash reserves to the non-expanding banks and might, thus, be compelled to contract again.

In many countries, a rigid cash ratio is not maintained by the commercial banks and hence, open market operations are not effective. Thus, under favourable conditions of credit expansion and insufficient demand for credit on the part of borrowers, an increase in the cash reserves cannot produce its proportionate effect on credit expansion.

Notwithstanding these limitations, open market operations are a useful instrument of monetary policy. They constitute a more direct and effective way of controlling credit than the bank rate policy.

Usefulness of Open Market Operations

The open market operations policy of the central bank can serve the following purposes:

- (1) As a complementary to the bank rate policy it tends to enhance the efficacy of the bank rate. It may be used to prepare the ground for changes in the bank rate. When credit contraction is desired, the central bank may raise bank rates as well as sell securities in the open market, so that the cash reserves (credit base) of banks are also reduced. Conversely, when central bank may, at the same time, buy securities in the open market and, thus, provide additional cash to commercial banks to enable them to increase their advances.
- (2) It assists government borrowings. By purchasing government bills and bonds and such other securities when the prices are low and selling them when their prices are high, the central bank can maintain stability in the prices of government securities and thereby promote public confidence in the instruments of public debt.
- (3) It may be useful in contracting extreme trends in business by buying securities during periods of slack business and selling them in period of inflationary boom.
- (4) It may be adopted to influence the balance of payments position favourably. Open market sales operations, for instance, will have a contractionary effect on credit and a deflationary situation will develop so that the domestic price level will fall. Exports will be encouraged due to increased foreign demand on account of lower prices, whereas, imports will be restricted due to high costs of foreign goods. Thus, a favourable balance of payments will follow.

On these accounts, open market operations have come to be recognised as an important technique of monetary management. The growing importance of open market operations is due to the decline of bank rate as an instrument of credit control after the first war and the consequent need for another and more direct method. In the thirties, open market operations became necessary in order to implement the policy of cheap money.

Superiority of Open Market Operations

As a method of influencing money supply, open market operations are superior to bank rate because the initiative lies in the hands of the monetary authority, in the case of the former, while it rests with the commercial banks in the case of the latter. In other words, while bank rate policy is only an indirect way of controlling credit, open market operations are more direct. Moreover, the bank rate directly affects only short-term interest rates; long-term rates are affected only indirectly. Open market operations, on the other hand, have a direct influence on the prices of long-term securities and, therefore, on long-term interest rates. They have a direct and immediate effect on the supply of money and credit and, therefore, on money and interest rates. Thus, this method is largely used nowadays to influence interest rates in the country and prices of government securities in the market.

In the opinion of some economists, however, open market operations can achieve little. They can be successful only as a supplement to the discount rate policy. Keynes, on the other hand, maintains that open market operations, undertaken extensively and skillfully, could achieve the purpose without a discount rate policy, if they are supplemented by state organisation of investment or, failing this, by compensatory planning or public works. However, the general opinion is that open market operations must always be supplementary to the bank rate policy.

Relation between BRP and OMO

Both these weapons of credit control have their merits and demerits (as discussed above). Each, by itself, will not succeed in producing the desired result, and, therefore, must be supplemented by the others in order to be effective. For instance, when the bank rate is raised, with a view to controlling credit, open market sales of securities should follow so that credit contraction will be more effective. However, if the bank rate is raised and the open market purchase policy is adopted *simultaneously*, the rise in the bank rate will prove to be ineffective, because banks will then increase their cash reserve by selling securities.

They will not, then, feel the necessity of rediscounting bills. Conversely, if the open market purchase policy is adopted, with a view to credit expansion, a simultaneous decrease in the bank rate will help in achieving the desired goal.

In fine, therefore, it can be said that the efficiency of the bank rate and of the open market policy are interrelated. Open market operations are generally undertaken to prepare the market for changes in the bank rate, which has far reaching influence over the market.

However, as the Reserve Bank of India itself admitted, open market operations in India have not been solely designed to suit the role of a full fledged instrument of credit control. But, open market operations can be carried out for sundry purposes and some of these may achieve success in the underdeveloped money markets of the backward countries. These countries may very well undertake open market operations in order to neutralise seasonal movements in the economy. In busy seasons, the credit stringency can be relaxed by releasing excess liquidity through open market purchase operations.

In India, open market operations have been resorted to more for the purpose of assisting the government in its borrowing operations and for maintaining orderly conditions in government securities market than for influencing the availability and cost of credit. The objectives of what is called grooming the market, such as acquiring securities nearing maturity to facilitate redemption and to make available on tap a variety of loans to broaden the gilt-edged market, have been more striking features of the open market operations in India.

8.7.8 VARIABLE CASH RESERVE RATIO (VCRR)

The variable cash reserve ratio is comparatively new method of credit control used by central banks in recent times. In 1935, the U.S.A.'s Federal Reserve System adopted it, for the first time. In countries where the money market is unorganised or underdeveloped, increasing recourse is now taken to this method of credit control.

The variable reserve ratio device springs from the fact that the central bank, in its capacity as *Bankers' Bank*, must hold a part of the cash reserves of commercial banks. The minimum balances to be maintained by the member banks with the central bank are fixed by law and statutory powers have been conferred on the central bank to alter the quantum of these minimum reserves. The customary minimum cash reserve ratio is an important limitation on the lending capacity of banks. Thus, variations in the reserve ratio reduce or increase the liquidity and, consequently, the lending power of the banks also. Therefore, the cash reserve ratio is raised by the central banks also. Therefore, the cash reserve ratio is raised by the central bank when credit contraction is desired and lowered when credit is to be expanded.

Thus, like other techniques of monetary control, the variation of cash reserve requirements has a dual purpose; requirements can be lowered as well as increased. A reduction of reserve requirements immediately and simultaneously augments the lending capacity of all the banks. Conversely, raising a cash reserve ratio immediately and simultaneously reduces the lending capacity of all member banks. The fundamental assumption of this method is that the excess cash reserve (being the base of credit) realised through the lowering of the minimum reserve ratio, results in the expansion of credit, and similarly, the contraction of cash reserve due to the raising of minimum, cash reserve requirements will result in the contraction of credit.

Therefore, the reserve requirement ratio is a powerful instrument which affects the volume of excess reserve with commercial banks as well as credit creation multiplier of the banking system. To clarify the point, suppose commercial banks have Rs. 10 crores of total reserve funds with the central bank and that the legal cash reserve ratio is 10 per cent of the total deposits. If, with the existing deposits, the required reserves of the banks are Rs. 3 crores, the excess reserves amounting to Rs. 7 crores will support a tenfold (the multiplier being ten, as the reserve ratio is ten percent) increase in the deposits, *i.e.*, Rs. 70 crores of credit creation {Rs. 7 x (100/70) crores}. If, on the other hand, the reserve ratio is doubled, *i.e.*, if it is raised to 20 per cent, the required cash reserves are Rs. 6 crores, and the excess reserves would be Rs. 4 crores only. This excess reserve of Rs. 4 crores, with the 20 per cent reserve requirements, would obviously support only a fivefold (the multiplier now being 5) increase in the bank deposits *i.e.*, Rs. 20 crores of credit creation only {*i.e.*, Rs. 4 x (100/20) crores}. Thus, raising of the reserve requirements affect credit contraction, and conversely, a reduction in the reserve ratio brings about credit expansion.

OMO versus VRR

The variable reserve ratio, as an instrument of monetary control, is regarded as decidedly superior to open market operations in the following particulars:

- (i) The variable reserve ratio is a straight direct method of credit control. It can give results more promptly than open market operations. The cash reserves of a bank can be altered by just a stroke of the pen. A declaration by the central bank that commercial banks must maintain a large percentage of their deposit liabilities as balances with the central bank than they have been doing immediately decreases their deposits. Likewise, an expansion of credit can be promptly attained by reducing the minimum cash reserves to be maintained with the central bank.

Thus, the variations in reserve ratio reduce the time lag in the transmission of the effect of monetary policy to the commercial banking system. Aschheim, therefore, opines that "If results of the variation of reserve requirements were the same as the results of open market operations in all respects by the speed of transmission preference for the former weapons over the latter would be quite plausible."

- (ii) The successful working of open market operations requires a broad-based, developed, securities market. The variable reserve ratio has no such limitations. Thus, in countries where the securities market is not extensively developed, the variable reserve ratio has greater significance as a technique of monetary control.

- (iii) Large-scale open market operations may affect the value of government securities and, thus, there are chances of loss being incurred by the central government and commercial banks, because their assets consist of a large stock of government securities. The variations in reserve ratios, on the other hand, yield the desired results in the controlling credit, without fear of any such loss.

Unlike the open market operations, the variable reserve ratio is capable of functioning without "ammunition." Thus, it does not tend to increase or decrease the supply of earning assets of the central bank, a fear which is very significant from the point of view of central banking policy and treasury financing.

- (iv) The variable reserve ratio is applicable simultaneously to all commercial banks in influencing their potential credit-creating capacity. Open market operations affect only those banks which deal in securities.

Thus, some economists consider that the variable reserve ratio is "a battery of the most improved type" that a central bank can add to its armory. On the other hand, there are economists who opine that the variable ratio reserve has not yet developed as a delicate and sensitive instrument of credit control. To them, as compared to open market operations, the variable reserve ratio lacks precision in the sense that it is inexact, uncertain or rather clumsy as regards changes not only in the amount of cash reserve but also in relation to the place where these changes can be made effective. The changes in reserve involve larger sums than in the case of open market operations. Further, open market operations can be applied to a relatively narrow sector.

The variable reserve ratio is comparatively inflexible in the sense that changes in reserve requirements cannot be well adjusted to meet or localise situations of reserve stringency or superfluity. Moreover, the variable reserve ratio is discriminatory in its effect. Banks with a large margin of excess reserves would be hardly affected, while banks with small excess reserves would be hard pressed. This means that the variable reserve ratio always causes injustice to the small banks, often without reason. On this account, many economists favour open market operations rather than the variations in reserve ratio for achieving monetary control.

It has been suggested, however, that open market operations and the variable reserve ratio should be complementary to each other. A judicious combination of both will overcome the drawbacks of each weapon when used individually and produce better results. Thus, the suggestion is that the increase in reserve requirements, for instance, may be combined with an open market purchase policy rather than open market sales policy.

8.8 OBJECTS AND FUNCTIONS OF THE RBI

8.8.1 Objectives

The Preamble to the Reserve Bank of India Act, 1934 spells out the objectives of the Reserve Bank as: "to regulate the issue of bank notes and the keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage."

Prior to the establishment of the Reserve Bank, the Indian financial system was totally inadequate on account of the inherent weakness of the dual control of currency by the Central Government and of credit by the Imperial Bank of India. The Hilton-Young Commission, therefore, recommended that the dichotomy of functions and division of responsibility for control of currency and credit and the divergent policies in this respect must be ended by setting-up of a central bank called the Reserve Bank of India - which would regulate the financial policy and develop banking facilities throughout the country. Hence, the Reserve Bank of India was established with this primary object in view.

Another object of the Reserve Bank has been to remain free from political influence and be in successful operation for maintaining financial stability and credit.

The fundamental object of the Reserve Bank of India is to discharge purely central banking functions in the Indian money market, *i.e.*, to act as the note-issuing authority, bankers' bank and banker to government, and to promote the growth of the economy within the framework of the general economic policy of the government, consistent with the need of maintenance of price stability.

A significant object of the Reserve Bank of India has also been to assist the planned process of development of Indian economy. Besides the traditional central banking functions, with the launching of the five-year plans in the country, the Reserve Bank of India has been moving ahead in performing a host of developmental and promotional functions, which are normally beyond the purview of a traditional central bank.

As has been stated by the First Five Year Plan document, "central banking in a planned economy can hardly be confined to the regulation of the overall supply of credit or to a somewhat negative regulation of the flow of bank credit. It would have to take on a direct and active role, firstly, in creating or helping to create the machinery needed for financing developmental activities all over the country and secondly, ensuring that the finance available flows in the directions intended."

The Reserve Bank of India, as such, aims at the promotion of monetisation and monetary integration of the economy, filling in the "credit gaps" and gaps in the financial infrastructure, catering to the financial needs of the economy with appropriate sectorial allocation, as well as supporting the planners in the efficient and productive deployment of investible funds with a view to attain the macro-economic goals of maximisation of growth with stability and social justice.

Functions

The Reserve Bank of India performs all the typical functions of a good central bank. In addition, it carries out a variety of developmental and promotional functions attuned to the course of planning in the country.

Its major functions may be stated as follows:

- (1) Issuing currency notes, *i.e.*, to act as a currency authority.
- (2) Serving as banker to the government.
- (3) Acting as bankers' bank and supervisor.
- (4) Monetary regulation and management.
- (5) Exchange management and control.
- (6) Collection of data and their publication.
- (7) Miscellaneous developmental and promotional functions and activities.
- (8) Agricultural finance.
- (9) Industrial finance.
- (10) Export finance.

8.8.2 THE RBI AS CURRENCY ISSUING AUTHORITY

The Reserve Bank has the sole right to issue currency notes, except one rupee notes which are issued by the Ministry of Finance. The RBI follows a minimum reserve system in the note issue. Initially, it used to keep 40 per cent of gold reserves in its total assets. But, since 1957, it has to maintain only Rs. 200 crores of gold and foreign exchange reserves, of which gold reserves should be of the value of Rs. 115 crores. As such, India has adopted the "managed paper currency standard."

As a currency authority, the Reserve Bank provides different denominations of currency for facilitating the transactions of the Central and State Governments, and caters to the exchange and remittance needs of the public, banks as well as the Government departments.

The bank has established 14 offices of the Issues Department for the discharge of its currency functions. At all the other centres of the country, the currency requirements are met by the Bank through currency chests. Currency chests are maintained by the bank with the branches of the SBI group, Government Treasuries and Sub-Treasuries, and public sector banks

Currency Chest

A currency chest is a pocket edition of the Issue Department. The stock of notes and coins kept in the currency chests varies as per the needs of the respective areas served by the Treasury or an agency of the bank.

The following advantages are claimed for maintaining currency chests by the bank:

1. The currency chests provides remittance facilities to banks and the public.
2. They facilitate treasuries and bank branches to function by keeping relatively small cash balances.
3. They facilitate the exchange of rupee coins for notes, as well as the issue of new for old/soiled notes.

Above all, the Banking Department of the Reserve bank manages seasonal variations in currency circulation. In the busy season, the currency flow is expanded, in the slack season, it is contracted. During the busy season when there is an increased demand for cash from the public. It is first reflected in the depletion of the cash balances of the commercial banks and through them in the cash balances of the Banking Department. The Banking Department then transfers eligible securities to the Issue Department, on the basis of which the Issue Department issues more currency notes. This is how the currency expansion takes place. During the slack season, the process is reversed.

The following are the important provisions made under the RBI Act, 1934 regarding the issue of currency notes by the Reserve Bank:

- (i) The Issue Department of the Bank alone can issue notes of Rs. 2 and those of higher denominations.
- (ii) The assets of the Issue Department should be completely segregated from those of the Banking Department of the Reserve Bank.
- (iii) All the notes issued by the Reserve Bank of India are legal tender and are guaranteed by the Central Government.

- (iv) The design, form and material of the notes issued by the RBI should have the approval of the Central Government.
- (v) The Central Government is empowered to demonetise any series of the notes issued by the RBI.
- (vi) No stamp duty is payable by the RBI in respect of notes issued by it.
- (vii) The Central Government has to circulate rupee coins through the RBI only.
- (viii) The RBI is obliged to supply rupees coins in exchange for bank and currency notes or bank and currency notes in exchange for coins.

8.8.3 THE RBI AS A BANKER TO GOVERNMENT

The Reserve Bank of India serves as a banker to the Central Government and the State Governments. It is its obligatory function as a central bank. It provides a full range of banking services to these Governments, such as:

- (i) Maintaining and operating of deposit accounts of the Central and State Government.
- (ii) Receipts and collection of payments to the Central and State Governments.
- (iii) Making payments on behalf of the Central and State Governments.
- (iv) Transfer of funds and remittance facilities to the Central and State Governments.
- (v) Managing the public debt and the issue of new loans and Treasury Bills of the Central Government.
- (vi) Providing ways and means advances to the Central and State Governments to bridge the interval between expenditure and flow of receipts of revenue. Such advances are to be repaid by the government within three months from the date of borrowal.
- (vii) Advising the Central and State Governments on financial matters, such as the quantum, timing and terms of issue of new loans. For ensuring the success of government loan operations, the RBI plays an active role in the gilt-edged market.

- (viii) The bank also tenders advice to the government on policies concerning banking and financial issues, planning as well as resource mobilisation. The Government of India consults the Reserve Bank on certain aspects of formulation of the country's Five Year Plans, such as financing pattern, mobilisation of resources, institutional arrangements regarding banking and credit matters. The government also seeks the bank's advice on policies' regarding international finance, foreign trade and foreign exchange of the country. The Reserve Bank has constituted a sound research and statistical organisation to carry out its advisory functions effectively.
- (ix) The Reserve Bank represents the Government of India as member of the International Monetary Fund and the World Bank.

8.8.4 THE RBI AS A BANKER'S BANK AND SUPERVISOR

The Reserve Bank of India serves as a banker to the scheduled commercial banks in India. All the scheduled commercial banks keep their accounts with the Reserve Bank.

According to the Banking Companies' Act of 1949, originally, each scheduled bank had to maintain with the Reserve Bank of India a balance as cash reserves equal to 5 per cent of its demand liabilities and 2 per cent of its time liabilities. The Act, amended in 1962, specifies that 3 per cent of the total liabilities should be kept as reserve requirement.

The Reserve Bank of India serves as a clearing agent for commercial banks. It provides clearing and remittance facilities to the scheduled commercial banks at centres where it has offices or branches.

The Reserve Bank of India also serves as 'a lender of last resort' by rediscounting eligible bills of exchange of commercial banks during the period of credit stringency. The bank can, however, deny rediscounting facility to any bank without assigning any reason therefore.

In recent years, however, to contain inflationary pressures and to check heavy borrowings by commercial banks, the Reserve Bank with its tight and discretionary lending policy has been operating as a lender of 'regular resort' rather than of 'last resort.'

Supervision of Banks

Apart from being the bankers' bank, the Reserve Bank is also entrusted with the responsibility of supervision of commercial banks.

Under the Reserve Bank of India Act and the Banking Regulation Act, 1949, the Reserve Bank of India has been vested with a wide range of powers of supervision and control over commercial and co-operative banks.

The various aspects of the supervisory/regulatory functions exercised by the Reserve Bank may be briefly mentioned as under:

1. Licensing of Banks. There is a statutory provision that a company starting banking business in India has first to obtain a licence from the Reserve Bank. If the Reserve Bank is dissatisfied on account of the defective features of the proposed company, it can refuse to grant the licence. The bank is also empowered to cancel the license of a bank when it will cease to carry on banking business in India.
2. Approval of Capital, Reserves and Liquid Assets of Banks. The Reserve Bank examines whether the minimum requirements of capital, reserve and liquid assets are fulfilled by the banks and approves them.
3. Branch Licensing Policy. The Reserve Bank exercises its control over expansion of branches by the banks through its branch licensing policy. In September 1978, the RBI formulated a comprehensive branch licensing policy with a view to accelerate the pace of expansion of bank offices in the rural areas. This was meant to correct regional imbalance of the banking coverage in the country.
4. Inspection of Banks. The Reserve Bank is empowered to conduct inspection of banks. The inspection may relate to various aspects such as the banks' organisational structure, branch expansion, mobilisation of deposits, investments, credit portfolio management, credit appraisal, profit planning, manpower planning, as well as assessment of the performance of banks in developmental areas such as deployment of credit to the priority sectors, etc. The bank may conduct investigation whenever there are complaints about major irregularities or frauds by certain banks. The inspections are basically meant to improve the working of the banks and safeguard the interests of depositors and thereby develop a sound banking system in the country.

5. Control Over Management. The Reserve Bank also looks into the management side of the banks. The appointment, re-appointment or termination of appointment of the chairman and chief executive officer of a private sector bank is to be approved by the Reserve Bank. The bank's approval is also required for the remuneration, perquisites and post retirement benefits given by a bank to its chairman and chief executive officer. The Boards of the public sector banks are to be constituted by the Central Government in consultation with the Reserve Bank.
6. Control Over Methods. The Reserve Bank exercises strict control over the methods of operation of the banks to ensure that no improper investment and injudicious advances are made by them.
7. Audit. Banks are required to get their Balance Sheets and Profit & loss Accounts duly audited by the auditors approved by the Reserve Bank. In the case of the SBI, the auditors are appointed by the Reserve Bank.
8. Credit Information Service. The Reserve Bank is empowered to collect information about credit facilities granted by individual banks and supply the relevant information in a consolidated manner to the banks and other financial institutions seeking such information.
9. Control Over Amalgamation and Liquidation. The banks have to obtain the sanction of the Reserve Bank for any voluntary amalgamation. The Reserve Bank in consultation with the Central Government can also suggest compulsory reconstruction or amalgamation of a bank. It also supervises banks in liquidation. The liquidators have to submit to the Reserve Bank returns showing their positions. The Reserve Bank keeps a watch on the progress of liquidation proceedings and the expenses of liquidation.
10. Deposit Insurance. To protect the interest of depositors, banks are required to insure their deposits with the Deposit Insurance Corporation. The Reserve Bank of India has promoted such a corporation in 1962, which has been renamed in 1978 as the Deposit Insurance and Credit Guarantee Corporation.
11. Training and Banking Education. The RBI has played an active role in making institutional arrangement for providing training and banking education to the bank personnel, with a view to improve their efficiency.

8.8.5 EXCHANGE MANAGEMENT AND CONTROL

Under Section 40 of the Reserve Bank of India Act, it is obligatory for the bank to maintain the external value of the rupee.

The Reserve Bank of India is the custodian of the country's foreign exchange reserves. It has authority to enter into foreign exchange transactions both on its own and on behalf of the government. It is obligatory for the bank to sell and buy currencies of all the member countries of the International Monetary Fund to ensure smooth and orderly exchange arrangements and to promote a stable system of exchange rates.

The Reserve Bank of India has resorted to the technique of exchange control to allocate its limited foreign exchange resources according to a scheme of priorities.

In India, exchange control was introduced under the Defence of India Rules in September, 1939. It was, however, statutorily laid down by the Foreign Exchange Regulation Act of 1947. This has been again stipulated by the Foreign Exchange Regulations Act, 1973.

Objectives of Exchange Control in India

The primary objective of exchange control in India is to regulate the demand for foreign exchange for various purposes against the supply constraints. When the government finds a shortage of foreign exchange due to the low level of external reserves on account of deficit in the balance of payments, exchange control becomes necessary. Exchange control implies a kind of rationing of foreign exchange for the various categories of demand for it.

The Reserve Bank of India implements exchange control on a statutory basis. The Foreign Exchange Regulation Act, 1973 empowers the bank to regulate investments as well as trading, commercial and industrial activities in India, of foreign concerns (other than banking), foreign nationals and non-resident individuals. Moreover, the holding of immovable property abroad and the trading, commercial and industrial activities abroad by Indian nationals are also regulated by the Bank under exchange control.

The Reserve Bank manages exchange control in accordance with the general policy of the Central Government.

In India, exchange control is grossly related to and supplemented by trade control.

While trade control is confined to the physical exchange of goods, exchange control implies supervision over the settlement of payments - financial transactions pertaining to the country's exports and imports. Comparatively, exchange control is more comprehensive than trade control, since it covers all exports and imports as well as invisible and capital transactions of the country's balance of payments.

Under the present exchange control system, the Reserve Bank does not directly deal with the public. The bank has authorised foreign exchange departments of commercial banks to handle the day-to-day transactions of buying and selling a foreign exchange. Further, the bank has given money changer's licences to certain established firms, hotels, shops, etc. to deal in foreign currencies and traveler's cheques to a limited extent.

The Reserve Bank has issued some directions to the authorised dealers and money changers in dealing with foreign exchange which are published in the *Exchange Control Manual*.

Under exchange control, there is check on foreign travel. An Indian visiting abroad is given a fixed sum of foreign exchange only. The present limit is U.S. \$ 500.

There is exchange control on exports, whereby all exporters are required to make a declaration on the prescribed form from the customs/postal authorities that foreign exchange only representing the full export value of the goods has been or will be disposed of in a manner and within a period specified by the Reserve Bank and shall receive payment by an approved method. To facilitate export promotion, however, the bank issues blanket foreign exchange permits for lump sums for specified purposes to eligible registered exporters.

Similarly, all non-resident accounts are also governed by the exchange control regulations. There are various categories of non-resident accounts such as: (a) non-resident accounts, (b) ordinary non-resident accounts, (c) non-resident (external) accounts, and (d) blocked accounts.

"Non-resident bank accounts" refers to the accounts of the overseas branches and correspondents of authorised dealers.

"Ordinary non-resident accounts" are those which are maintained by Indians who have gone abroad for the purpose of employment, business or vacation. Balances in these accounts cannot be transferred abroad without the Reserve Bank's approval.

"Non-resident (External) Accounts" are meant to encourage Indians abroad to remit their savings to India.

"Blocked account" implies that the Reserve Bank is empowered to "block" the accounts in India if any person whether an individual, firm or company, resident outside India and to direct that payment of any sums due to that person may be made to such blocked account. In the normal course, balances in the blocked account cannot be invested in India.

The Foreign Exchange Regulation Act, 1973 also puts a check on foreign investment in India.

In short, in our country, the scheme of exchange control is largely governed by the Foreign Exchange Regulation Act, 1973.

Exercise :

1. What is meant by saving? What are the determinants of savings as identified by Keynes?
2. Explain the Saving-Investment relations as viewed by Keynes. What is the role of rate of interest in it?
3. Give an idea of the structure of the Indian Capital Market? What are the prospects of its growth?
4. What is the role of Banks in a modern economy? How many kinds of Banks generally exist in a modern economy?
5. What are the functions of a Central Bank? What is the importance of Central bank in monetary management?
6. State the functions of the Reserve Bank of India as the central banking agency in our country.
7. Write short notes on :-
 - (a) Open market operation
 - (b) Variable cash reserve ratio
 - (c) Weapons of credit control
 - (d) Exchange control

UNIT – X

PARALLEL ECONOMY

10.1 MAGNITUDE OF POVERTY IN INDIA

Poverty is a plague affecting all parts of the world and it has many faces and dimensions. One of the most important and most common manifestations of poverty is the denial of access to the basic necessities of human existence.

10.1.1 'Absolute' and 'Relative' Poverty

Poverty is multidimensional.

'Absolute' poverty is poverty below the breadline. Those who suffer from 'absolute poverty' have no guarantee that they will be able to meet the fundamental costs of living as a human being. The World Bank has fixed the norm of one dollar one person per day for this purpose.

A situation of need can also be expressed in terms of the living and working conditions of other members of the same society at the same time. In this sense, poverty is 'relative' to disparity of wealth and income. It is the extreme form of inequality in standards of living and degree of protection against insecurity. In this case, poverty applies to individuals and families whose income and other resources, including living conditions and the rules governing poverty, employment and labour, are distinctly below the average level of the society in which they live.

10.1.2 Extent of Poverty in India

In India, poverty has been defined as that situation in which an individual fails to earn income sufficient to buy him bare means of subsistence.

To quantify the extent of poverty and measure the number of 'poor' in the country, professional economists have made use of the concept of 'poverty line'. (The concept of the 'poverty line' was introduced in Indian economic analysis in 1971, it was first defined at the end of the nineteenth century in Great Britain.

Among these economists we may specifically mention the studies conducted by Bardhan, Minhas, Dandeknt and Ruth, Ojha, Ahluwalia, Veidyanathzm, Blmtyd lain and Tendulkar, Ravallion and Datt.

All of these studies do not look so much at the whole spectrum of income distribution in India as at the problem of poverty as such. More specifically, the question that has attracted attention most is whether the proportion of the population living below the 'poverty level' has increased or decreased in recent years.

Line of Poverty and Head-Count Ratio: In order to define the 'poverty line', all of these studies –

- have determined the minimum nutritional level of subsistence,
- have estimated the cost of this minimum diet,
- on the basis of the per capita consumption expenditure, have delineated the line of poverty.

Where changes in the magnitude of poverty have to be estimated between two different years, account has been taken of changes in the price level by using deflators of one type or another. Roughly, the same procedures are used in the various studies.

Most of these use the data generated by the NSSO through is consumption expenditure surveys, in which households are asked how much of different goods they consume. These surveys are expected to be representative as they are large surveys. Based on these surveys, NSSO publishes data which says how many persons have a monthly per capita consumption expenditure of say Rs. 0 Rs. 30, Rs. 31-50, Rs. 51-70, etc. Using this distribution one can estimate how many consumed less than the normative poverty line. Such estimates of poverty are also known as "Head-count ratio".

A problem with the head-count ratio is its insensitivity to the intensity of poverty. In other words, a head-count ratio simply measures the number of poor below the poverty line. It does not tell us anything about the income shortfall of the poor.

It may be desirable to group the poor into, say, three distinct categories, viz. (i) the most destitutes, (ii) the destitutes, and (iii) the poor. There are a number of analytical and policy uses to which the disaggregated information can be put to.

The discrepancy between the structures of minimum wages and the poverty line can be easily calculated,

If the official poverty line may be deemed to define the society's norm of subsistence, it would be possible to determine with fair precision the two lower levels of subsistence,

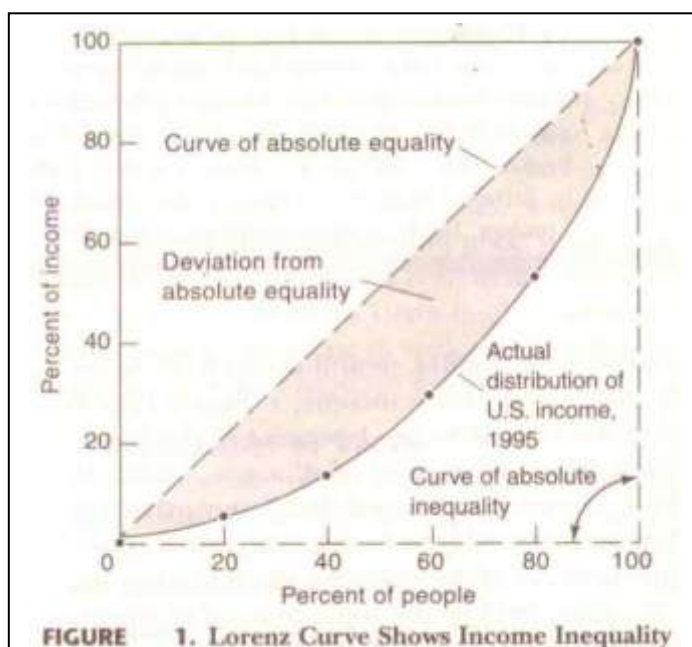
The other correlates of poverty, such as, low calorie intake resulting in low physical strength, perhaps also insufficient development of mental faculties which go with poor education and low educational potential, and low trainability, can be scientifically investigated to determine at least the magnitude of the problem of those families which lie deeply entrapped in these kinds of vicious circles and have lost the ability to escape.

A large body of economists also seems to share this view. What is required is a measure of poverty that includes fulfillment of certain basic human needs.

10.2 How to Measure Inequality among Income Classes

How can we measure the degree of income inequality? At one pole, if incomes were absolutely equally distributed, there would be no difference between the lowest 20 per cent and the highest percent of the population: Each would receive exactly 20 percent of the total income. That's what absolute equality means.

The reality is far difference. The lowest fifth, with 20 percent of the households, garners less than 4 percent of the total income. Mean while the situation is almost reversed for the top 5 percent of house holds, who get more than 20 percent of the income.



We see that the solid rust-colored actual distribution-of income curve lies between the two extremes of absolute equality and absolute inequality. The shaded area of this Lorenz curve (as a percentage of the triangle's area) measures relative inequality of income. (How would the curve have looked back in the roaring 1920s when inequality was greater? In a Utopia where all have equal inheritances and opportunities?)

We can show the degree of inequality in a diagram known as the Lorenz curve, a widely used device for analyzing income and wealth inequality. Figure - 1 is a Lorenz curve showing the amount of inequality listed in the columns of Table-A; that is, it contrasts the patterns of (1) absolute equality, (2) absolute inequality, and (3) actual 1995 American inequality.

Absolute equality is depicted by the gray column of numbers in column (4) of Table-A. When they are plotted, these become the diagonal dashed rust-colored line of Figure 1's Lorenz diagram.

At the other extreme, we have the hypothetical case of absolute inequality, where one person has all the income. Absolute inequality is shown in column (5) of Table A and by the lowest curve on the Lorenz diagram—the dashed, right-angled black line.

Any actual income distribution, such as that for 1995, will fall between the extremes of absolute equality and absolute inequality. The rust-colored column in Table-A presents the data derived from the first two columns in a form suitable for plotting as an actual Lorenz curve. This actual Lorenz curve appears in Figure 1 as the solid rust-colored intermediate curve. The shaded area indicates the deviation from absolute equality, hence giving us a measure of the degree of inequality of income distribution. A quantitative measure of inequality that is often used is the Gini coefficient, which is 2 times the shaded area.

Distribution of Wealth

One source of the inequality of income is inequality of ownership of wealth, which is the net ownership of financial claims and tangible property. Those who are fabulously wealthy - whether because of inheritance, skill, or luck - enjoy incomes far above the amount earned by the average household. Those without wealth begin with an income handicap.

(1)	(2)	(3)	(4)	(5)	(6)
Income class of households	Percentage of total income received by households in this class	Percentage of households in this class and lower ones	Percentage of Income received by this class and lower ones		
			Absolute equality	Absolute Inequality	Actual distribution
			0	0	0.0
Lowest fifth	3.7	20	20	0	3.7
Second fifth	9.1	40	40	0	12.8
Third fifth	15.2	60	60	0	28.0
Fourth fifth	23.3	80	80	0	51.3
Highest fifth	48.7	100	100	100	100.0

Table A : Actual and Polar Cases of Inequality

By cumulating the income shares of each quintile shown in column (2), we can compare in column (6) the actual distribution with polar extremes of complete inequality and equality.

In market economies, wealth is much more unequally distributed than is income, as Figure 2(b) shows in the United States; 1 percent of the house-holds own almost 40 percent of all assets. Studies by New York University’s Edward Wolff show that the distribution of wealth has become much more unequal. Because of the booming stock market, the share of wealth held by the top 1 percent of people has doubled over the last two decades. Given the sharp and growing increases in wealth inequality, Wolff, along with legal scholars Bruce Ackerman and Anne Alston, have proposed that the United States consider instituting a progressive wealth tax to go along with its progressive income tax.

The vast disparities in ownership of wealth have spurred radicals over the ages to propose heavy taxation of property income, wealth, or inheritance. Revolutionaries have agitated for expropriation by the state of great accumulations of property. In recent years, a more conservative political trend has muted the call for redistribution of wealth. Economists recognize that excessive taxation of property income and wealth dulls the incentives for saving and may reduce a nation’s capital formation. Particularly in a world of open borders, countries with high tax rates on wealth may find that the wealth has fled across the borders to tax havens or Swiss bank accounts.

Poverty is caused primarily by unemployment. As a matter of fact, poverty and unemployment go together. The concept of employment is however a complex phenomenon. This is because it has to be related by some notion of value of the work accomplished. The question of valuation is thus very important in this context. Employment cannot always be defined in terms of physical activity only.

The production may arise in the intellectual field or in the aesthetic field, provided it has demand in the commercial sense. The complexity in the field of employment is further aggravated by the fact that a host of activities in an under-developed economy take place in the sphere of self employment that does not bear any record.

Widespread are the “unpaid family labour” for an economy of peasants and artisans where the concept of employment practically loses its straightforward meaning and economic activities merges into the wider complex of family based production. Thus, a huge non-money economy exists side by side with exchange economy but nevertheless adds to the G.N.P.

According to economists, there are three important aspects of employment – the (i) income aspects, the (ii) production aspects and the (iii) recognition aspects. On the one hand, employment begets income to the labour, it generates production for the consuming society and again it gives a recognition or position in the society to the person concerned. Without employment, a person virtually is pushed out of the economic world as a participant. Employment can thus be a factor in self-esteem and indeed in esteem by others.

Full Employment

The concept of full employment is not easy to define. In a very simple version, it may mean that the total available supply of labourer is completely absorbed in gainful employment. There is voluntary unemployment in every society. There is frictional unemployment too.

According to Lerner, full employment means that those, who want to work at the prevailing wage rate are able to find work. Beveridge on the other hands defines full employment in way which means, having always more vacant jobs than unemployed man. It means that jobs are at fair wages, of such kind and so located and the unemployed man can reasonable be expected to take them.

Mrs. John Robinson categorically says that frictional unemployment cannot be considered as being consistent with full employment. In her opinion it is difficult to demarket unemployment which is due to frictions and unemployment which is due to deficiency of effective demand. However, in macroeconomic analysis, full employment is viewed as an equilibrium situation in which sum of demands in all labour markets tends to be equal to the sum of the supplies, though of course, there may be excess or deficiency in some pockets.

Unemployment may be open or disguised. The term 'disguised unemployment', is a common feature of an under-developed economy. It refers to a situation of employment with surplus man power in which some workers have such low marginal productivity that their removal from services will not affect the volume of total output; on the contrary, it may leave the aggregate product even increasing.

THREE SECTORS OF ECONOMY

It is necessary to understand that value-addition takes place in the region where employment is created for the purpose of production. Thus, if raw material is produced in one country but industrially processed for value-addition in another country, the other country is enriched by way of employment and addition to G.D.P. In this way the rural sector of economy generally produces the primary products, by operating on natural resources in the sphere of agriculture, animal husbandry, forestry, poultry, pisci-culture, etc. Thus, it is called the primary sector of economy.

In the next place, the secondary sector comprises value-addition in manufacture or industries by transforming primary products into improved consumable items. This operation mostly takes place in urbanized regions and are said to constitute the secondary sector of the economy. But, that is not all. In order that consumable items reaches the doors of the consumers, some more inputs become necessary, like transportation, wholesale and retail shopping, financing of all the productive ventures, settlement of disputes, maintenance of law and order and requirement of governmental administration. All these purposes are served by services rendered in the third sector of economy known as the tertiary sector. Since an appropriate stage of density of population as well as bigger size of human settlement is required to sustain such activities, the tertiary sector is a marked feature of the urban region.

Thus, the entire issue of division of economy in different sectors – primary, secondary and tertiary, has to be understood in the context of demographic patterns, reflected in level of urbanization together with economic factor like level of industrialization and the social factor reflected in level of education, health, motivation and efficiency of the people in the performances of production as well as rendering of services.

From valuation point of view all these factors are extremely important in-as-much as the valuation of real estate or plant and machinery depends upon the productivity of the different agents of production like land, labour, capital and organization. In assessing a long-term view of the prospect of value-addition considered in the perspective of the forces at work in the above demographic, economic or social fields and even the political scenario at large claim serious consideration. The treatment of the entire micro economic as well as macro economic issues thus deserves particular focus from the valuation angle.

10.3 PARALLEL ECONOMY (Black Economy)

A particular feature that holds back the economic progress of the country of the third world requires also to be discussed in the realm of economics. As we have seen the urban-rural relationship is an important factor in economic analysis, since rural areas have predominantly primary sector to thrive on, while the urban sector comprises the economic activities in the secondary and tertiary sectors. In the modern world, urbanization is taken as an index of economic development as it means the harbouring of a growing secondary sector and fast growing tertiary sector therein. A note of warning need be added while increasing the rate of urbanization as a marked feature of developing countries.

The growing urbanization of developing countries means high rate of immigration of population from rural to the urban sectors. Two classes of people are generally marked out as migrants – the upper class comprising the richer section in quest of better amenities of life and the poorer section in search of employment driven by loss of work in the rural hinterland. These people of the poorer section find accommodation in the informal sector of economy comprising day labours, masons, hawkers, vendors, pavement sellers and similar segment who struggle to eke out a living.

While the flight of richer section deprives the rural economy of adequate purchasing power to sustain a healthy market in the rural sector, the flight of poorer section only deteriorates the urban-economic scenario by swelling an informal sector which remains out of tax net and frustrates monetary measures initiated by the government. However pitiable are the condition in general, there are quite a few who escape the tax-net along with other businessmen and traders in no small measure.

Let us now discuss the parallel economy that is known as underground economy comprising the unreported transactions, the magnitude of which is a major headache.

The parallel economy arises out of the following manner of distorted growth pattern. The economy gets divided in the three following sectors:

- (i) Formal sector
- (ii) Informal sector
- (iii) Illegal sector

The formal sector is suppose to comprise all transactions that are exposed to fiscal intervention and line within the ambit of the influence of the monetary policy pursued by the government. Here, too parallel economy has made a headway by underhand dealings in bribery, corruption and other abuses that have become a part of civic life. Donations to political parties from unaccounted sources constitute another big threat. In this way, the parallel economy grows by abusing the formal sector by using an illegal sector that comprises disbanded activities like drug trafficking, arms selling, etc. and by tolerating an informal sector which has become an unavoidable imperative to provide self-employment at large to helpless people who cannot be employed otherwise.

10.4 BLACK ECONOMY IN INDIA

10.4.1 Meaning

It is well known that there is a large amount of money income and wealth which has been and is being made and / or owned which is unaccounted in our tax system and, therefore, has not suffered tax. This unaccounted economic sector is referred to as black economy (alias the parallel economy, the underground economy, the unreported economy etc.).

We might distinguish here between 'black money' and 'black income'. While black money is a stock at a point of time, black income is a flow over a period of time. For policy purposes, the correct concept is that of black income, rather than black money

The black economy in India has been a matter of concern for a number of years. It has grown to enormous dimensions. It has become a threat to the ability of the official monetary—credit policy mechanisms to manage demand and prices in several vulnerable sectors of the economy. The fact is that it has permeated every section of society.

10.4.2 Magnitude of Black Economy

A number of efforts have been made to estimate the quantitative dimensions of the problem in the economy: A numerical review of the estimates given by the various economists and others reveals that almost all of them show a growing quantity of black income relative to GNP as well as in absolute terms. The aggregate of black income generated is estimated to have gone up from Rs. 50,977 crores in 1980-81 to Rs.10,50,000 crores in 2006-07. The process has only further accelerated due to ongoing liberalisation.

Raja J. Chelliah has estimated that black money is generated at the rate of 20 per cent of country's GDP. The corresponding figures were between 0 and 20 per cent for the EU, 15 per cent for U.S.A., 30 per cent for Italy and 25 per cent for France.

10.4.3 Causes of Black Economy

More important causes of black economy can be discussed as follows:

Level and Structure of Taxation: High effective rates of taxation are a major contributory factor to tax evasion and black income generation in India. Improved tax compliance can result from significant and sustained reductions in the effective tax burdens of those who are liable to tax.

As regards the composition of tax structure, it is generally believed that indirect taxes on commodities are more difficult to evade than direct taxes on income and wealth. That is why countries at earlier stages of development normally rely much more heavily on indirect taxes than more developed nations. Thus, there is some presumption that as a country develops over time the composition of its tax revenue would gradually shift in favour of direct taxes. It is urgent to increase the tax-net rather than enhance the tax-net.

Weaknesses in Tax Administration: The performance of the tax administration in India has been poor by international standards and has been deteriorating over the years. A recent study on the subject identifies the following as the causes of this:

- Information system. It is primitive and tamper-prone.
- Organisational structure. Functional specialisation is lacking leading to failure to integrate various information sources available in assessments and prosecution.
- Manpower policies. No serious efforts have been made to adopt incentive systems that induce tax officials to detect or attempt to prosecute tax evasion.
- Penalty and prosecution. These are increasingly oriented towards the punishment of technical violations rather than tax evasion.

Pervasive Controls: The controls violate basic economic law of demand and supply and create artificial scarcities by curtailing production, and (or supply) by inducing excessive demand by purchasers. They become a bee-hive of black income dealers, and producers in black markets; administrators of controls get their share in black incomes.

Public Expenditure Programmes: The black-market economy has also received sustenance from the poor design and faulty administration of many public expenditure programmes in India, usually through illegal leakages in these expenditures. Public savings have been cheated of taxes on these ill-gotten income, and the programmes' unit costs have also increased.

Inflation: Inflation generates black income in several ways.

- With a progressive income (and wealth) tax structure, defined with respect to nominal values, inflation increases the effective burden of taxation at any given level of real income (and wealth), and hence the incentive to evade.
- General inflation encourages illegitimate transactions. It is usually accompanied by pronounced scarcities and windfall gains in certain sectors which are unlikely to be fully declared to the tax authorities.
- Inflation hits hard fixed salaried income groups which include government servants. The pinch of inflation reduces their real income and as such they start misusing their official position by accepting bribes, etc, This generates black money.

Political finance It is widely believed that black money has become an important operational component of the Indian economy with many diverse links with the political system. The functioning of the political parties and system of election laws had been identified as a significant factor in black income generation by the various expert committees.

Standards of Public Morality: There has been a general deterioration in our moral standards. We may quote Prof B.B. Bhattacharya in this context, when he remarks: "Before 1991, money making was not considered a virtue. The significant change since liberalisation is that being rich is now all important and people, whether a professor, a musician or an industrialist, are evaluated in income earnings". This change is motivating people to be corrupt.

High Cash-intensity: The cash-GDP ratio in India, called cash—intensity, works out to about 10 per cent (against 3 to 4 per cent in advanced countries like UK, France, Switzerland, Germany, Japan, Belgium, Netherlands, etc.). The greater the cash transactions in an economy, the greater is the scope for money laundering without detection.

In addition, a peculiar phenomenon which is associated with the black money is the constant interchange between the black and white economies. The extent of this change too is very high. Various methods are adopted to convert black money into white and *vice-versa*.

10.5 Effects of Black Economy

Effect of black money on the state of economy can broadly be discussed under the following heads:

Misinformation About the Economy: The most obvious effect of substantial black money is misinformation about the actual state of the economy because it remains outside the purview of the economic policies. The presence of a sizeable black money casts doubts on the validity of the data on national income estimates, distribution of incomes, consumption, savings and the distribution of investment between public and private sectors. The economic planning loses effectiveness and important economic decisions are rendered meaningless because they are based on macroeconomic indicators which ignore the large black money component.

Impact on Fiscal System: Evasion of taxes has serious consequences for the economy's fiscal system. The most obvious effect is that the Government is deprived of large amounts of tax revenue.

The long-run consequence of such revenue loss is to reduce the built-in elasticity of the tax system. To raise a given target of revenue the Government is obliged to depend increasingly on discretionary hikes in tax rates or to expand the array of taxes. Both the measures have undesirable effect on the economy. While, as the first measure gives inducement to avoidance and evasion of tax, the second measure is bound to make an already complex tax structure more complicated.

Implications for Resource Allocation: It distorts resource allocation in the economy and often leads to wasteful use of money. Black money leads to conspicuous consumption and in turn results in the diversion of large funds to unproductive channels which ultimately put the economy out of gear.

Effects on Income Distribution: The household with a higher proportion of black income are more likely to understate their true incomes and to do so to a greater degree. With the given progressive structure of income taxation, the incentive to make black income through under statement of legal source incomes clearly increases with increase in income. So we should expect richer households to earn proportionately greater black incomes through this means. In this way, the distribution of income becomes even more skewed in favour of the rich with the growth of black money. The last manifestation of this is the Report of the IMF that over Rs. 1,800 crores are stashed away illegally in secret accounts in one country, Switzerland, by Indian nationals.

Implications for Monetary Policy: As regards stock dimensions of black money it is related to the stock of 'black liquidity'. The stock of 'black liquidity' is defined as the accumulation of black savings (from black incomes) in the form of cash and other readily convertible assets such as gold and silver. It is this 'black liquidity' which creates a lot of problems for monetary authorities to regulate the economy. Even the selective credit control measures which aim at regulating the flow of credit into particular uses and diverting credit from the less urgent to the more urgent uses in the economy are rendered ineffective owing to the existence of sizable 'black liquidity' in our country. In fact, it renders all the anti-inflationary policies of the monetary authorities ineffective.

Black Income and Inflation: Black income is more a cause and less an effect of inflation. Black operation lie at the root of fiscal deficit of the government, which is largely responsible for "excessive" increases in high-powered money and so in money supply in India year after year.

Above all, what Wanchoo Committee observed more than three decades ago still holds true: "One of the worst consequences of black money and tax evasion is, in our opinion, their pernicious effect on the general fibre of society. They put integrity at a discount and place a premium on vulgar and ostentatious display of wealth. It is, therefore, no exaggeration to say that black money is like a cancerous growth in the country's economy which, if not checked in time, is sure to lead to its ruination."

10.6 Remedies

The various measures adopted by the government to deter income tax evasion and unearth black income can be studied under three parts, viz. (1) measures to deter tax evasion, (2) measures to unearth black money, and (3) new measures for dealing with black money.

Measures to Deter Tax Evasion

The statutory obligations of taxpayers include compulsory filing of tax returns by everyone with a taxable income, compulsory maintenance of accounts by businessmen and professionals and their compulsory auditing if income or turnover exceeds a specific limit, compulsory canalising of transactions involving payment exceeding Rs. 20,000 through banks, etc. However, in actual sense, these statutory provisions have not made much difference. The self-employed continue to escape the tax net either by not filing returns or by filing false returns with grossly under reported incomes.

Use of PAN

All income-tax payers are required to get a permanent account number (PAN) from the income tax department. A provision has been made for the compulsory mention of PAN or GIR in certain high value transactions. With increased usage of computerisation the data will be fully utilised for increasing the tax base and for preventing the leakage of revenue.

Surveys

To bring new assesseees into the tax net and strengthen the information base for the detection of tax evasion by existing assesseees, a general survey is conducted by the income tax department. While the surveys have increased substantially the number of taxable new assesseees each year, the realised gain is much below the expected potential.

Tax Raids and Seizures

Raids are conducted from time to time, by the tax enforcement machinery, on the premises of the people who are suspected of possessing black money. After the raids, wide publicity is usually given to the amount of money, or other assets that are seized. But a large part of these have to be returned to the owners, presumably because acceptable evidence incriminating the owners cannot be produced in the court of law. Hence, raids fail to make the desired impact.

Penalties and Prosecutions

To discourage tax evasion, tax laws also provide for monetary penalties and for the prosecution (and imprisonment) of tax evaders. However, in actual practice, penalties have been imposed on only a very small proportion (less than one per cent) of total Assessments and these, too, have been pitifully small.

The Settlement Commission

Following the recommendations of the Wanchoo Committee (1971), the Settlement Commission was established in 1976. Its objective was to provide a mechanism for the quick and final disposal of those cases where a tax evader was willing to make a confession and face the consequences.

Monitoring of Banks' Transactions

In a bid to curb black money transactions in the banking system, the RBI has directed all commercial banks to submit details of all cash deposits and withdrawals of Rs. 10 lakh and above to the central bank.

It is urgent to release the country from the octopus grip of a black economy so that a healthy foundation of economic growth can be laid amidst a globalised world.

Exercise :

1. Define poverty in “absolute” and “relative” terms. Depict poverty as measured in the Lorenz Curve shown in the diagram.
2. Describe how the economy is usually said to comprise in three sectors. How this division in three sectors matches with the level of urbanization?
3. What do you understand by ‘informal sector’ in an economy? Explain how the growing urbanization lead to an informal sector in the developing countries.
4. What do you understand by ‘parallel economy’? How does it arise?
5. What are the effects of a parallel economy or black economy and how to combat it in the situation prevailing in our country?
6. Write short notes on :-
 - (a) Full employment
 - (b) Illegal sector
 - (c) Black income

BOOK KEEPING AND ACCOUNTANCY

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SECTION I

ACCOUNTING CONCEPTS AND CONVENTIONS

Introduction

The basic purpose of accounting statements like the final accounts, cash flow statements etc is to provide financial information about an organization to the interested parties like investors, financial institutions, government, owners, management and even employees. Comparison of various organizations in respect of performance, profitability etc is possible only when there is complete uniformity in the preparation of the accounting statements or else there will be total confusion. In order to have consistency, financial accounting operates within the framework of what is called, as Generally Accepted Accounting Principles or what is popularly known as GAAPs.

Accounting principles

Accounting Principles refer to general laws or rules adopted in accounting as a guide or action or as the basis of conduct of practice. It should have universal acceptability. The language of accounting should be understandable to the persons to whom the communication is made. In order to communicate the message in the same sense in which it is sought to be conveyed to them, a number of principles have been agreed upon and followed by accountants in writing of accounts and in the presentation of financial statements. **It is therefore essential to standardize the accounting principles and policies in order to ensure Transparency, consistency and comparability. Accounting principles can be divided in to Accounting concepts and Accounting conventions.**

Accounting concepts

Accounting concepts generally mean postulates, assumptions or conditions upon which accounting are based. They have developed to make accounting convey the same meaning to all the people as far as practicable. There are a number of accounting concepts agreed upon by accountants. They are as follows –

- 1) **Concept of Entity** – For accounting purposes the owner of the business is treated as separate from the business, there can be transactions between the owner and his own business. For example every person acts in two different capacities i.e. at home Ramesh and in business Ramesh & co. This concept helps in keeping private affairs of the proprietor away from the business affairs.

Thus if proprietor invests Rs.1,00,000/- in the business, it is deemed that the proprietor has given Rs.1,00,000/- to the business and it is shown as liability in the books of the business because business has to ultimately repay it to the proprietor. Similarly if proprietor withdraws Rs.10,000 from business it is charged to him.

- 2) **Concept of Dual aspect** – This is the basic concept of accounting. As per this concept, every business transactions have a dual effect. For **example** Manohar started business with cash Rs.1,00,000/- there are two effects of this transactions: Asset Account and Capital Account. The business gets Asset (Cash) of Rs.1,00,000 and on the other hand the business owes Rs.1,00,000 to Manohar as capital. This can be expressed in the form of an equation as follows:-

$$\text{Capital} + \text{Liabilities} = \text{Assets.}$$

$$1,000 + 2,000 = 3,000$$

Thus the total Assets are always equal to total liabilities.

BALANCESHEET

Liabilities	Rs.	Assets	Rs.
Capital (Pc)	1,00,000	Assets	1,10,000
Liabilities (Pc)	10,000	(Pd & Rd)	
	1,10,000		1,10,000

Note: - In other words the total of both sides of the balance sheet should tally.

The Balance Sheet or financial statement which is part of accounting tallies because of the following reasons:-

- Increase of one asset and Decrease of another asset.
- Increase of one liability and Decrease of another liability.
- Increase of an asset and simultaneously increase of a liability.
- Decrease of an asset and simultaneously decrease of a liability.

- e. Increase of a liability and simultaneously increase of an asset.
- f. Decrease of a liability and simultaneously Decrease of an asset.

3) **Concept of going concern** – It is assuming that business will continue for a fairly long time, unless and until it has entered into a state of liquidation. It is as per this assumption that the accountant does not take into account forced sales value of assets while valuing them. Similarly, depreciation on assets is provided on the basis of expected lives of the assets rather than their market values.

Since the concern is kept continuously alive for a long period of time, financial and accounting policies are directed towards maintaining such continuity of activity.

Example: It is generally assumed that the business will not liquidate in the near foreseeable future because of going concern.

4) **Realisation concept** – According to this concept profit should be accounted only when it is actually realized. Revenue is recognized only when a sale is affected, or the services are rendered. A sale is considered to be made when the property in goods passes to the buyer and he is legally liable to pay. However, in order to recognize revenue receipt of cash is not essential. Even credit sale results in realisation as it creates a definite asset called Account Receivable.

Incomes like commission, interest, rent etc are shown in profit and loss account on accrual basis though they may not be realized in cash on the date of preparing accounts.

Example: A machine was purchased for Rs.1,00,000 on 01.01.2006 and on 31.12.2006 its net realization value was Rs. 1,50,000. Do you prefer to count this profit? If you count which concepts will be violated – Realisation.

5) **Accrual concept** – The accrual system is a method whereby revenues and expenses are identified with specific periods of time like a month, half year or a year. It implies recording of revenues and expenses of a particular accounting period whether they are received/paid in cash or not. Under cash system of accounting, the revenues and expenses are recorded only if they are actually received or paid in cash irrespective of the accounting period to which they belong to. But under accrual method, the revenues and expenses relating to that particular accounting period only are considered.

6) **Concept of accounting period** – Though the life of the business is indefinite, the measurement of income and studying the financial position of the business after a very long period would not help in taking timely corrective steps or to enable periodic distributions of income to proprietor with reasonable safety. Therefore it is necessary for the concern to stop at regular intervals and see back how it is fairing.

An accounting period is the interval of time at the end of which income statements and financial position statements are prepared to know results and resources of the business. Although shorter periods are frequently adopted for purposes of comparative studies, the normal accounting period is twelve months.

Example: Economic life of an enterprise is split into the periodic interval as per going concern concept.

- 7) **Money measurement concept** – In accounting everything is recorded in terms of money. Events or transactions which cannot be expressed in terms of money are not recorded in the books of accounts, even if they are very important or useful for the business. Purchase and sale of goods, payment of expenses and receipt of income are monetary transactions which find place in accounting etc. death of an executive, resignation of a manager are the events which cannot be expressed in money.

Example: Human assets have no place in accounting records is based on Money measurement.

Example: According to money measurement concept, currency transactions and events are recorded in the books of accounts in the ruling currency of the country in which transaction takes place.

- 8) **Cost concept**. – According to this concept cost price is the basis for recording the asset in the books of accounts. The current market value or realizable value shall not be considered in recording the capital assets. The cost means the historical cost at which these assets are actually acquired. This cost generally means the expenditure incurred to bring an asset in to its present working condition and location. Their current realizable value may be more or less than cost, but it should be ignored. It should be noted that cost concept does not specify that asset should appear in the balance sheet as cost only. It will be recorded at cost price and then subsequently depreciated as per the rates prescribed.

a) **Example:** “Assets should be valued at the price paid to acquire them” is based on Cost concept

b) **Example:** If a machinery is purchased for Rs. 1,00,000 the asset would be recorded in the books at Rs. 1,00,000 even if its market value at that time happens to be Rs. 1,40,000. In case a year after, the market value of the asset comes down to Rs. 90,000 it will ordinarily continue to be shown at Rs. 1,00,000 and not Rs. 90,000 due to Cost concept.

Cost attach concept – An asset is recorded at its cost and cost is calculated after considering cost attach concept. According to this concept, the expenditure incurred in connection to an asset should be considered for making valuation of its cost. It means individual costs are not relevant but all the related costs should be attached or merged. After attaching or adding such related costs, it is possible to have meaningful information regarding actual cost.

a) Example:

Expenditure incurred for bringing the asset in to working condition should be added to the cost of asset because they are related to each other. But expenditure incurred for maintaining the asset in working condition is not added to the cost of the asset because such expenses are recurring and they are not related to the cost of assets.

b) Example:

For calculating cost of finished goods not only the cost of raw materials is considered but also the cost of wages and other manufacturing expenses are required to be considered as they are related to each other.

c) Example:

RPG Ltd. purchased equipment from PQR Ltd. for Rs. 50,000 on 1st April, 2005. The freight and carriage of Rs. 2,000 is spent to bring the asset to the factory and Rs. 3,000 is incurred on installing the equipment to make it possible for the intended use. The market price of machinery on 31st April, 2006 is Rs. 60,000 and the accountant of the company wants to disclose the machinery at Rs. 60,000 in financial statements. However, the auditor emphasizes that the machinery should be valued at Rs. 55,000 (50,000+2,000+3,000) according to historical cost concept.

d) Example:

Mr. A purchased a machinery costing Rs. 1,00,000 on 1st October, 2005. Transportation and installation charges were incurred amounting Rs. 10,000 and Rs. 4,000 respectively. Dismantling charges of the old machine in place of which new machine was purchased amounted Rs.10,000. Market value of the machine was estimated at Rs. 1,20,000 on 31st March, 2006. While finalizing the annual accounts. A values the machinery at Rs. 1,20,000 in his books. So cost concept was violated by A.

e) Example:

Any expenses such as Tea, break fast etc is incurred at the time of Travelling should be debited to Travelling expenses account and not to the sundry expenses account as per cost attach concept.

9) **Periodic matching of cost and revenue concept** – This concept is based on accounting period concept. Making profit is the most important objective that keeps proprietor engaged in the business activities. It is necessary to match revenues of that period with the expenses of that period. Profit earned by the business during a period can be measured only when the revenue earned by the business during period can be compared with the expenditure incurred to earn that revenue. The question when payment was made/received is irrelevant. Therefore as per this concept, adjustments are made for all outstanding expenses, prepaid expenses, income receivable and income received in advance.

a) **Example:** Mohan purchased goods for Rs. 15,00,000 and sold 4/5th of the goods amounting Rs. 18,00,000 and paid expenses amounting Rs. 2,70,000 during the year, 2005. He paid Rs. 5,000 for an electricity bill of Dec, 2004 and advance salaries amounting Rs. 15,000 was paid for the month of Jan. 2006. He counted net profit as Rs. 3,50,000. The profit calculated by him is correct according to matching concept.

b) **Example:** The determination of expenses for an accounting period is based on the principle of Matching

10) **Verifiable objective evidence concept** – According to this concept all accounting transactions should be evidenced and support by objective documents. These documents include invoices, contracts, correspondence, vouchers, bills pass book, cheque books etc. such supporting documents provide the basis for making accounting entries and for verification by the auditors later on. This concept also has its limitations. For example, it is difficult to verify internal allocation of costs to accounting periods.

Conventions of Accounting – Accounting conventions refer to customs, Traditions, usages or practices followed by accountants as a guide in the preparation of financial statements. They are adopted to make the financial statements more clear and meaningful. Following are some of the accounting conventions followed

1) **Convention of Disclosure** – This means that the accounts must be honestly prepared, and they must disclose all material information. The accounting reports should disclose full and fair information to the proprietors, creditors, investors and others. This convention is especially significant in case of big business like Joint Stock Company where there is divorce between the owners and the managers. Therefore, The Indian companies Act 1956 not only requires that the accounts of the company, but it has also prescribed the contents and forms of profit and loss account and Balance sheet.

However, it does not mean that all information of any kind is to be included in accounting statements. The term disclosure only implies that there must be a sufficient disclosure of information's which is of material interest to proprietors, present and potential creditors and investors. Disclosure concept gives priority to substance over legal form of a transaction.

- 2) **Convention of materiality** – The accountant should attach importance to material details and ignore insignificant details. If this is not done accounts will be overburdened with much minute details .as per the American accounting association an item should be regarded as material, if there is a reason to believe that knowledge of it would influence the decision of informed investor. Therefore, keeping convention of materiality in view, unimportant items are either left out or merged with other items. Some items are shown as foot notes like contingent liabilities, market value of investment etc. however as item may be material for one purpose but immaterial for another or material for one year but immaterial for another year.

a) **Example:** The cost of a small calculator is accounted as an expense and not shown as an asset in a financial statement of a business entity due to Materiality concept.

b) **Example:** omission of Paise and showing the round figures in financial statements is based on materiality.

- 3) **Convention of consistency** – The comparison of one accounting period with the other is possible when the convention of consistency is followed. It means accounting from one accounting period to another. For example, a company may adopt straight line method, written down value method or any other method of providing depreciation on fixed assets. But it is expected that the company follows a particular method of depreciation consistently. Similarly, if stock is valued at cost or market price whichever is less, this principle should be followed every year. Any change from one method to another would lead to inconsistency. However, consistency does not mean non-flexibility. A change in accounting policy is justified to comply with accounting standard, to ensure more appropriate presentation of the financial statement of the enterprise and to comply with the law.

a) **Example:** The accounting policies once adopted are not changed unless there is an urgent need for such change is based on Consistency.

b) **Example:** Change in the method of depreciation should be done only if it is required by some statute and change would result in appropriate presentation of financial statement.

- 4) **Convention of conservatism**- It refers to the policy of playing safe' A per this convention all prospective losses are taken in to consideration but not all prospective profits. In other words anticipate no profits but provide for all possible losses. However this convention is being criticized on the ground that it goes not only against the convention of full disclosure but also against the concept of matching costs and revenues. It encourages creation of secret reserves by making excess provision for depreciation, bad and doubtful debts etc. the income statement shows a lower net income and the Balance sheet overstates the liabilities and understates the assets. The convention of conservatism should be applied cautiously so that the results reported are not distorted. Some degree of conservatism is inevitable where objective data is not available.

a) Example: A businessman purchased goods for Rs. 25,00,000 and sold 70% of such goods during the accounting year ended 31st March, 2005. The market value of the remaining goods was Rs. 5,00,000. He valued the closing stock at Rs. 5,00,000 and not at Rs. 7,50,000 as per concept of conservatism.

b) Example: A businessman purchased goods for Rs. 25,00,000 and sold 80% of such goods during the accounting year ended 31st March, 2005. The market value of the remaining goods was Rs. 4,00,000. He valued the closing stock at cost. He violated the concept of conservatism.

Following are the other examples of application of conservatism

- i. Making provision for doubtful debts and discount on debtors.
- ii. Not providing for discount on creditors.
- iii. Valuing stock in trade at cost or market price whichever is less.
- iv. Creating provision against fluctuation in the price of investments.
- v. Showing joint life policy at the surrender value and not at the paid-up amount.
- vi. Amortization of intangible assets like goodwill which has indefinite life.

Fundamental accounting Assumption

- a) Going concern
- b) Consistency
- c) Accrual

If nothing has been written about the fundamental accounting assumption in the financial statements then it is assumed that they have already been followed in their preparation of financial statements. However if any of the above mentioned fundamental accounting assumption is not followed then this fact should be specifically disclosed.



SECTION II

BOOK KEEPING AND ACCOUNTANCY

1.0 Meaning of Book Keeping:

Book-keeping means an art of keeping or maintaining or recording business transactions in a scientific and systematic manner. R.N. Carter states, "Book-keeping is a science and an art of correctly recording in the books of accounts all those business transactions that result in transfer of money or money's worth."

Indian version of book keeping is known as "Deshi-nama" in various parts of our country.

Book keeping is a process in which various business transactions are, classified and systematically recorded in a set of books. It has basic rules, style and format for drafting, recording and maintaining the business transactions. Thus, book keeping is an art as well as science, of systematically recording business transactions on the basis of well-defined rules and principles in the books of accounts which calls for application of human skills, knowledge, training and experience.

1.1 Features:

Key features of Book-Keeping are :

- It is an art of recording business transactions scientifically.
- There must be a documentary support for each and every transaction.
- The system of recording should be universal.
- The recording is made of monetary transactions only. It means the transaction must involve money or money's worth. Non-monetary transactions cannot be recorded.
- Recording of transactions is made in a given set of books only.
- Recording is prepared for a specific period and presented for future references.

1.2 Objectives of Book Keeping:

- To maintain the permanent records of the business transactions for various purposes,
- To ascertain profit earned or loss sustained in the business,
- To know the financial position of the business, capital invested into the business, assets accumulated and acquired and liabilities owed etc.

- To know the exact amount due from debtors and the exact amount payable to creditors.
- To know the exact amount of taxes due to the Government and to do tax planning for, the business ventures.
- To detect and prevent errors and fraud committed by others in the business.
- To provide valuable business information to various groups of users.
- To take important decisions on important business matter.
- To know progress made by business and to measure efficiency of business.

1.3 Importance of Book-keeping:

Book-keeping is important to every business concern for the purpose of effective control over the business. The information supplied by the accounts department helps the management in decision-making. The information made available by the accounting system is of great importance not only to the owners but also to others connected directly or indirectly with the business.

Following explain the importance of Book-Keeping:

- **Facilitates Planning:** Proprietors have to plan their business operations for years to come. Book-keeping generates valuable information about production, sales, expenses and incomes which helps planning.
- **Decision-making:** Management has to take valuable decisions about business. Book-Keeping makes available necessary information which facilitates decision making.
- **Controlling:** Management can control business operations with the help of various types of budgets. Book-Keeping and Accounting helps the management in this regard also.
- **Aid to Memory:** Human memory has certain limitations. A businessman cannot remember all the business transactions. Book-Keeping helps the businessman in retrieving required information. Due to Book-Keeping, it is not necessary to remember all the transactions.
- **Comparative Study:** Proper record helps a businessman to compare one year's performance with that of the other year. Comparative study reveals the loopholes, which enables a businessman to take proper corrective action.
- **Helpful in getting discharge:** In case of insolvency, a proprietor can get discharge from the court on the basis of record of business transactions,

- **Evidence in litigation:** The court as evidence accepts Systematic record in case any dispute arises. The court can decide the matter on the basis of records only.
- **Sale of business:** In case the business is sold out, the purchase consideration can be decided on the basis of the accounts maintained.
- **Settlement of tax liability:** Business is subject to many taxes viz. Income tax, sales tax, property tax etc. Proper record of transactions would enable a businessman to fix up the amount of his tax liability and discharge it.
- **Helpful in getting loans:** A businessman may require loans from banks for financing his expansion scheme. Properly kept accounts can convince the banks about financial soundness of business.
- **Protection against theft and dishonesty:** A businessman can protect himself against theft and dishonesty of employees by keeping books of accounts in a systematic manner. He can exercise greater control on his finance through systematic recording only.

1.4 The Utility of Book Keeping:

Utility means usefulness. Book-keeping is most useful since it provides correct and valuable information on financial matters of the business.

- **Businessman or Owner:** The businessman or owner who invests his money and assets into his business must know profitability, financial stability and solvency of his business concern at any given point of time. This can be ascertained only from the books of accounts. It would not be possible for the owner to carry out his business without systematic records of the business transactions. He can take business decisions more realistically on the basis of information provided by the books of accounts.
- **Comparative study:** By comparing the financial statements of past years with current years and with the financial statements of similar other firms' management or owner of the business can judge whether the business is making progress or not and accordingly introduce changes in the business to increase profitability.
- **Management:** In the case of joint stock company & co-operative society there is division of ownership and management. Ownership remains with the shareholders and management looks after the business activities. It is therefore necessary for the management to provide financial information from time to time to shareholders. From the accounting records manager can provide timely information to different parties to gain their confidence.

The manager can take proper decision of various activities carried out by the business based on the information supplied by the accountants. By studying different financial statements, he can judge efficiency of the business and project the future of the business. In other words, it helps the management in planning, controlling, decision making and managing the overall business.

- **Creditors & Lenders:** Book keeping has great utility to creditors. The creditors get valuable and correct information from the different financial statements published by the business concern. On the basis of such information they can decide the credit worthiness of the concern.
- **Investors:** The investors like shareholders, debenture holders, creditors, partners or any prospective investors can take decision by studying the books of accounts whether to invest into the business concern or not.
- **Trade Union:** Accounts provide valuable information to employees, trade unions of the respective business concern about the its business dealings.
- **Government:** Government authorities collect taxes like Sales tax and Income tax and revenue collecting departments can accurately impose and collect taxes from the business on the basis of information provided by the books of accounts.

2.0 Meaning of Accountancy

Accounting is the broader concept than book keeping. Accountancy which includes book keeping is an entire process of classifying, summarizing and interpreting business transactions.

Kolher defines “Accountancy refers to the entire body of the theory and process of accounting”

2.1 Basis of Accounting:

- A. Cash Basis Accounting** - is the basis of accounting wherein only cash transactions are recorded. i.e. income is accounted when cash is actually received and expense is recorded when cash is actually paid.
- B. Accrual Basis Accounting** – is the basis of accounting wherein cash as well as credit transactions are recorded. Income is recorded when it is earned and expenses are recorded when it becomes payable. The basic difference in Accrual basis of accounting is that the income and expenses are accounted for at the point of accrual i.e. earned or incurred irrespective of whether such income or expense is received or paid.

2.2 Branches of Accounting

There are mainly three major branches of Accounting

- Financial Accounting
- Cost Accounting
- Management Accounting

2.3 Difference between Book Keeping and Accountancy

No.	Book Keeping	Accountancy
1.	It is mainly related to identifying, measuring, and recording, financial transactions	It is the process of summarizing, interpreting, and communicating financial transactions which were classified in the ledger account
2.	Management can't take a decision based on the data provided by bookkeeping	Depending on the data provided by the accountants, the management can take critical business decisions
3.	Its objective is to keep the records of all financial transactions proper and systematic	Its objective is to gauge the financial situation and further communicate the information to the relevant authorities
4.	Financial statements are not prepared as a part of this process	Financial statements are prepared during the accounting process
5.	It doesn't require any special skill sets	It requires special skills due to its analytical and complex nature
6.	The process of book-keeping does not require any analysis	Accounting uses book-keeping information to analyze and interpret the data and then compiles it into reports
7.	Basically there are two types of bookkeeping - Single entry and double entry bookkeeping	There are two types of accounting Cash basis accounting and Accrual basis accounting. The accounting department does preparations of a company's budgets and plans loan proposals

3.0 Some Key Terms and Definitions

1. Business:

Any activity carried out by a person with a motive to earn profit is called Business.

2. Goods:

Goods are Commodities, which are bought or sold by a businessman for the purpose of business; or Goods are Commodities in which a trader deals. For a particular Commodity to be known as Goods it should satisfy following two conditions:

- a) It should be purchased for the purpose of selling, and
- b) It should be his regular business.

Accounting term for goods in different situation:

(i) PURCHASES:

When goods are bought it is known as purchases

(ii) SALES:

When goods are sold it is known as sales.

(iii) SALES RETURN:

If sold goods are returned by the customer it is known as sales Return or Return Inwards.

(iv) PURCHASE RETURN:

If goods purchased are returned to supplier it is known as purchase Return or Return onwards.

3. Transactions:

A Transaction is an exchange of goods or things or services on cash or credit term (Basis).

For example:

- i) Purchase of T.V. on Cash.
- ii) Doctor's fees paid in Cash.
- iii) Lawyer's fees adjusted against tuition fees.
- iv) Purchase of Motor Cycle on Credit.

Transaction can be of two types:

1) **Barter Transaction:** When goods are exchange for goods it is called as Barter Transaction. In this type of transaction money is not used as a medium of exchange. As value of the transaction cannot be ascertained in terms of money, this type of transaction cannot be recorded in the books of accounts.

2) **Monetary Transaction:** When goods are exchanged for money or money's worth it is called as Monetary Transaction.

Monetary Transactions are further grouped on the basis of mode of payment. They are:

- ❖ **Cash Transaction:** Cash transaction is an immediate exchange of goods or assets or services for cash. In Cash transaction relation between parties comes to an end immediately.
- ❖ **Credit Transaction:** Credit transaction is an exchange of goods, services or things on credit basis. In this type of transaction goods, things or services are received / given now but payment is to be made / received in future. In credit transaction, the exchange takes place at different times and relation between parties will continue in future.

4. Assets:

Properties owned by a person and used in Business to earn profit is called as assets. e.g. Cash & Bank Balance, Machinery, Furniture, Motor Vehicles etc. Assets can be (a) Fixed Assets (b) Current Assets (c) Tangible Assets (d) Intangible Assets

- **Fixed Assets** are those assets, which are held in the business for a long period of time, and they are generally used for manufacturing goods and services. For instance, Land & Building, Plant & Machineries, Motor Vehicles etc. are fixed assets of enterprise.
- **Current Assets** are held in the business for a very short period and they are used for maintaining liquidity of business. For instance, cash in hand, bank balance, stock of goods in hand, amount receivable from debtors etc. are current assets of the business enterprises.
- **Tangible Assets** are those, which can be seen and be touched and felt.
- **Intangible Assets** are those assets, which cannot be seen, touched and felt, but can be sold and converted into cash. Use of tangible assets enables its owner to earn income in the form of royalty. For instance, goodwill, copyrights, patents, trademarks, etc. are called intangible assets.

5. Liabilities:

It is the amount owed/payable by a Businessman to other persons like suppliers of materials, Bank or other parties from whom he has borrowed money for business purpose. Liabilities arise because the Businessman is not able to make immediate payment for goods purchased or services taken or money borrowed. Example of Liabilities is Bank Loan, Creditors, Unpaid expenses etc.

Liabilities are classified as short-term liabilities and Long-term liabilities.

- ❖ **Short-term liabilities** are those obligations or debts, which are to be paid by business within a period of one year. For instance, Bank Overdraft, sundry creditors, bills payable etc. are called short-term liabilities as they are to be paid generally within a year.
- ❖ **Long-term liabilities** are those obligations or debts which are payable by a business after one year. For instance, capital, bank loan, debentures, loan taken financial institution like LIC, GIC, FCI, ICICI, etc. are called long term liabilities as they are to be paid by business after one year.

6. Debtor:

A debtor is a person to whom another person has sold goods on credit.

OR

He is a person to whom another person has given a loan.

In other words, a debtor is a person who has to pay some amount to another person or who owes (has to pay) something to another person.

OR

A debtor is a person from whom we have to receive some amount.

For Examples:

- (a) If we sell goods to A on credit or give a loan to him, he will be our debtor, since he owes (has to pay) amount to us.
- (b) If Mr. Clinton sells goods to George Bush than George Bush is known as Debtor of Mr. Clinton.

7. Creditor:

A Creditor is a person who has sold goods to another person on Credit.

OR

He is a person who has given a loan to another person.

In other words, a creditor is a person who has to receive some amount from another person

OR

He is a person to whom one has to pay something.

OR

A Creditor is a person to whom we have to pay some amount.

For example:

- a) If we buy goods of Rs. 1,000 from Mr. Kapil Dev he will be called our Creditor, because we have to pay Rs. 1,000 to him.

b) If Mr. Clinton sells goods to George Bush then Mr. Clinton is known as Creditor of George Bush.

8. Capital:

Capital is the total amount invested in the business by the owner. It is the amount, which belongs to the owner himself. The Capital of a business is the amount receivable by the owner from the business.

OR

It is the amount payable by the business to the owner. Capital is a liability of the business. In the accounting Sense Capital is the Excess of Assets Over Liabilities.

The Equation will be: **Capital = Assets - Liabilities**

For example: If the assets in a business amount is Rs. 70,000 and the Liabilities amount is Rs. 20,000 then Capital of businessman will be Rs. 50,000. The owner has to receive the amount from the business. Capital may be invested in Cash or Kind.

9. Drawings:

It is the amount withdrawn by a proprietor from business for his personal use. It can be in cash or kind i.e. goods. Thus word 'drawings' is just opposite to word 'capital' in meaning. Drawings refer to total amount of cash and goods withdrawn by proprietor from the business from time to time for self-use or family use. Drawings are always adjusted with capital.

10. Solvent:

A person is said to be Solvent when he is able to pay off all his Liabilities. In other words, a person is said to be Solvent when his assets are equal to or more than his Liabilities.

11. Insolvent:

A person is said to be insolvent when he is unable to pay off all his Liabilities. In other words, a person is said to be insolvent when his Liabilities are more than his Assets.

12. Revenue / Income:

Revenue is the amount received or receivable when the firm sells its goods or products. For example: If a businessman sells goods of Rs. 5,000 on Cash and Rs. 10,000 on Credit then the total revenue of the business is Rs. 15,000.

Income: It is the amount received or receivable in return of Services rendered.

Example: Amount received by way of Rent, Commission, Interest etc.

So professionals like Doctors, Lawyers etc. earn an Income and not revenue.

13. Expenses:

It is the amount spent on manufacturing goods or for selling of goods and for rendering services. Therefore, expenses can be classified into:

- i) Expenses on purchase of goods or manufacturing of goods.
Examples: Wages, Power & Fuel, Carriage Inward, Purchase of Raw Material.
- ii) Expenses on services received by the business.
Examples: Salaries, Printing & Stationery, Advertisement etc.

14. Profit:

Profit is the excess of revenue or income over expenses during a particular period. In terms of equation it can be written as: Profit = Revenue or Income – Expenses

15. Loss:

Loss is the excess of expenses over revenue or income, during a particular period. In terms of equation: Loss = Expenses - Revenue or Income

16. Bad Debts:

Debts, which are not recoverable, are known as Bad Debts. Bad Debt is a loss which is incurred by the business on account of non-collection of the debt from debtors. It is treated as bad debt when all hopes or chances of recovery of debt are lost.

17. Journal:

It is a Book in which daily transactions of the Business are recorded in a chronological order It is also called as book of original entry.

18. Entry:

When the transaction is recorded in the Journal it is known as entry. It forms the basis for writing the Books of Accounts.

19. On Account:

When the amount is received or paid in part then it is said that payment is made or received on account.

20. Discount:

An allowance or benefits, which is given by the seller to buyer or by creditor to debtor, is known as discount. Thus it is the Reduction allowed by seller to buyer. Discount is of two types viz. Trade discount and cash Discount.

TRADE DISCOUNT (T.D)	CASH DISCOUNT (C.D)
1. T.D. is allowed at the time of purchase/sale of goods in bulk/large quantities.	1. C.D. is allowed on prompt payment.
2. T.D. is allowed for cash as well as credit of transactions buying / selling of goods.	2. C.D. is allowed only for cash transaction .
3. % of T.D. is applied on GROSS PRICE (original price of goods) (G.P.) (List price) (Catalogue price)	3. % of C.D. is applied on NET PRICE (N.P.)
4. List Price X (-) T/ Discount <u>X</u> Net Price <u>X</u>	4. Net Price X (-) C/Discount <u>X</u> Cash Recd./ paid <u>X</u>
5. T.D. is never recorded in the books of accounts	5. C.D. is recorded in the books of accounts.
6. Entry will be passed only at Net Price Goods/Purchase A/c Dr. X To Cash party A/c X (At net price)	6. (i) For purchase Goods/Purchase A/c Dr. X To Cash party A/c X To Discount Received A/c X (ii) For Sale Cash A/c Dr. X Discounts Allowed A/c Dr. X To Goods /Sales A/c X

4.0 Double Entry System

Double Entry System of book-keeping denotes that every business transaction has two-fold effect. There cannot be a business transaction unless it has an effect on at least two accounts or two parties. Whenever a businessman gives something, he gets something else in return of that. In other words, one account receives the benefit and the other account gives the benefit.

The amount of benefit received by one account is equal to the amount of benefit given by the other party. This enables us to record the two effects of any business transaction. Thus, recording this dual aspect of business transactions in the books of accounts is known as Double Entry System of Book Keeping.

4.1 Key Principles of Double Entry System:

- Every business transaction has two aspects.
- These two aspects involve two accounts
- One account is the receiver of the benefit and the Other account is the giver of the benefit.
- If one account is debited the other account has to be credited with equal amount

There are three steps in recording any financial transaction:

- (1) Deciding as to what accounts are affected.
- (2) Deciding whether to debit or to credit the account.
- (3) Deciding on the amounts to be debited or credited.

4.2 Advantages of Double Entry Book Keeping system:

- By recording double aspects of each transaction in the books of accounts, it ensures an arithmetical accuracy of accounts.
- This system is helpful to detect, prevent and reduce the frauds.
- If at all any mistake occurs, it can be detected and rectified.
- Exact amount due to us from customers and other parties, and exact amount payable to creditors by us can be known easily from the records maintained as per this system.
- This accounting system keeps complete, accurate and perfect records of business transactions.

- This accounting system is suitable for all types of the business organisation i.e. small scale, medium scale and large scale, public and private business organisation etc.
- This accounting system is helpful to prepare trial balance and final accounts, of the business at the end of the accounting year.
- With the help of this system income statements of current year can be compared with the income statements of previous years and on the basis of that comparison businessman gets information about the variations in incomes and expenses. To control expenses, businessman can adopt different measures.

4.3 Golden Rules of Double Entry Book Keeping System

Rule 1:	Debit what comes in.	Credit what goes out.
Rule 2:	Debit the receiver.	Credit the giver.
Rule 3:	Debit all expenses or losses.	Credit all income or gains.

4.4 Account:

An account is a list of business transactions falling under same description for a given period of time. A systematic and summarised record of business transactions with respect to person, property, loss, gain, income, expense is known as account. Account is generally prepared for one complete year. The word Account in abbreviation can be written as A/c. Accounts are prepared and maintained in the Ledger. Separate Ledger sheet or page is used for each account.

4.5 Classification of Accounts:

Accounts are classified into two main groups as (1) Personal Account and (2) Impersonal Account,

(1) Personal Account:

Account of person or account relating to person with which business keeps dealings is called Personal A/c. Therefore, account of an individual, partnership firm, company, club, institution, local authority, association, State Government and Central government with which business keeps dealings is called personal account.

From viewpoint of law persons are classified as (a) natural or living persons and (b) legal or artificial persons. Legal person does not have life, body and soul, but law recognizes it, as a person because all business transactions are done by it in its own name. For instance Bank of India's A/c. is a personal account as Bank of India is a financial institution, which deals in money. It is a legal person. Under the title legal person following institutions and legal bodies are included viz. partnership firm, joint stock company, association, clubs, legal, medical, financial, educational and charitable institutions, Gram Panchayat, District body, State Government, Central Government etc are included. Account of debtor, Account of creditor, Bank A/c, College's A/c, Hospital's A/c, Club's A/c, Partnership firm A/c are called Personal A/c.

(2) Impersonal Account:

All accounts other than personal accounts are known as impersonal accounts. In other words, all accounts, which are not personal accounts, are grouped under impersonal account. For instance, Cash A/c, Rent A/c, Wages A/c, furniture A/c are impersonal accounts. Impersonal accounts are classified as (a) Real A/c and (b) Nominal A/c.

(a) Real Account: An account of property, or any thing owned and possessed by business is called Real Account. In other words, Real A/c. is that account which relates to assets, objects etc. of the business. For example, Cash A/c, Furniture A/c, Land and Building A/c, Goods A/c, Goodwill A/c, Plant and Machinery A/c are called Real A/c as they relate to Property of the business.

(b) Nominal Account: An account relating to business expense, income, gain and loss are called Nominal account. In other words, an account of business expense, business income, business loss or business gain is called Nominal A/c. For instance, Rent A/c. is a Nominal A/c, as rent is an expense if it is paid by business and it is an Income if it is received by business.

Table showing Classification of accounts into Personal Accounts, Real Accounts and Nominal Accounts is given below:

Personal Accounts	Real Accounts	Nominal Accounts
1. Capital A/c	1. Stock of goods A/c	1. Bad debts A/c
2. Bank of Baroda's A/c	2. Cash A/c	2. Interest A/c
3. Mr. Kamlakar's A/c	3. Goods A/c	3. Discount A/c
4. D.G.T. Junior college's A/c	4. Building A/c	4. Loss of stock by fire A/c
5. X.Y.Z. Partnership Firm's A/c	5. Goodwill A/c	5. Printing & Stationery A/c
6. Jay's A/c	6. Investment A/c	6. Salaries A/c
7. Loan A/c	7. Tools A/c	7. Income Tax A/c
8. Debtor's A/c	8. Loose Tools A/c	8. Carriage Inward A/c
9. Creditor's A/c	9. Copy right A/c	9. Carriage Outward A/c
10. Loan from Vijay's A/c	10. Patent A/c	10. Repairs to Machinery A/c
11. M/s. Sunita Textiles A/c	11. Shares A/c	11. Octroi A/c
12. Proprietor's Wife Loan A/c	12. Livestock A/c	12. Taxes A/c
13. Bombay Municipalities A/c	13. Premises A/c	13. Audit Fee A/c
14. Co-operative Stores A/c	14. Leasehold Building A/c	14. Interest on debentures A/c
15. Cricket Club of India's A/c	15. Freehold Property A/c	15. Gas and Light A/c
16. Mahendra & Mahendra Co.'s A/c	16. State Govt. Security A/c	16. Trade Expenses A/c
17. Outstanding Wages A/c	17. Debentures A/c	17. Royalty A/c
18. Prepaid Insurance A/c	18. Stock of Stationery A/c	18. Bank Commission A/c
19. Rent Receivable A/c	19. Bills Receivable A/c	19. Bank charges A/c
20. Unexpired Insurance A/c	20. Motor vehicle A/c	20. Packing Charges A/c
21. Outstanding interest A/c	21. Furniture & Fixtures A/c	21. Brokerage A/c
22. Interest receivable A/c	22. Plant & Machinery A/c	22. Upkeep of Machinery A/c
23. Employees Provident Fund A/c		23. Railway freight A/c
		24. Sales Tax A/c
		25. Publicity A/c
		26. Profit on sale of furniture A/c

Analysis of Transactions

Transaction	Two A/cs Involved	Types of Accounts	How each aspect is affected	Rule Applicable	Accounts to be debited	Accounts to be credited
STEP I	STEP II	STEP III	STEP IV	STEP V	STEP VI	STEP VII
1. Commenced business with Rs. 15,000/-	Cash	Real	Cash comes in	Debit What comes In	Cash A/c	
	Capital	Personal	Proprietor is the giver	Credit the giver		Capital A/c
2. Purchased goods for cash Rs.1,000/-	Goods	Real	Goods comes in	Debit what comes In	Goods A/c	
	Cash	Real	Cash goes out	Credit what goes out		Cash A/c
3. Sold goods to Pallavi Rs.1,500/-	Pallavi	Personal	Pallavi is the receiver	Debit the receiver	Pallavi's A/c	
	Goods	Real	Goods go out	Credit what goes out		Goods A/c
4. Sold goods for cash Rs.2.000/-	Cash	Real	Cash comes in	Debit what comes in	Cash A/c	
	Goods	Real	Goods go out	Credit what goes out		Goods A/c
5. Paid office rent Rs.200/-	Rent	Nominal	Rent is an expense	Debit expenses	Rent A/c	
	Cash	Real	Cash goes out	Credit what goes out		Cash A/c
6. Paid cash to Dhanashri Rs.500/-	Dhanashri	Personal	Dhanashri receives cash	Debit the receiver	Dhanashri's A/c	
	Cash	Real	Cash goes out	Credit what goes out		Cash A/c

7. Received Commission Rs. 100/-	Cash	Real	Cash comes in	Debit what comes In	Cash A/c	
	Commission	Nominal	Commission is Income	Credit income		Commission A/c
8. Returned goods by Ram	Goods	Real	Goods come in	Debit what comes In	Goods A/c	
	Ram	Personal	Ram is the giver	Credit the giver		Ram A/c
9. Goods withdrawn for personal use	Drawings	Personal	Proprietor receives benefit	Debit the receiver	Proprietors Drawings A/c	
	Goods	Real	Goods go out	Credit what goes out		Goods A/c
10. Purchased Machinery for cash Rs.10000	Machinery	Real	Machinery comes in	Debit what comes in	Machinery A/c	
	Cash	Real	Cash goes out	Credit what goes out		Cash A/c
11. Paid for Stationery	Cash	Real	Cash goes out	Credit what goes out		Cash A/c
	Stationery	Nominal	Stationery is an expense	Debit expenses	Stationery A/c	
12. Borrowed from Bindu	Cash	Real	Cash comes in	Debit what comes In	Cash A/c	
	Bindu	Personal	Bindu giver of benefit	Credit the giver		Bindu's Loan A/c
13. Paid Salary	Salary	Nominal	Salary an expense	Debit expenses	Salary A/c	
	Cash	Real	Cash goes out	Credit what goes out		Cash A/c

4.6 Definition of Journal

Journal means a 'daily record'. According to a Dictionary for Accountant written by Elic L. Kohler, "A 'Journal' is the book of original entry in which are recorded transactions not provided for in specialised journals". A Journal is a book of "Original entry" or "primary entry". It is a book for daily record. First of all, the business transactions are recorded in the "Journal" and subsequently they are posted in the ledger. In modern times, a journal is divided into various books known as "Subsidiary Books". To study "Book-keeping" one must learn first how to journalise the transactions. To journalise the transactions means to record the two fold effects of a transaction in terms of debit and credit. This has to be done by observing the rules of debit and credit.

4.7 Features of a Journal:

- Books prime original or first entry.
- Records transactions in a systematic manner.
- Analyses the transactions into their debits and credits.
- A gateway to the ledger.

4.8 Utility of a Journal:

A journal is needed for the following reasons:

- It contains a record of various transactions that takes place every day.
- It provides a complete record of transaction as both the aspects of the transactions are recorded at one place.
- Since narration of a transaction is written in the Journal, there is no need to give an explanation in the ledger.
- It facilitates cross checking of transactions.
- Since transactions are recorded in the Journal, there is no need to post the transactions to the ledger immediately.
- From the legal point of view also a Journal becomes necessary. Courts recognize the journal as evidence in approving or disapproving claims.
- It helps to locate and prevent errors.

4.9 A Specimen Form of Journal:

In the Journal of M/s.

Date	Particulars	L.F.	Debit Rs.	Credit Rs.
200__	_____ A/c .....Dr. To _____ A/c (Being _____) (Narration)		_____	_____

Explanation of the form of Journal:

1. Date Column: In this column the date of the transaction is written. Generally, this column is divided into two parts namely for writing the month and the date of the transaction.

2. Particulars Column: The "Particulars Column" is the most important column. Before the details are written in this column the book-keeper decides as to what accounts are affected and which account is to be debited and which account is to be credited. The account to be debited is written on the first line just near the date column. On the same line the word "Dr" is written against the account to be debited. After that, on the second line the account to be credited is written. The name of this account should be preceded by the word "To" and while writing on the second line a little space should be left from the date column. It must be noted that the word "Cr" need not be written against the account to be credited, as it is clear that if the account on the first line is shown debited the corresponding account on the next line stands credited. On the third line a brief description of the transaction is written which is known as "narration".

3. Ledger Folio: While recording the transactions nothing has to be written in this column. The journal entries are required to be posted to the debit and credit of accounts in the ledger. At that time the page number of the ledger on which the two accounts appear are entered in this column.

4. Debit Amount Column: In this column the amount of transaction is written against the word "Dr" in particulars column on that line.

5. Credit Amount Column: In this column the amount of transaction is written against the name of the account credited on that line.

6. In the particulars column an explanation or narration is to be given below the credit item. Such a narration should be written in between the date line and the folio line. It should not cross these two lines on either side.
7. A thin line should be drawn between each transaction across the page from the date column to the folio column immediately below the journal entry. Some space should be left after each such line so as to distinguish one entry from another.
8. At the end of each page of a journal the debit and credit amount columns are totaled up and the total of the debit and credit amount columns must be equal as the amount debited and amount credited are equal for every transaction. These totals are carried forward to the next page.
9. In case the journal runs over several pages the first page is totaled and the totals are carried over to the next page at the top as "Totals brought forward". This is repeated for subsequent pages.
10. The amount of debit column must agree with the amount of credit column.
11. Totals of amount column are never posted in the ledger.

5.1 Ledger:

Ledger is a book of accounts in which businessman keeps individual records of persons, properties, expenses, incomes, gains and losses. It is the end point of entries made in the journal, or subsidiary books. Ledger may be in the form of a bound register or cards or separate sheets may be attached and maintained in a loose-leaf binder. For every person with whom business keeps dealings, a separate account is prepared in the ledger; Similarly, separate account is maintained in the ledger for each kind of assets, expenses, losses and gains. As and when business transactions occur, they are first recorded in journal and subsequently those recorded entries from journal are transferred and posted to respective account in Ledger. Each ledger account is totaled at the end of the accounting period. This book contains many pages and each page is called a folio. The relationship between the business and a particular account on given date can be ascertained only from the ledger. For instance, if businessman wants to know on a particular date the amount due from a certain customer or debtor, it can be known easily only from ledger, various transactions pertaining to different dates of a particular account may be spread over in the journal on various pages but in the ledger they are found on one page.

5.2 A Specimen of Ledger:

Dr.				Cr.			
NAME OF THE ACCOUNT							
Date	Particulars	J/F	Amount	Date	Particulars	J/F	Amount

Explanation of the form of Journal:

Each page of ledger is serially numbered. Each ledger account has two main side's viz. left hand side and right hand side. Left hand side of ledger account is called debit side and Right hand side of ledger account is called credit side. Each side has four sub columns viz. Date, Particulars, J.F. and Amount.

Steps to be taken for preparation of the Ledger Account:

- (1) At the top of ledger, in the middle, name of account should be written.
- (2) Date of transaction should be written in date column in the same order as we record in journal.
- (3) In particulars column on debit side of ledger account name of account credited is written and in particulars column on credit side of ledger account name of account debited is written. For instance, following journal entries are posted in cash account as given below:

1997

July 1	Cash A/c.	Dr.	15,000		
	To Sales A/c			15,000	

July 5	Purchase A/c.	Dr.	10,000		
	To Cash A/c			10,000	

Dr.				Cr.			
Cash A/c							
Date	Particulars	J.F.	Amount	Date	Particulars	J.F.	Amount
01/07/1997	To Sales A/c		15,000	05/07/1997	By Purchase A/c		10,000

- (4) Opening balance of ledger account should be shown as balance (b/d). Real account like Cash A/c., Furniture A/c., Goods a/c. Machinery A/c. etc. always shows debit balance and liabilities like Capital A/c., Sundry Creditor's A/c. Bank Loan A/c., etc. always shows credit balance.

5.3 Balancing of Ledger Account:

Balancing of ledger account means finding difference between heavier total, and lighter total of ledger account and recording that difference on lighter total side. At the end of the accounting year all accounts operated in the ledger are totaled and balanced. Steps required for balancing of ledger account are given below:

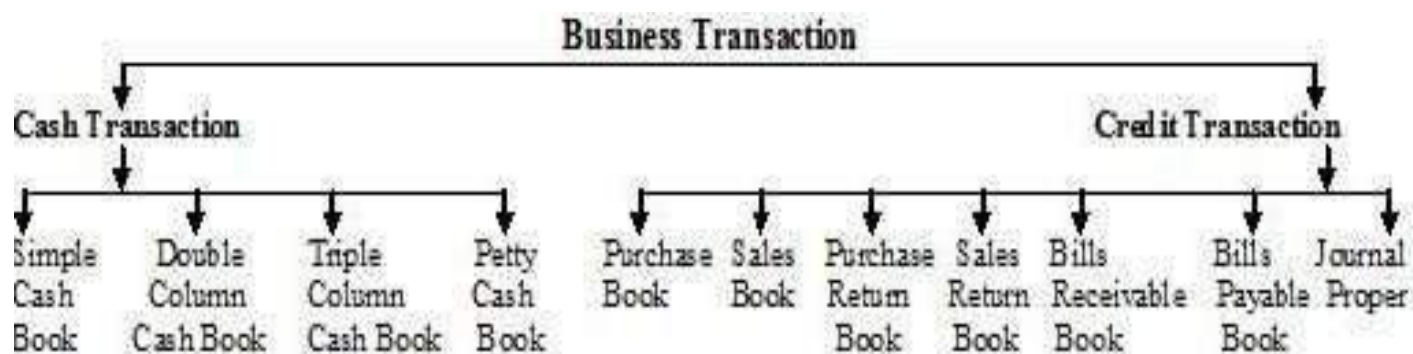
- Look at the Ledger A/c and mentally decide which side is more.
- Take total of that side first.
- Write the same total on opposite side on the same line.
- One line before total and two lines after total.
- If total of debit side of ledger account is heavier than total of credit side of that account, the balance is called debit balance and is written on credit side (i.e. on the side where total is lighter) as "By Balance (C/d.)".
- If total of credit side of ledger account is heavier than total of debit side of that account, the balance is called credit balance and is written on debit side (i.e. on the side where total is lighter) as "To Balance (C/d)."
- Now carry forward the total to the next month on the opposite side either as "To Balance b/d" or "By Balance b/d".

6.0 Subsidiary Books

Journal is a main account book in which all types of day-to-day business transactions are recorded systematically in chronological order. Journal is useful for traders whose business is small and limited in size. Journal is not useful to those traders whose business is large in size and who carries on unlimited business transactions every day. A single journal for entire large-scale business will be bulky and difficult to operate and handle. Similarly, many clerks cannot simultaneously do office work based on information written in the journal. It was felt that if all transactions are recorded in one journal, it will be time consuming to obtain necessary information. To avoid these difficulties journal is sub divided into number of parts.

Each of that sub part of journal is called subsidiary book. In other words, subsidiary book is a divided part of journal, meant for recording specific types of business transactions. These subsidiary books are: (1) Purchase Books. (2) Sales Book. (3) Purchase Return Book, (4) Sales Return Book. (5) Cash Book, (6) Bill Receivable Book, (7) Bills Payable Book, (8) Journal Proper.

Classification of Business Transactions and Location in Book of Accounts:



6.1 Purchase Book:

This is a subsidiary book in which only credit purchases of goods are recorded and is known as purchase book. It is used to record credit purchase of goods in which trader regularly deals. In this book cash purchases of goods and assets are not recorded. Similarly purchase of asset on credit is also not recorded in this book. Purchase book is written on the basis of Inward invoice i.e. a statement received from the supplier. Trade discount is never recorded. Trade discount is calculated and deducted from invoice price and net price is recorded in purchase book. If a bookseller purchases books on credit, it will be recorded in this purchase book. Purchase of furniture by bookseller on credit will not be recorded in his purchase book. At the end of each month purchase book is totaled and this total shows the total amount of goods purchased on credit.

Specimen of Purchase book is given below:

Date	Name of the Suppliers	Inward Invoice	L.F.	Amount (Rs.)

Explanation of Columns:

- (a) Date: This column is meant for recording date of credit purchase of goods.
- (b) Particulars: In this column name of suppliers from whom goods are purchased on credit is recorded. Along with name of supplier his address and description of goods is also written in this column.
- (c) Inward Invoice No.: Statement received from supplier along with goods purchased is called inward invoice. In this column number of inward invoice is mentioned.
- (d) L.F- No.: In this column page number of ledger on which supplier's account is prepared is recorded for ready reference.
- (e) Amount: This column shows net amount payable to suppliers.

Proforma of Invoice:(for Purchase & Sales Book)

INVOICE			
Telegrams: "Golden"		Golden Watch Makers	
Telephone: 1001		Aurangpura,	
No. 1600		Aurangabad,	
Name: <u>M/s. Ram Bros. Watch Co., Nagpur.</u>		1st March, 2004	
Quantity	Particulars	Rate	Amount
			Rs.
10	Gents' Watches (Standard)	500	5,000
10	Ladies' Watches (Gentle)	400	4,000
05	Super Watches	800	4,000
			13,000
	Less: Trade Discount @	10%	1,300
			11,700
E. & O.E.		For Golden Watch Makers	
		Sd/-	
		XYZ	

6.3 Sales Book:

A subsidiary book in which only credit sales of goods are recorded, is known as sales book. This book is meant for recording credit sales of goods in which trader regularly deals. In this book sale of goods as well as assets on cash basis are not recorded. Similarly, sale of assets on credit is also not recorded in this book. This book is written on the basis of outward invoice. Trade discount never appears in this book Trade discount is simply calculated and deducted from invoice price. If a grocer sells different types of grains to its customers on credit it will be recorded in the sales book of the grocer. Cash sales made by the grocer will not be recorded in his sales book. Sales book is also known as day book. At the end of each month sales book is totaled and this total shows total amount of goods sold on credit.

Specimen of Sales book is given below:

Date	Name of the Customers	Outward Invoice	L.F.	Amount (Rs.)

Explanation of Columns:

1. Date: The date on which the sales took place is entered.
2. Particulars: Name of the customer is written, but Address of customer need not be given.
3. Outward Invoice No.: The serial number of the invoice is entered.
4. L.F.: The page number of the ledger on which the customer's account appears is shown.
5. Amount: The net amount of the sale is recorded (amount arrived at after deducting the trade discount from the gross value of the sales.)

6.4 Purchase Return Book:

A subsidiary book in which, return of goods purchased on credit is recorded, is known as Purchase return book. Purchase return book is also known as return outward book or debit notebook. This book is used by trader for recording the returns of goods purchased on credit. Trader may return goods to supplier on one of the following reasons. Viz. (a) defective goods, (h) damaged goods, (c) delayed goods, (d) inferior goods, (e) goods which are not as per design, Color or sample sent (f) excess goods received etc. This book is written on the basis of debit note. Purchase return book is totaled at the end of each month. This total shows value of goods returned to suppliers.

Specimen of Purchase Return book is given below:

Date	Name of the Suppliers	Debit Note No.	L.F.	Amount (Rs.)

6.5 Debit Note:

A Debit Note is sent to the supplier when the goods purchased from him are returned. A Debit Note is a statement sent by the buyer to the supplier stating the full details of the good returned. It is sent along with the goods. It intimates the supplier that his account has been debited by the value of the goods returned to him. Many a time goods are received correctly as per the invoice but the invoice is overcharged. Therefore, the invoice shows a larger amount than what it should be. In such a case, the buyer does not return the goods but sends a debit note to the supplier of the excess value charged. On receiving the debit note the supplier also sends a credit note to us for the excess value charged. Debit Notes and Credit Notes are in a bound book. The original copy of Debit Note is sent to the supplier to whom the goods are returned and the carbon copy is kept for reference in the office.

Specimen of Debit Note

UNIVERSAL TRADING CO.		
Marine Lines. Bombay		
Debit Note No:	Swadeshi Mills. Bombay Account	Dated: 10-2-2005
We have to advise you that your account has been debited on account of.		
Invoice No. Date	Particulars	Amount Rs.
21-1-2005	Being the difference of 100 meters Terry cot Cloth at the rate of Rs. 30 but charged at the rate of Rs. 35 in the invoice.	500.00
		500.00
		Sd/- Purchase Manager

6.6 Sales Return Book:

A subsidiary book in which transactions relating to return of goods sold on credit, are recorded, is called sales return book. This book is used by trader for recording the goods returned by customers, which were purchased by them on credit. They may return goods sold to customers on credit, on one of the following reasons, viz. (a) defective quality goods, (b) damaged goods, (c) delayed goods, (d) inferior quality goods, (e) goods not in accordance with sample, specification, color, design, (f) over supply of goods, etc.

Sales return book is written on the basis of credit note. This book is also called as credit note book or return inward book. At the end of each month sales return book is totaled.

Specimen of Sales Return book is given below:

Date	Name of the Customers	Credit Note No.	L.F. No.	Amount (Rs.)

6.7 Credit Note:

A Credit Note is sent to the customers when we receive goods returned from them. It gives the full details of the goods returned by the customers. Credit Notes are generally printed in red ink. Transactions are recorded in this book on the basis of Credit Notes.

Specimen of Credit Note

M/S CHOTILAL & CO. Fort, Bombay - 32		
Credit Note No.	Date : 01-03-2005	
M/s Ramlal Sons. Pune.		
We have to advise you that your account has been credited as under:		
	Rs.	
By Return:	10 Chairs returned on account of damage in transit at Rs. 50 per chair	500
		For Chotilal & Co. Rajan Manager

6.8 Difference between a Debit Note and a Credit Note:

- A Debit Note is an intimation sent to the party stating that the debit is given to its account. A Credit Note is an intimation to the party to whom it is sent stating that the credit is given to it.

- A Debit Note can be sent by the seller to the buyer to adjust the under debit or under-charge in the original invoice. It can also be sent by the buyer to the seller to adjust the excess debit given in the original invoice or to evidence the purchase returns. On the other hand, a Credit Note is sent by the seller to the buyer to adjust the excess debit given in the original invoice or to evidence the sales returns. It can also be sent by the buyer to the seller to adjust the under-credit given in the original invoice.

7.0 Cash Book:

The Cash Book is a Book of original entry. All the cash transactions are recorded in the cash book. Even credit transactions result in cash. Cash is either received or paid. This indicates that there is a need to maintain a separate book to record all such cash transactions. When the cash transactions are recorded in the cash book, it serves both purposes of being a book of original entry as well as a ledger. Since the cash book enables the trader to find out the daily cash and bank balance, it serves the purpose of cash account. Therefore, there is no need to open a separate Cash Account in the ledger. Similarly, writing in the cash book saves a lot of time and labour by enabling recording of cash and Bank transactions without passing journal entries. In any business firm, cash and bank transactions constitute a major portion of the entries and therefore, the cash book is very useful and results in economy of time and labour.

Cash book achieves three purposes:

1. Recording all transactions pertaining to cash.
2. Ascertainment of the balance of cash on hand and bank balance.
3. Verification of correctness of cash and bank balance.

7.1 Types of Cash Book:

Cash Book is classified under the following heads:

- (I) Simple or single column Cash Book.
- (II) Cash book with cash and discount columns or double columns cash book.
- (III) Cash book with Cash, Discount and Bank columns or Three columns Cash Book.
- (IV) Petty Cash Book or Multi Columns Cash Book.

Above types of cash books are discussed in detail as follows:

(I) Single Column Cash Book:

This cashbook is also called simple cashbook. It has two sides viz. receipt side and payment side. The debit side of cashbook is meant for recording all receipts and credit side of cashbook is meant for recording all payments. This book is written on the basis of cash receipts and cash vouchers. The cashbook is balanced from time to time and balance is carried forward. The cashbook always shows a debit balance. In this book discount and bank transactions are not recorded.

Specimen of Simple Cash Book:

Dr.					Cr.				
Cash Book									
Date	Receipt	R.No.	L. F.	Amount Rs.	Date	Payment	V.No.	L. F.	Amount Rs.

Double Columns Cash Book:

This cashbook is also called cashbook with cash and discount columns. In this Book along with cash transactions, discount received and allowed also recorded. A businessman who receives cash discount from his suppliers or creditors and allows cash discount to his customers or debtors maintains double columns Cashbook. In this book one additional column for discount is provided on both sides of the Cashbook along with the cash column. Cash discount allowed is a loss and therefore it is to be recorded on the debit side of the Cashbook. Cash discount received is a gain and it is to be recorded on the credit side of the Cashbook.

Specimen of Double Column Cash Book:

Dr.						Cr.					
Cash Book											
Date	Receipt	R.No.	L. F.	Discount Rs.	Cash Rs.	Date	Payment	V.No.	L.F.	Discount Rs.	Cash Rs.

Discount is a benefit or allowance, in money term given by seller to buyer or by creditor to debtor with a view of increasing sales or recovering the amount due. Discount is of two types viz. (a) Trade discount and (b) Cash discount. Trade discount is an allowance or concession in money term given by seller to buyer with an objective of increasing sales turnover.

Cash discount is recorded in the book of accounts. When cash is received, discount is allowed and debited in the cashbook. Similarly, when cash is paid, discount is earned and credited in the cashbook.

(II) Three Columns Cashbook:

This cashbook also called as cash book with cash, Bank and discount columns. Businessman, who does business transactions through Bank, records those banking transactions along with cash and discounts transactions in triple columns cashbook. Banking transactions like receipts and deposit of cheques, issue of cheques, deposit and withdrawal of cash from bank etc. are recorded in Triple columns cashbook. By maintaining triple columns cash book, businessman gets information of inflow and outflow of cash and details of banking transactions. Exact position of cash in hand and balance of cash at bank can be ascertained quickly by referring triple columns cashbook. Triple columns cashbook is useful for businessman to take quick decisions on business matters.

Specimen of Three Columns Cashbook:

Dr.							Cash Book						Cr.
Date	Receipt	R. No.	L.F.	Disc. Rs.	Cash Rs.	Bank Rs.	Date	Payment	V. No.	L.F.	Disc. Rs.	Cash Rs.	Bank Rs.

7.2 Sources of Writing the Cashbook:

(A) RECEIPT VOUCHERS:

It is a document showing an official and authentic acknowledgement of the fact that cash or cheque is received from the payer. Typical Contents of Receipt are -

- (a) Name and address of the Concern which has received the Cash/Cheque
- (b) Serial No. of receipt will be written
- (c) Date of the receipt will be written
- (d) The name of party from whom money is received.
- (e) Amount received in words.
- (f) Whether amount is received by cash/cheque/draft. Delete the word not applicable. If cheque/draft received, then write cheque no. and date.
- (g) Whether amount is received in full/part/advance and write the purpose, delete the words not applicable.
- (h) Write the bill no. and date.
- (i) Write the amount received in figures.

- (j) If amount is above Rs. 500 affix the revenue stamp and the person authorised will put his/her sign.

Specimen

RECEIPT	
No.: _____(b)_____	(a) SBCC ENTERPRISES Mumbai – 400 004
Date: _____(c)_____	
Received with thanks from _____(d)_____	
the sum of Rupees _____(e)_____	
_____ (f) by Cash \ Cheque \ D.D.	
No. _____(f)_____ dated _____(f)_____ in part \ full \ advance payment on account of	
_____ (g) _____ our Bill no. _____(h)_____ dated _____.	
Rs. _____(i)_____	(j) <div style="border: 1px solid black; border-radius: 15px; padding: 10px; display: inline-block;">Revenue Stamp</div>
Receipt subject to realisation of cheque	
	(Signature)

(B) PAYMENT VOUCHER

It is a document giving details of cash/cheque paid to a person by a businessman. Typical contents of Payment Voucher:

- (a) Write the name and address of the Company making payment.
- (b) The Serial no. and date of payment voucher.
- (c) The amount paid in figures
- (e) The name of party to whom amount is paid.
- (f) The name of a/c. to be debited.
- (g) The details of transactions along with amount.
- (h) The amount in words will be recorded.
- (i) The person preparing and the manager authorising voucher will sign.
- (j) Write the mode of payment and delete the words not applicable. Also write the name of Bank, cheque no. and date if payment is made by cheque.
- (k) If payment of Rs. 500/- or above then affix revenue stamp and take signature of the persons receiving payment.

Specimen

<div style="border: 1px solid black; border-radius: 15px; padding: 5px; display: inline-block;"> DEBIT VOUCHER </div>	<p>(a) SBCC ENTERPRISES Mumbai – 400 004</p>	<p>No.: _____ (b) _____</p> <p>Date: _____ (c) _____</p> <p>Rs. _____ (d) _____</p>
<p>Paid to: _____ (e) _____</p> <p>Debit: _____ (f) _____</p>		
Particulars	Rs.	
(g)	(g)	
Rupees (h)		
Total		
<p>Authorised by _____ (i) _____ Prepared by _____ (i) _____</p> <p>Paid Cash / Cheque drawn on _____ (j) _____</p> <p>Cheque No. _____ (j) _____ dated _____ (j) _____</p>		<div style="border: 1px solid black; border-radius: 15px; padding: 10px; display: inline-block;"> Revenue Stamp </div> <p>(Sign of receiver)</p>

7.3 Accounting Treatment of Banking Transactions in a Cash Book:

- 1. A Cheque is received but not deposited in the Bank:** Every cheque received; so long as it is not paid into the Bank should be treated as cash and should be recorded in the cash column.
- 2. A Cheque is received and deposited in the bank on the same day:** In this case, the amount of such a cheque should be entered on the receipt side of the Cash Book in the Bank column as 'To XYZ'.
- 3. A Cheque received on the previous day deposited into Bank:** In this respect, a contra entry should be passed on the day on which the cheque is deposited in the Bank. It will appear in the Cash Book on the Receipt Side as 'To Cash' in Bank column and on payment side as "By Bank" in Cash column.
- 4. Received a Crossed Cheque:** The amount of Crossed cheque received should be entered in the Cash Book on the receipt side as 'To XYZ' in Bank column.
- 5. Payment by issuing a Cheque:** Whenever payments are made by cheque they should appear in the Cash Book on the payment side as "Party's Account or Expenditure Account" in bank column".
- 6. Endorsement of Cheque:** A businessman can endorse the cheque in favour of the creditor in settlement of his account. In this case, it will appear in the Cash Book on the payment side as "By XYZ" (Creditor) in cash column or Bank column.

Whether it should be entered in the cash column or the Bank column depends upon the nature of the cheques. The simplest method is to see the original entry of that cheque. If it is originally entered in the Cash Column on the receipt side, then after endorsement it should be entered on the - payment side of Cash Book in the cash column. If it is originally entered in the "Bank Column" on endorsement, then it should be entered on the payment of the cash book in the Bank Column.

- 7. Dishonour of Cheque:** A cheque received from the customer or cheque Issued to the creditors may be dishonored owing to certain reasons. Dishonour means refusal of payment by the Bank, Cheques may be dishonored on the following grounds:
- If it is defaced.
 - If the signature on the cheque does not agree with the specimen signature.
 - If the amount in words does not agree with the amount in figure.
 - If the funds to the credit of the Drawer are insufficient.
 - If a period of six months has expired from the date of drawing the cheque.
- 8. Direct Deposit by Customers:** If the amount due from customer directly deposited by him in our Bank account, on receiving the advice it will be entered in the Cash Book on the receipt side, as, "To Customer's Account" (the amount will be entered in the Bank Column).
- 9. Collection of Interest on Investment by the Bank:** A Bank collects interest on our Investment or allows interest on our deposit. The credit the entry of such a collection is made in the passbook by the Bank. On receiving advice or the Pass Book from the bank, it will be entered on the receipt side of the Cash Book as "To interest on investment". (The amount will be entered in Bank Column).
- 10. Payments made by the Bank under our Standing Instructions:** As per our standing instruction, a Bank makes payment on our behalf, on account of insurance premium, Interest on loan taken; call money on shares, etc. On making such payments, the Bank passes a debit entry in the Pass Book. After receiving the advice or Pass Book, it is entered on the payment side of the Cash Book as "By Insurance Premium or By Interest or By calls on shares" as the case may be (The amount will be entered in the bank column).
- 11. Bank charges and Bank commission:** A Bank charges some amount for the services rendered to the customers. The Bank makes a debit entry in the Pass Book. On receiving the Pass Book or intimation, it is entered on the payment side of the Cash Book as "By Bank charges or by Commission" (The amount will be entered in the Bank column).

12. Transfers:

- **Transfer of an amount from a Savings Account in the Bank to a Current Account:** Bank columns appearing on both the sides of a Cash Book indicate a Bank Current Account. If the amount is transferred from a Savings Account to Current Account It will be entered on the receipt side of the Cash Book as "To Capital A/c" (The amount will be entered in the bank column).
- **Transfer of an amount from a Current Account to a Savings Account:** In this case, the entry will appear on the payment side of the cash book as "By Drawings A/c" (the amount will be entered in the bank column).

Note: Savings A/c being a personal A/c, it will be recorded either as Capital or Drawings.

13. Contra Entries: Contra entries mean such entries that are made on both the sides of the cash book. When cash or a cheque is paid into the bank the cash balance in the office will be reduced and the bank balance will be increased. In such a case the Bank account is to be debited and the cash account is to be credited. Since, in three columns Cash Book, both Cash and Bank accounts are included the amount will be written in a bank column on the receipt side and also in the cash column on the payment side of the Cash Book.

The transactions affecting the Cash Account and Bank Account (either Cash Account or Bank Account debited or credited) are recorded on both the sides of the Cash Book. As the Triple Column Cash Book consists of Cash Account and Bank Account, recording them on both the sides of the Cash Book completes Ledger posting of such transactions. Entries passed to record such transactions in the Triple Column Cash Book are regarded as contra entries. Letter "C" is written in the "L.F." column of the Cash Book in order to identify such entries.

Contra entries are passed in the following three cases:

- **Cash deposited in Bank Account:** When an amount is deposited in the Bank, it is entered in the Cash Book on the receipt side as "To Cash", (amount in bank column) on the payment side it appears as "By Bank." (Amount in cash column),

- **Cash withdrawals:** A transaction pertaining to withdrawal of cash the Bank appears on both the sides of the Cash Book. On the receipt side it appears as "To Bank" (amount in cash column) on the payment side, it is entered as "By cash" (amount in Bank column).
- **If a cheque received on the earlier day is deposited in the Bank:** Cheque may be received from the customer and entered in the cash column on the receipt side of the Cash Book. It may be deposited in the Bank after 4 or 5 days. On the date of deposit, a contra entry is passed. It is entered on the receipt side of the Cash Book as "To Cash" (amount in Bank column). It is entered on the payment side of the Cash Book as "By Bank", (amount in cash column).

8.0 Petty Cash Book:

With faster development in banking sectors most of the businessmen carry on their day-to-day business activities through bank. Mostly bank cheques are used for payments and receipts of higher amount. But generally cheque is not used for payments and receipts of small or minor amount, which are inevitable in the business. For instance, cheque is not used for payment of taxi fare, coolie charges, sweeping charges, postage etc and receipt of sale proceeds of old newspapers etc. In big business house or in industry to manage and pay minor expenses in cash a separate clerk or cashier is appointed. The cashier or clerk, who manages, look after and makes payment of petty i.e. minor expenses in the organisation is called petty cashier. An account book in which petty cashier records payments of petty expenses and receipts is called petty cash book. In other words, petty cash book is a separate account book in which businessman keeps records of daily transactions which are of minor in nature and payments and receipts of which are made in cash only. Head cashier gives petty cashier lump sum amount of cash in the beginning of every month and he is permitted to spend that amount on various minor expenses and also permitted to receive minor receipts in a period of a month. At the end of month petty cashier is required to return the balance amount to head cashier. This procedure is followed every month.

8.1 Types of Petty Cash Book:

Petty cash book is classified into the following categories viz. (a) Simple petty cash book, (b) Columnar petty cash book, (c) Petty cash book kept on imprest system.

Above types of petty cash book are discussed below in detail.

(a) Simple Petty Cash Book:

Simple petty cash book is just similar to simple or single column cash book. It is meant to record receipts and payments made in cash. This cash book has two main sides viz. receipts side and payments side. In this cash book columns like date and particulars are common for both receipt side and payment side. This cash book is not extensively used in business field.

(b) Columnar Petty Cash Book:

As name indicates, this petty cash book has many sub columns on payment side to record minor expenses individually. This cash book has two main sides viz. receipts side and payment side. In comparison to receipt side, payments side is much long. Payment side of this cash book has many sub-columns which are not fixed in number.

On payment side of this cash book one sub column is provided for one similar nature of expenditures. In short payment side has columns as many as expenditures on which business spend money. In addition to these columns, at the end two more columns are provided for L.F. No. and ledger account. In ledger account column, entries of personal account and real account are posted. This cash book is more popular and extensively used in the business field.

Specimen of columnar petty cash book is given below:

Receipt	Date	Particulars	V. No.	Total	Payments						
					Postage	Telephone	Advt.	Stationery	L. F.	Ledger A/c	

(c) Petty Cash Book Kept on Imprest System:

In many business houses Imprest system is more popular. In this system, in the beginning of every month head cashier gives to petty cashier that much amount of cash or cheque which is equivalent to amount, spent in the last month and makes opening cash in hand with petty cashier equal in the beginning of every month. In other words, in imprest system, a definite amount of cash is given to petty cashier at the beginning of a certain period. This amount is known as imprest money.

The petty cashier is then allowed to spend money on various petty expenses and when he has spent substantial amount of his imprest amount he gets reimbursement of the amount he has spent from the head cashier. Thus he again has the same amount of imprest cash. The reimbursement may be made on a weekly, fortnightly or monthly basis, depending on the frequency of small payments.

This system renders the following advantages:

- (a) No excess cash is issued to petty cashier than actually required.
- (b) Petty cashier will not have excess or idle cash.
- (c) Misuse of cash is avoided as far as possible.
- (d) Records of petty expenses can be easily checked and compared.

9.0 Trial Balance:

To reiterate, we have seen in the earlier sections how journal entries are passed in the journal. Similarly, the transactions can be recorded in Subsidiary Books. After recording the transactions either in the Journal or in the subsidiary Books they are posted to the Ledger and accounts are prepared and balanced. These books are written on the basis of the Double Entry System of book keeping. The fundamental principle of this system is that for every debit there is a corresponding credit. In any particular transaction, if one or more accounts are debited for some amount the other account or accounts are credited with the same amount. It follows therefore, that the amount for which one or more accounts is debited, for a similar amount the other account or accounts will be credited. As such the total of all debits and credits must be equal.

9.1 Key Features of a Trial Balance:

Analysis of the above definitions brings out the following features of a Trial Balance:

1. It is a list of debit and credit balances which are extracted from various ledger accounts.
2. It is a statement of debit and credit balances.
3. The purpose is to establish arithmetical accuracy of the transactions recorded in the books of accounts.
4. It does not prove accounting accuracy, which can be determined by audit.
5. It is not an account. It is only a statement of account.
6. It is not a part of the process of accounts.

7. It is usually prepared at the end of the year but it can also be prepared any time as and when required. e.g. half yearly, quarterly or monthly.
8. It serves as a link between books of accounts and the Profit and Loss Account and Balance Sheet.

9.2 Preparation of a Trial Balance:

All the accounts with their debit and credit balances are listed serially. The cash and bank balances as shown by the Cash Book are also included in a Trial Balance. This becomes necessary because a separate Cash Account is not maintained in the ledger. Bank columns appearing on both the sides of Cash Book represent the Bank Account in the ledger. Closing stock of goods at the end of the year is not included in the Trial Balance. After all the accounts are included in the Trial Balance, the total of the two sides is made and it is equal.

Forms of Trial Balance:

Trial Balance as on 31st March,



9.3 Example of a Trial Balance: From the following balances extracted from the books of accounts of ABC Traders as on 31st March, 2017:

	Rs.		Rs.
Capital	1,50,000	Goodwill	1,00,000
Sundry Debtors	35,000	Office Expenses	10,000
Sundry Creditors	42,000	Outstanding Expenses	15,000
Machinery	21,000	Interest Received	3,200
Furniture	19,000	Cash Balance	1,800
Sales	2,00,000	Opening Stock	1,07,400
Purchases	1,16,000	(as on 1-4-2017)	

Trial Balance of ABC Traders as on 31st March, 2017

Sr. No.	Name of Account	L.F.	Debit Rs.	Credit Rs.
1.	Capital			1,50,000
2.	Purchase		1,16,000	
3.	Sales			2,00,000
4.	Goodwill		1,00,000	
5.	Machinery		21,000	
6.	Furniture		19,000	
7.	Sundry Debtors		35,000	
8.	Sundry Creditors			42,000
9.	Office Expenses		10,000	
10.	Interest Received			3,200
11.	Outstanding Expenses			15,000
12.	Opening Stock		1,07,400	
13.	Cash Balance		1,800	
			4,10,200	4,10,200

SECTION III

FINAL ACCOUNTS

PART A – FINAL ACCOUNTS OF A SOLE PROPRIETOR

Final accounts are the group of three different accounts viz. Trading Account, Profit and Loss Account and Balance Sheet. The group of these three accounts is called final accounts because it gives final results of the business carried out in the accounting year. Final accounts, generally, refer to two important accounting statements prepared by any business unit at the end of the financial year and those accounting statements are (i) Income statements and (ii) statement of financial position. Income statement includes trading account and profit and loss account. Whereas, statement of financial position includes Balance Sheet. Preparation of trading account and profit and loss account gives result of business operations done in the entire financial year. Balance sheet shows the financial position of assets and liabilities of the business as on particular date.

10.1 Objectives of Final Accounts:

- (a) To ascertain gross profit or gross loss and net profit or net loss as a result of business done in the accounting year.
- (b) To check arithmetical accuracy of the business and to detect fraud.
- (c) To know the standing financial position of the business i.e. total assets owned by the business and total liabilities payable by the business.
- (d) To know how much tax is payable to the government on the profits and assets, if taxable.

10.2 Trading Account:

Trading account is a part of final accounts, which is prepared on the basis of direct expenses, and direct incomes of business to ascertain gross result of the business, done in the accounting year. Preparation of trading account is the first step in preparation of final accounts. Trading account is prepared by considering only direct expenses and direct incomes of the business. Expenses and incomes which have direct connection with production are called direct expenses and direct incomes, e.g. power and fuel, cost of raw materials, wages etc. are called direct expenses, and sales proceeds are called direct incomes. Thus, trading account shows gross result of trading or business activities carried out in the particular accounting year.

The basic objective of the trading account is to ascertain the gross profit earned or the loss suffered as a result of manufacturing goods or services or buying and selling of goods.

Specimen Form of Trading Account:

Name of Proprietor

Dr. Trading Account for the year ended 31st20... Cr.

Particulars	Amount	Particulars	Amount
To Opening Stock	----	By Sales	----
To Purchases	---	Less: Returns	----
Less: Returns	---	By Goods lost by Fire or Theft	----
To Carriage Inward	----	By Drawings (Goods taken over)	----
To Wages	----	By Advertisement (goods distributed as free sample)	----
To Freight	----	By Closing Stock	----
To Power & Fuel	----	By Gross Loss C/d	----
To Royalties	----		
To Octroi	----		
To Custom Duty	----		
To Factory Lighting	----		
To Factory Rent	----		
To Mfg. Expenses	----		
To Gross Profit C/d	----		
	----		----

10.3 Profit and Loss Account:

Profit and Loss account is a part of final accounts, which is prepared on the basis of indirect expenses, and indirect incomes of the business to ascertain net result of the business, done in the accounting year. On completion of trading account and profit & loss account are prepared by considering only indirect expenses and indirect incomes of the business. Expenses and incomes, which have no direct relation with production and whose absence do not affect production, are called indirect expenses and indirect incomes, e.g. salaries, interest, rent, cost of stationery etc. Indirect expenses are recorded on debit side of profit and loss account and indirect incomes are shown on credit side of profit and loss account. Indirect expenses of business are classified as (i) Office expenses (they are also called administrative expenses.) (ii) Selling expenses and (iii) Distribution expenses. Indirect incomes and gains include discount received; Commission earned, interest received, rent received etc

Specimen form of Profit and loss Account

Dr.		Cr.	
Profit & Loss Account for the year ended 31 st .....20...			
Particulars	Amount Rs.	Particulars	Amount Rs.
To Salaries	----	By Gross Profit B/d	----
To Rent	----	By Rent Received	----
To Printing & Stationery	----	By Interest Received	----
To General Expenses	----	By Commission Earned	----
To Sundry Expenses	----	By Discount Earned	----
To Depreciation	----	By Miscellaneous Receipts	----
To Postage & Telegram	----	By Income from Investment	----
To Telephone Expenses	----	By Excess reserve for bad debt	----
To Travelling Expenses	----	By Net Loss C/d	----
To Conveyance	----		
To Advertisement	----		
To Interest on loan taken	----		
To Interest on Capital	----		
To Bad debt	----		
Add: Further Bad Debt	----		
Add: New Reserve	----		

Less: Old Reserve	----		
To Repairs	----		
To Bank Charges	----		
To Legal Charges	----		

To Loss on sales of Assets	----		
To Audit Fees	----		
To Discount Allowed	----		
To Commission Allowed	----		
To Carriage Outward	----		
To Insurance	----		
To Net Profit C/d	----		
	----		----

10.4 Balance Sheet:

Accounting statement, which shows financial position of all assets and liabilities of the business as on date, is called Balance Sheet. It is not an account but a positional statement showing financial position of a business concern as on date. On the left-hand side of this statement liabilities of various types are systematically recorded and on the right-hand side of this statement all types of business assets are shown systematically. Business liabilities include short liabilities like sundry creditors, bank overdraft, bills payable outstanding expenses etc. and long-term liabilities like Bank loan, capital, loan etc. Business assets are classified as fixed assets, tangible assets, intangible assets, current or circulating assets and fictitious assets.

Specimen from of Balance sheet is shown below:

Balance Sheet as at 31st 20....

Liabilities	Amount Rs.	Assets	Amount Rs.
Capital	----	Land & Building	----
Less: Drawings	----	Plant & Machinery	----
	----	Furniture & Fixture	----
Add: Interest on Capital	----	Motor car	----
	----	Investment	----
Less: Interest on Drawings	----	Goodwill	----
	----	Patents	----
Add: Net Profit	----	Loose Tools	----
Loan Taken	----	Bills Receivable	----
Bank Loan	----	Sundry Debtors	----
Sundry Creditors	----	Closing Stock	----
Bank Overdraft	----	Prepaid Expenses	----
Bills Payable	----	Income Receivable	----
Expenses Outstanding	----	Cash in Hand	----
Income received in advance	----	Cash at Bank	----
	----	Loans Given	----
	----		----

10.5 Adjustments:

Additional business information provided after completion of trial balance for preparation of final accounts are known as adjustments. To get clear view and real results of business done in the trading year, some other business information which do not find place in the trial balance are required to be considered, while preparing final accounts. These adjustment items are required to be given proper effects in the final accounts. For every adjustment item, double effects are given in the final accounts, e.g. outstanding wages are first added to wages at debit side of trading account and secondly outstanding wages are shown separately at liability side of balance sheet.

Final Accounts: Adjustments at a glance:

Adjustment	How to make it in Profit & Loss Account	How to make it in Balance Sheet
1. Outstanding Expenses or Unpaid Expenses	Add to expenses concerned on debit side.	Show on liability side separately.
2. Outstanding Income / Income Due but not Received / income Receivable / income Earned but not Received.	Add to income concerned on credit side.	Show on asset side separately.
3. Prepaid Expenses/Expenses Paid in Advance / Unexpired Expenses.	Deduct from expenses concerned on debit side.	Show on asset side separately.
4. Income Received in Advance	Deduct from Income concerned on the credit side.	Show on liability side separately.
5. Depreciation.	Show on the debit side separately.	Deduct from asset concerned on asset side.
6. Reserve for Doubtful Debts.	a) If New R.D.D. + Bad Debts > Old R.D.D. : Then on Debit Side: Bad Debts + New R.D.D. – Old R.D.D. b) If Old R.D.D. > New R.D.D. + Bad Debts: Then on Credit Side: Old RD.D. - New RD.D. – Bad Debts.	Deduct only New RD.D. from debtors on asset side.
7. Reserve for Discount on Debtors.	a) If New Reserve + Discount > Old Reserve: Then on Debit Side: New Reserve + Discount – Old Reserve. b) If Old Reserve > New Reserve + Discount: Then on Credit Side: Old Reserve - New Reserve - Discount.	Deduct from debtors on asset side only the amount of New Reserve for discount.

8. Reserve for Discount on Creditors.	a) If New Reserve + Discount Received > Old Reserve: Then on Credit Side: New Reserve + Discount Received - Old Reserve. b) If Old Reserve > New Reserve + Discount Received: Then on Debit Side: Old Reserve - Discount Received - New Reserve.	Deduct from creditors on liability side only the amount of New Reserve.
9. Write off further Bad Debts.	Add to Bad Debts on debit side.	Deduct from debtors on asset Side.
10. Goods distributed as free samples.	Show on credit side of Trading Account	Show on debit side of Profit Loss Account
11. Loss of goods by fire (Goods not insured)	Show on credit side of Trading Account	Show on debit side of Profit Loss Account as loss by fire.
12. Loss of goods by fire and Insurance Company admitted the claim	Show on credit side of Trading Account by full value as "goods lost by fire". Show on asset side separately as "Insurance Co. A/c" or "Insurance Claim".	Show on debit side of Profit and Loss Account only the difference below value of goods destroyed and claim admitted as "Loss by Fire".
13. Wages paid for installation of machinery debited to Wages Account.	Deduct from wages on debit side of Trading Account.	Add to Machinery on asset side.
14. Goods withdrawn by proprietor for personal use.	Show on credit side of Trading Account.	Add to the drawings.
15. Goods given as charity	Show on credit side of Trading Account.	Debit Profit & Loss A/c (If considered business expenses) Deduct from Capital A/c (If considered personal expenses)
16. Goods used for office purposes	Show on credit side of Trading Account.	Debit to Profit & Loss A/c as office expenses.
17. Goods used for making an asset	Show on credit side of Trading Account.	Add to Asset A/c

18. Goods Purchased included in closing stock but not recorded in the Purchase Book.	Add to Purchases	Add to creditors
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10.6 Example of a Final Account: The trial balance of M/s. ABC as on 31st December 1998 is given below:

Trial Balance as on 31st December 1988

Debit Balances	Rs.	Credit Balances	Rs.
Drawings	750	Capitals	25,000
Building	20,000	Sales	75,500
Plant & Machinery	6,000	Purchase Returns	1,000
Cash at Bank	550	Sundry Creditors	12,600
Purchases	47,500	Discount Earned	50
Sales Return	1,500	Reserve for Bad Debts	750
Carriage Inward	350	Outstanding Salaries	100
Opening stock	11,000	6 % loan Taken on 01/10/88	11,000
Wages	6,000		
Sundry Debtors	17,600		
Salaries	2,500		
Postage & Telegram	200		
Rent & Insurance	400		
Bad Debt	250		
Discount	100		
Trade Expenses	300		
Furniture	5,000		
Commission	500		
Prepaid Insurance	300		
Printing & Stationery	700		
Cash in Hand	2,000		
Patents	2,500		
	1,26,000		1,26,000

Adjustments:

- (I) Stock as on 31st December 1988 was valued at Rs. 15,000.
- (II) Outstanding wages Rs. 600 and outstanding rent Rs. 700.
- (III) Provide 10% depreciation on Plant & Machinery and 5% depreciation of Furniture.
- (IV) 5% interest allowed on capital.
- (V) Goods worth Rs. 250/- withdrawn by the proprietor for self-use.

- (VI) Goods worth Rs. 5,000/- destroyed by fire and insurance company admitted a claim for Rs. 4,200/-
- (VII) Provide 5% RD.D. at Sundry Debtors.

Preparation of a Trading Account, Profit & Loss Account for the year ended 31st December.1988 and the Balance Sheet as on that date.

In the books of M/s. ABC Traders.

Dr. Trading and Profit & Loss Account for the year ended 31st December. 1978 Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening stock		11,000	Sales	75,500	
To Purchases	47,500		Less: Return Inwards	1,500	74,000
Less: Return Outward	1000	46,500	Goods Lost by Fire		5,000
To Wages	6,000		Goods withdrawn		250
Add: O/s wages	600	6,600	Closing Stock		15,000
To Carriage inwards		350			
To Gross Profit C/d		29,800			
		94,250			94,250
To Salaries		2,500	By Gross Profit b/d		29,800
To Postage & Telephone		200	By Discount A/c		50
To Rent & Insurance	400				
Add: Outstanding Rent	700	1,100			
To Depreciation					
P&M	600				
Furniture	250	850			
To Bad Debt	250				
Add; Further Bad debts	---				
Add: New Reserve	880				
	1,130				
Less: Old Reserve	750	380			
To Interest on Loan		165			
To Interest on Capital		1,250			
To Discount		100			
To Trade Expenses		300			
To Commission		500			
To Printing & Stationery		700			
To Loss by Fire		800			
To Net Profit C/d		21,005			
		29,850			29,850

Balance Sheet as at 31st December. 1988

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Capital	25,000		Sundry Debtors	17,600	
Less: Drawing	750		Less: New Reserve	880	16,720
	24,250		Cash at bank		550
Less: Drawings (goods)	250		Plant & Machinery	6,000	
	24,000		Less: Depreciation	600	5,400
Add: Interest (5%)	1,250		Land & Building		20,000
	25,250		Furniture	5,000	
Add: Net Profit	21,005	46,255	Less: Depreciation	250	4,750
Sundry Creditors		12,600	Closing Stock		15,000
Outstanding Salaries		100	Patents		2,500
Outstanding Wages		600	Insurance Claim Receivable		4,200
Outstanding Rent		700	Prepaid Insurance		300
Loans	11,000		Cash in Hand		2,000
Add: Interest on Loan	165	11,165			
		71,420			71,420

Working Notes: (1) Interest on Loan = $11,000 \times \frac{3}{12} \times \frac{6}{100} = 165$

(2) Interest on Capital = $25,000 \times \frac{5}{100} = 1,250$

PART B - Capital and Revenue Expenditure

12.0 Capital and Revenue Expenditure - Meaning

12.1 Capital expenditure: it is the expenditure resulting in:

- (i) the acquisition of an asset;
- (ii) an increase in the earning capacity of a business;
- (iii) an advantage or a benefit of an enduring or permanent nature.

The purpose of capital expenditure is to create a new infrastructure/ asset with a view to improve future profitability. This is done either (a) positively by increasing earning capacity; or (b) negatively by some structural changes thereby decreasing working expenditure.

It is not absolutely essential that some new asset must come into existence as a result of capital expenditure. If a cinema theatre is renovated to provide additional seating capacity, then expenditure on such renovation is a capital expenditure, because, it increases the earning capacity of the business. Similarly, if a petrol engine of a motorcar were converted into diesel engine, the expenditure involved would be of capital nature, as it would result in a decrease in working expenditure of the business in future.

Following are examples of capital expenditure:

- (1) Expenditure for purchase or acquisition of fixed assets like land, buildings, plant, machinery, furniture, fixtures, goodwill, patent, trademarks, copyrights, leasehold rights, vehicles, etc.
- (2) Expenditure incurred in connection with or incidental to the purchase or installation of a fixed asset e.g., legal charges, stamp duty for the purchase of land and building or copyrights, expenses incurred for installation of plant and machinery, expenses incurred for bringing the fixed asset into the factory like freight, customs duty, or octroi duty on purchase of machinery, furniture and building materials.
- (3) Expenditure for extending or improving a fixed asset e.g., amount spent on increasing the seating capacity of a hotel, cinema auditorium or amount spent in converting petrol engine into diesel engine or amount spent in converting coal-fired furnace into electric furnace, etc.

Thus, a capital expenditure is that expenditure, which results to a benefit not only in the current accounting year, but also the future years. It is therefore necessary to carry forward such expenditure for allocation / amortization over all those years in which benefits are expected to accrue. Thus, the cost of fixed asset is written off by way of depreciation over the period of its use.

12.2 Revenue Expenditure: It is the expenditure incurred

- (i) for the actual running of business;
- (ii) in maintaining adequately all the fixed assets;
- (iii) in an accounting period and is:
 - (a) matched against the income of that accounting period and
 - (b) not carried forward to the subsequent accounting year.

Revenue expenditure is necessary for the maintenance of the earning capacity (including the upkeep of fixed assets), and all other normal expenses incurred in sale and purchase of goods and services, office administration, etc.

Examples of revenue expenditure:

- (1) All items of expenditure whose benefit expires within the same year of expenditure e.g., printing and stationery, travelling expenses, rent, salaries and wages. These are the administration and such other expenses incurred in the normal course of the business like office expenses, sales expenses, interest, audit fees etc.
- (2) Cost of purchase of goods for conversion into final product for resale e.g., purchase of raw materials, packing materials and also such conversion charges as are necessary to produce the saleable product.
- (3) Expenditure incurred in maintaining the fixed assets of the business, e.g., repairs and maintenance of machinery, furniture, building.
- (4) Depreciation on fixed assets.

12.3 Deferred Revenue Expenditure:

There are certain expenses, which are primarily revenue in nature but the benefit from which is not exhausted during the year in which it is incurred. Such expenses are called "Deferred Revenue Expenditures." The term refers to those revenue expenses the writing off, of which is deferred to more than one year. Such expenses are carried forward and written off over the period during which the business is likely to benefit from the same.

Revenue expenditure written off over more than one year can be of two different categories:

- (1) (a) Those expenses which are wholly paid in advance and for which the services/benefits are to be received in future. e.g., prepaid insurance, prepaid rent, advance salaries.
- (b) Those expenses the benefit of which is partly received during the year under consideration and partly in subsequent year(s) e.g., expenditure incurred in an advertising campaign for introducing a new product. A part of this expenditure will be charged against profit of the year and the balance will be carried forward (and shown in the balance sheet), for write off in subsequent years.

- (2) Expenses, which are incurred very rarely. Such expenses are not incurred in the normal routine carrying on of the business. Illustrations of such expenses are developmental expenditure like market survey, expenses on experiments, expenses on issue of shares and debentures, discount on issue of shares or debentures. Proper accounting necessitates that; these are not treated as expenses for the year in which they are incurred, but spread over a number of years. Such expenses are the real "deferred revenue expenses." These expenses do not create any asset or infrastructure. Hence they are not "capital expenditure." Simultaneously they are not normal day-to-day expenses of the year, which can be absorbed against the revenue of one year.

Revenue expenditure constitutes a charge against profits; it is therefore debited to Trading and Profit and Loss account. On the other hand, capital expenditure is not a charge against profits. It is an asset not meant for resale. It is shown on the assets side of the balance sheet.

12.4 Capital and Revenue Receipts:

Any receipt on capital account is a capital receipt and any receipt on revenue account is a revenue receipt. A capital receipt is disclosed in the balance sheet while a revenue receipt appears in the trading and profit and loss account.

Thus, any receipt in the ordinary course of the business, which is a regular source of income of the company, is a revenue receipt. Sale of goods, receipt of interest and dividend income, rents received, commission and discounts earned are all examples of revenue receipts. Receipts like loans from banks and friends, capital contributed by a partner, a lottery prize, and sale of old assets are the examples of capital receipts.

However, here also, at times the distinction is very thin. Facts and circumstances of each case will decide the issue. A sale of machinery will be a capital receipt for a manufacturing company using that machine as a fixed asset, but, will be a revenue receipt for a machinery dealer.

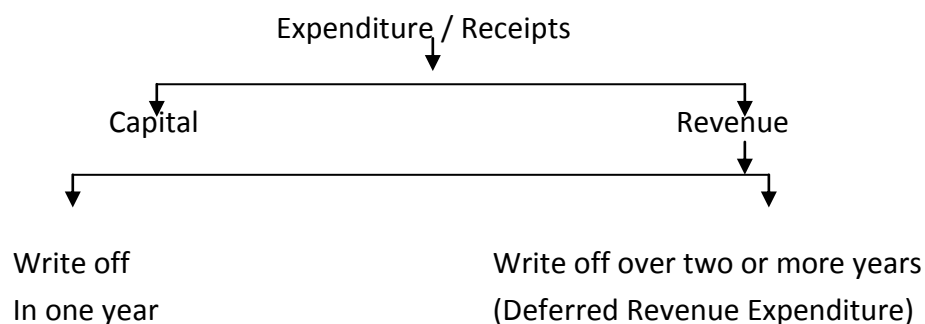
12.5 Distinction between "Capital" and "Revenue"

The distinction between "Capital" and "Revenue" is of vital importance in accounting. It directly affects the correctness of the amount of profit or loss made by the firm during a given period. It also affects the truthfulness of the financial position of the firm on any given date. The distinction between Capital and Revenue is connected with the matching of costs with revenues. This concept requires matching the expenses incurred for a period, with revenue earned for the same period. The process involves two steps: (1) Ascertain the revenue earned for a given accounting period and (2) Determine expenses incurred to earn that revenue.

The distinction between Capital and Revenue is relevant for both the steps. Certain receipts are not income. For example, sale proceeds of obsolete plant and machinery, or capital received from the partner. These are receipts but not income for a given period. Hence such receipts are not credited to profit and loss account. They are capital receipts.

Similarly, there are certain payments, which do not represent expense for the year e.g., purchase of land and building or repayment of loan taken from the bank. Hence such payments are not to be debited to profit and loss account. They are capital expenditures.

The distinction between capital and revenue becomes relevant in the preparation of final accounts viz. profit and loss account and balance sheet. All items appearing in the trial balance are taken either to trading and profit and loss account or balance sheet. All revenue expenditures and receipts are taken to the trading and profit and loss account, while all capital expenditures and receipts are taken to the balance sheet. Each item of expenditure and receipt must therefore, be placed in the appropriate financial statement. The distinction can be depicted with the help of a chart:



12.6 A Specimen bifurcating following items as Capital, revenue or deferred revenue with reasons:

- (1) Cost incurred in replacing worn out but costly spare parts of a machine.
- (2) Cost of acquisition of copyrights.
- (3) Cost of designing a new product, which ultimately could not come up for commercial production,
- (4) Heavy current repairs to the roof of the factory building.
- (5) Cost of alteration to a cinema theatre in accordance with municipal law,
- (6) Replacement of a wooden roof with a guarantee of 20 years.
- (7) Replacement of worn out tyre of delivery van.
- (8) Repainting of the building.
- (9) Replacement of wooden platform for machinery with a concrete one,
- (10) Replacement of an open truck body with a closed refrigerated body,
- (11) Replacement of petrol engine of the car with the diesel engine.
- (12) Planting of rose bushes outside the managing director's office.
- (13) Amount received from insurance company for loss of stock.
- (14) Loss due to change in exchange rate for purchase of materials.
- (15) Additions to factory building.
- (16) Repairs to plant.
- (17) Heavy advertising expenses.
- (18) Renewal of factory licenses.
- (19) Premium given for lease.
- (20) Costs in relation to mortgage.
- (21) Commission on issue of debentures.
- (22) Cost of pulling down an old factory preparatory to constructing a new one
- (23) Amount received as claim from insurance company, on a fire destroying one machine.
- (24) Profit on sale of investments.
- (25) Contribution paid to state government/municipal corporation / gram panchayat for road development in surrounding area.
- (26) Rs.10,000 spent on renovation and overhauling machinery, which resulted in extension of the life of the plant.
- (27) Carriage inwards and freight for bringing the furniture from the dealer.
- (28) White washing of factory building.
- (29) Heavy legal expenses incurred by a publisher in a defamation suit.
- (30) Cost of market research of a new product.
- (31) Interest paid on money borrowed for purchasing plant and machinery.

- (32) A sum of Rs. 2,500 previously written off as bad debts now recovered; this year.
- (33) Legal expenses incurred in an action for infringement of trademark.
- (34) Expenditure incurred for an additional exit to the theatre under the order of a local authority.
- (35) Purchased a second-hand typewriter for Rs. 5,000 and spent Rs. 3,000 on repairs to make it ready for use.
- (36) Compensation received from local authority for compulsory acquisition of land.
- (37) Expenditure incurred for equipping the theatre with sitting accommodation and electrical fittings.
- (38) Expenditure on uniforms for the staff.
- (39) Cost of stores consumed in manufacturing machinery for installation in own factory.
- (40) Rs.25,000 spent for replacing the electric motor of machinery. The motor was destroyed by fire.
- (41) Claim received from an insurance company for suspension of business activity due to fire.
- (42) Compensation of Rs. 95,000 paid for termination of services of three workers who were disturbing the industrial peace in the factory.
- (43) Rs.1,00,000 received by tenant for surrendering his tenancy right in favour of the builder who has purchased the premises.
- (44) Amount of Rs. 25,000 spent for dismantling (at old factory), removing and reinstallation (at new factory).
- (45) Purchase of loose tools costing Rs. 1,500 expected to last only for eight months approximately.
- (46) Cost of raincoats and umbrellas for employees who are given the same every two years.
- (47) Expenditure incurred on two engineers for training on a new machine in Japan. Expenditure includes their lodging, boarding, travelling, and training expenses.
- (48) Wage paid for construction of building extension.
- (49) Import duty on raw materials purchased and imported from Germany.
- (50) Cost of replacement of defective part of the machinery.
- (51) Expenditure incurred in preparing a project report.
- (52) Expenditure for training employees for better running of machinery.
- (53) Expenditure incurred for repairing cinema screen.
- (54) Legal and other expenses incurred in connection with the issue of share capital.
- (55) Amount paid for purchase of goodwill of a similar business.
- (56) Amount received from a relative staying abroad.
- (57) Old items of machinery disposed off at a loss.

- (58) Travelling expenses of a director for going to USA to find possibilities of export of company's products.
- (59) Stock transferred from one factory to another one where there is shortage.
- (60) Travelling expenses of a director for going to Germany to purchase a new machine.

Solution:

Sr. No.	Item	Nature of Expenditure / Receipt	Reason
1.	Cost of replacing costly spare parts of a machine	Revenue	For maintenance of an asset
2.	Cost of acquisition of copyrights	Capital	New asset acquired
3.	Cost of designing a new product which did not come up for production	Deferred revenue	Amount spent on developing a product. (Basically, it is a capital loss/expenditure)
4.	Heavy current repairs to roof of factory building	Revenue	For maintenance of an asset
5.	Cost of alteration of cinema theatre in accordance with municipal law	Revenue	Normal day-to-day business expenditure
6.	Replacement of wooden roof with 20 years guarantee	Revenue	Maintenance expenditure
7.	Replacement of worn out tyre of delivery van	Revenue	Maintenance expenditure
8.	Repainting of building	Revenue	Normal recurring expenditure
9.	Replacement of wooden platform for machinery with concrete	Capital	Increases life of the asset
10.	Replacement of open truck body with a closed refrigerated body	Capital	Increases earning capacity of the asset
11.	Replacement of petrol engine of the car with diesel engine	Capital	Increases earning capacity of the car by reducing cost of operation
12.	Planting rose bushes outside director's office	Revenue	Normal business
13.	Amount received from insurance company for loss of stock	Revenue	Proceeds on compensation for loss of stock is revenue receipt
14.	Loss due to change in exchange rate for purchase of materials	Revenue	Normal business expenditure
15.	Additions to factory building	Capital	Purchase of an asset
16.	Repairs to plant	Revenue	For maintenance of an asset
17.	Heavy advertising expenses	Deferred revenue	Spent for a new product and the benefit will last over some years

18.	Renewal of factory licenses	Revenue	Recurring expenditure
19.	Premium given for lease	Capital	Expenditure incidental to purchase of an asset
20.	Costs in relation to mortgage	Revenue	Normal business expenditure
21.	Commission on issue of debentures	Deferred Revenue	Benefit will last over some years
22.	Cost of pulling down an old factory for building a new one.	Revenue	Does not result in any new asset
23.	Claim received from insurance co. on fire destroying one machine	Capital	It is in connection with destruction of a capital asset
24.	Profit on sale of investments	Revenue	Sales realisation over and above the cost is revenue receipt
25.	Contribution for road development	Revenue	Does not result in any asset for the company and is social responsibility of the company
26.	Amount spent on renovation and overhauling a machinery which resulted in extension of the life of the plant	Capital	Increases life of the asset
27.	Carriage inwards/ freight for brining furniture	Capital	Expenditure in connection with purchase of an asset
28.	White washing of factory building	Revenue	Normal business expenditure
29.	Heavy legal expenses incurred by publisher in a defamation suit	Revenue	Normal business expenditure for a publisher
30.	Cost of market research of a new product	Deferred revenue	Benefit will last for a number of years
31.	Interest paid on money borrowed for purchase of machinery	Capital up to the date of installation of machinery and thereafter revenue	Expenditure incidental to purchase of asset

32.	Amount previously written off as bad	Revenue	Normal business receipts
33.	Legal expenses for infringement of trademark	Revenue	Expenditure for maintenance of an asset
34.	Amount for additional exit to the theatre	Revenue	Normal business expenditure
35.	(a) Purchase of second- hand typewriter (b) Amount spent on repairs of typewriters	Capital Capital	Purchase of an asset Expenditure incidental to purchase of asset to bring it in running condition
36.	Compensation from local authority for acquisition of land	Capital	Receipt in connection with sale of a fixed asset
37.	Expenditure for equipping a theatre with sitting accommodation and electrical fittings	Capital	Increases earning capacity of the asset i.e. theatre
38.	Amount spent on uniforms	Revenue	Recurring expenditure for the staff
39.	Cost of stores consumed in manufacturing machinery for installation in own factory	Capital	Expenditure incidental to acquisition of an asset
40.	Amount spent on replacing electric motor of machinery destroyed by fire	Revenue	For maintenance of an asset
41.	Claim received from an insurance company for suspension of business activity due to fire	Revenue	Receipt for suspension of revenue activities
42.	Compensation paid for termination of services of workers disturbing peace in the factory	Revenue	Normal business expenditure
43.	Amount received by tenant for surrendering tenancy right	Capital	Receipt for sale of capital asset
44.	Amount spent for removing and reinstallation of machinery	Revenue	Expenditure does not increase life of asset
45.	Purchase of loose tools expected to last 8 months	Revenue	Normal running expenditure
46.	Cost of raincoats and umbrellas for employees	Revenue	Recurring business expenditure
47.	Training of two engineers on a new machine in Japan	Capital	Expenditure incidental to acquisition of an asset
48.	Wages for building extension	Capital	Expenditure incidental to acquisition of an asset
49.	Import duty on raw materials imported from Germany	Revenue	Normal business expenditure
50.	Cost of replacement of defective part of machinery	Revenue	For maintenance of an asset

51.	Expenditure in preparing project report	Capital / Deferred Revenue	Capital if project is ultimately implemented otherwise deferred revenue
52.	Training expenses for employees for better running of machinery	Revenue	Normal business expenditure
53.	Expenses for repair of cinema screen	Revenue	For maintenance of an asset
54.	Legal and other expenses in connection with issue of share capital	(Deferred) Revenue expenditure	Benefit of expenditure to last for a few years
55.	Goodwill of another business acquired	Capital	Brings into existence a new asset
56.	Gift received from a relative	Capital	It is not a normal receipt
57.	Loss on sale of machinery	Capital	Loss is because of sale of a fixed asset
58.	Travelling expenses of director abroad for exploring export possibilities	Revenue expenditure	Normal business (even if export ultimately does not take place)
59.	Cost of transferring stock from one factory to another	Revenue	Normal business expenditure
60.	Travelling expenses of director abroad for purchase of machinery	Capital	Expenditure incidental to purchase of an asset.

PART C –NPO

FINAL ACCOUNTS AND BALANCE SHEET OF NON-PROFIT SEEKING CONCERNS

Certain concerns like Clubs, Charitable Institutions, Medical Association, Societies, etc. do not intend to earn profit. They render service to the society or to their members. Their members do not get any share of profit or dividend. These concerns are known as non-profit concerns as their transactions are service-based but not profit-based.

Their annual accounts are regularly prepared to convey their financial affairs to their members or others like (govt. etc.) for seeking financial grants. If the size of the concern is small, the accounting records are usually kept under single entry system. Complete double entry system is followed only in big concerns. In any case they all prepare — (A) Receipts & Payments Account for a financial period; (B) Income & Expenditure Account for a financial period and (C) Balance Sheet at the end of the financial period.

A. Receipts & Payments Account

1. It is an Account which contains all Cash and Bank transactions made by a non-profit organization during a particular financial period.
2. It starts with the opening balances of Cash and Bank. All Cash Receipts both capital & revenue during the period are debited to it.
3. All Cash Payments both capital & revenue during the period are credited to this Account. It ends with the closing Cash and Bank Balances.
4. While recording the Cash and Bank transactions all entries are made on Cash Basis.
5. It is a summary of Cash Book.
6. It follows Real Account

PERFORMA RECEIPTS & PAYMENT ACCOUNT

In the books of

Receipts & Payments Account For the year ended

Receipts	Amount Rs.	Amount Rs	Payments	Amount Rs.	Amount Rs.
To balance b/d			By Sundry Payments		
Cash in hand		XXX	(Both Capital and Revenue)		XXX
Cash at bank		XXX			
To sundry Receipts (Both Capital and Revenue)		XXX	By Balance C/d Cash in hand Cash at bank		XXX XXX
		XXX			XXX

B. Income & Expenditure Account

1. It follows Nominal Account.
2. All expenses of revenue nature for the particular period are debited to this Account on accrual basis.
3. Similarly all revenue incomes related to the particular period are credited to this Account on accrual basis.
4. All Capital incomes and Expenditures are excluded.
5. Only current year's incomes and expenses are recorded. Amounts related to other periods are deducted. Amounts outstanding for the current year are added.
6. Profit on Sale of Asset is credited. Loss on Sale of Asset is debited. Annual Depreciation on Assets is also debited.
7. If income is more than expenditure, it is called a Surplus, and is added with C General Fund etc. in the Balance Sheet.
8. If expenditure is more than income, it is a deficit, and is deducted from Capital or Fund etc. in the Balance Sheet.

PROFORMA INCOME & EXPENDITURE ACCOUNT

In the books of

Income & expenditure Account for the year ended,,,,,.

Dr.

Cr.

Expenditure	Amount Rs.	Amount Rs	Income	Amount Rs.	Amount Rs.
To Revenue Expenditure		XXX	By Revenue Income		XXX
To Surplus (Excess of Income over Expenditure)			By Deficit (Excess of Expenditure over Income)		
		XXX			XXX

C. Balance Sheet

The Balance Sheet is prepared in the similar way as followed in a Trading concern shall of the assets and liabilities may be made in order of liquidity or in order of nence.

Calculation of opening capital Fund: (If not mentioned)

Opening Capital Fund = Opening Assets - Opening Liabilities,

Distinction between Receipts and Payment Account and Income & Expenditure Account

	Receipts & Payment Account	Income & Expenditure Account
1	It is a summarized Cash Book	It closely resembles the Profit & Loss Account of a Trading Concern
2	Receipts are debited, and Payment are Credited	Incomes are credited, and Expenditures are debited
3	Transactions are recorded on cash basis	Transactions are recorded on Accrual basis.
4	Amounts related to previous period or future period may remain included. Outstanding amount for included. Outstanding amount for current year is excluded	Transactions are recorded on accrual basis. All amounts not related to the current period are excluded. Outstanding amounts of current period are added.
5	It records both Capital and Revenue transactions.	It records of Revenue transactions only.
6	It serves the purpose of a Real Account	It serves the purpose of a Nominal Account

7	It starts with opening Cash and Bank Balances and ends with closing Cash and Bank Balances.	1 It does not record such balances, rather its final balance shows a surplus or a deficit for the period
8	It does not record notional loss or non-cash expenses like bad debts, depreciation etc.	It considers all such expenses for matching against revenues
9	Its closing balance is carried forward to the same account of the next accounting period.	Its closing balance is transferred to Capital Fund, or General Fund or Accumulated Fund in the same period's Balance Sheet.
10	It helps to prepare an income & ire A/c.	It helps to prepare a Balance Sheet

Some Important Considerations

1. Capital Fund:

It is also called "General Fund" or "Accumulated Fund," It is actually the Capital of a non-profit concern. It may be found out as the excess of assets over liabilities. Usually "Surplus" or "Deficit" during a period is added with or deducted from it. A portion of Capitalized incomes like donations may be added with it.

2. Special Fund:

It may be created out of special donation or subscription or out of a proportion of the "Surplus". For example club may have "Building Fund". It may be used meeting some specific expenses or for acquiring an assets. It any income is derived out of investment made against this fund or if any profit or loss occurs due to sale of such investment, such income or profit or loss is transferred to this fund.

Other Treatments:

(a) If the Special Fund is used to meet an expense

Special Fund A/c Dr.
 To Bank A/c (amt. of expense)

The balance of the Fund is shown as a liability. If the balance is transferred to Capital Fund, the entry will be—

Special Fund A/c Dr.
 To Capital Fund A/c (Balance of Special Fund)

(b) If the Special Fund is used to purchase an asset

Asset A/c Dr.
 To Bank A/c (Cost of the asset) Special Fund A/c Dr.
 To Capital Fund A/c (Special Fund closed)

3. Donations

- (a) Donation received for a particular purpose should be credited to Special Fund.
For example, Donation received for Building should be credited to Building Fund A/c.
- (b) For other donations received the by-laws or rules of the concern should be followed.
- (c) If there is no such rule, donations received of non-recurring nature should be credited to Capital Fund. Recurring donations received should be credited to Income & Expenditure Account.
- (d) Donation paid by the concern should be debited to Income & Expenditure Account.

4. Legacy received: It is to be directly added with Capital Fund after deduction of tax, (if any). It is a kind of donation received according to the will made by a deceased person.

5. Entrance Fees or Admission Fees

- (a) The rules or by-laws of the concern should be followed.
- (b) If there is no such rule, Admission or Entrance Fees paid once by members for acquiring membership should be added with Capital Fund.
- (c) If such fees are of small amounts covering the expenses of admission only, the fees may be credited to Income & Expenditure Account.

6. Subscriptions

- (a) Annual subscriptions are credited to Income & Expenditure Account on accrual basis.
- (b) Life membership subscription is usually credited to a separate account shown as a liability. Annual Subscription apportioned out of that is credited to Income & Expenditure Account and deducted from the liability. Thus the balance is carried forward till the contribution by a member is fully exhausted. If any member dies before hand, the balance of his life Membership contribution is transferred to Capital Fund or General Fund.

Illustration:

Special Points: (a) Preparation of Income & Expenditure Account and calculation of Closing Capital Fund; (b) Loss on Sale of Asset; (c) Donation to a Specific Fund.

The following is the Receipts and Payments Account of a Club for the year ended 31st December, 2007

Receipts: Cash in hand (1.1.07) Rs. 1,000; Cash at Bank (1.1.07) Rs. 4,000; Donation for Building Rs. 10,000; Sale of Furniture (Balance on 1.1.07 Rs. 100) Rs. 80; Sale of Newspapers Rs. 200; Subscriptions Rs. 20,000.

Payments: Sports Materials Rs. 2,500; Salaries Rs. 3,250; Furniture Rs.1,600; Newspapers Rs.500; Building Fund Investment Rs. 10,000; Tournament Expenses Rs. 11,000; Postage Rs. 200; Cash in hand (closing balance) Rs. 1,030;Cash at Bank (Closing Balance) Rs. 5,200.

The following adjustments are to be made

- (i) Of the Subscriptions collected Rs. 2,000 was outstanding for 2006;
- (ii) on 1.1.07 Stock of Raw Materials was Rs. 500 and 31.12.07 it was Rs.700.

Prepare the Income and Expenditure Account for the year ended 31st December, 2007 and show the Capital Fund of the Club as on that date.

PART D - COMPANY FINAL ACCOUNTS

(i) Schedule VI of Companies Act :

Schedule VI to the Companies Act, 1956 provides the manner in which every company registered under the Act shall prepare its Balance Sheet, Statement of Profit and Loss and notes thereto. The Revised Schedule VI is applicable for the financial year commencing on or after April 1, 2011.

The Revised Schedule VI prescribes only the vertical format for presentation of Financial Statements. Thus, a company does not have an option to use horizontal format for the presentation of Financial Statements.

The Structure of Revised Schedule VI is as under:

- I. General Instructions
- II. Part I - Form of Balance Sheet
- III. General Instructions for Preparation of Balance Sheet
- IV. Part II - Form of Statement of Profit and Loss
- V. General Instructions for Preparation of Statement of Profit and Loss.

(ii) Shareholder's Funds

Shareholder's Funds consists of;

A. Share Capital: It should include

- a. The Authorized Capital with the number and amount of shares;
- b. The number of shares issued and subscribed and whether they are fully paid or not fully paid;
- c. Face value per share;
- d. The different classes of shares and their rights and restrictions.
- e. A reconciliation of the number of shares outstanding at the beginning and at the end of the period;

- f. Separate particulars for a period of five years following the year in which the shares have been allotted/bought back, in respect of:
- Aggregate number and class of shares allotted as fully paid up pursuant to contract(s) without payment being received in cash.
 - Aggregate number and class of shares allotted as fully paid up by way of bonus shares.
 - Aggregate number and class of shares bought back.

B. Reserves and Surplus: It shall be classified as:

- a. Capital Reserves;
- b. Capital Redemption Reserves;
- c. Securities Premium Reserve;
- d. Debenture Redemption Reserve;
- e. Revaluation Reserve;
- f. Other Reserves;
- g. Surplus i.e. balance in Statement of Profit & Loss disclosing allocations and appropriations such as dividend paid, bonus shares and transfer to/from reserves.
- h. Debit balance of Statement of Profit and Loss shall be shown as a negative figure under the head 'Surplus' Similarly, the balance of 'Reserves and Surplus', after adjusting negative balance of surplus, if any, shall be shown under the head 'Reserves and Surplus' even if the resulting figure is in the negative.

(iii) Non Current Liabilities :

Ans. Non current Liabilities includes:

A. Long-term Borrowings :

- a. Bonds/debentures.
- b. Term loans
from banks
from other parties.
- c. Deposits.
- e. Loans and advances from related parties.
- f. Long-term maturities of finance lease obligations
- g. Other loans and advances (specify nature).

Borrowings shall be classified as secured and unsecured. The type and nature of security shall be specified. If the loans have been guaranteed by directors, it should be mentioned against the loan. Also the terms of repayment of loans should be mentioned. If the company is in default about repayment of loan then the period and amount of default, with break-up of principal and interest shall be specified separately.

- B. Deferred Tax Liabilities:** If the company has to pay either the Central Govt. or the State Govt for any taxes in the future the details of the liabilities along with the period should be mentioned.
- C. Other Long-term Liabilities :** Other Long-term Liabilities shall be classified as:
 - a. Trade payables
 - b. Others.
- D. Long-term Provisions:** The amounts shall be classified as:
 - a. Provision for employee benefits.
 - b. Others.

(iv) Current Liabilities:

Current Liabilities consists of,

- A. Short-term Borrowings:**
 - a. Loans repayable on demand
 - from banks.
 - from other parties.
 - b. Loans and advances from subsidiaries/holding company/associates/business ventures.
 - c. Deposits.
 - d. Other loans and advances.

Borrowings shall be classified as secured and unsecured. The type and nature of security shall be specified. If the loans have been guaranteed by directors, it should be mentioned against the loan. Also the terms of repayment of loans should be mentioned. If the company is in default about repayment of loan then the period and amount of default, with break-up of principal and interest shall be specified separately.

- B. Trade Payables :**They consist of Creditors, Bills Payable and outstanding expenses

C. Other Current Liabilities :The amounts shall be classified as:

- a. Current maturities of long-term debt;
- b. Current maturities of finance lease obligations;
- c. Income received in Advance;
- d. Interest accrued but not due on borrowings;
- e. Interest accrued and due on borrowings;
- f. Unpaid Dividends;
- g. Other payables.

D. Short-term Provisions : The amounts shall be classified as:

- a. Provision for employee benefits.
- b. Others.

(v) Non Current Assets :

It includes

A. Tangible Assets:

- a. Land.
- b. Buildings.
- c. Plant and Equipment.
- d. Furniture and Fixtures.
- e. Vehicles.
- f. Office equipment.
- g. Others .

B. Intangible Assets:

- a. Goodwill.
- b. Brands/trademarks.
- c. Computer software.
- d. Copyrights, and patents and other intellectual property rights, services and operating rights.
- e. License and franchise.
- f. Others

Details for both Tangible and Intangible Assets should be given, the Gross as well as Net Amount of the Assets , additions and Deductions during the year. The amount of depreciation charged in the current year and the amount of depreciation adjusted on sale of assets.

C. Non-current Investments: These are Long Term Investments

- a. Investments in Equity Instruments;
- b. Investments in Preference shares;
- c. Investments in Government or trust securities;
- d. Investments in units, debentures or bonds;
- e. Investments in Mutual Funds;
- f. Investments in partnership firm;

The following information should be given

- a. The amount of quoted investments and market value;
- b. The amount of unquoted investments;
- c. The provision for decrease in value of investments;
- d. The amount of partly paid-up investments.

D. Long-term Loans and Advances:

Long-term loans and advances shall be classified as:

- a. Capital Advances;
- b. Security Deposits;
- c. Loans and Advances to related parties ;
- d. Other Loans and Advances.

The above shall also be separately sub-classified as:

- a. Secured, considered good;
- b. Unsecured, considered good;
- c. Doubtful.

E. Other Non-current Assets :Other non-current assets shall be classified as:

- (i) Long-term Trade Receivables;
- (ii) Others .

(vi) Current Assets:

Current Assets consists of

A. Current Investments: These are called as short term investments

- a. Investments in Equity Instruments;
- b. Investments in Preference shares;
- c. Investments in Government or trust securities;
- d. Investments in units, debentures or bonds;
- e. Investments in Mutual Funds;
- f. Investments in partnership firm;

The following information should be given

- a. The amount of quoted investments and market value;
- b. The amount of unquoted investments;
- c. The provision for decrease in value of investments;
- d. The amount of partly paid-up investments.
- e. The basis of valuation of individual investments.

B. Inventories:

- a. Raw material;
 - b. Work-in-progress;
 - c. Finished goods;
 - d. Stock-in-trade;
 - e. Stores and spares;
 - f. Loose tools;
 - g. Goods In Transit
- Mode of valuation should be stated.

C. Trade Receivables:

Under this heading we record entries for debtors and bills receivable. If the amount of Trade Receivables is outstanding for a period exceeding six months they should be separately stated. Trade receivables should also be segregated as

- a. Secured, considered good;
- b. Unsecured, considered good;
- c. Doubtful.

If the Debts are due by directors or other officers of the company or debts due by firms or private companies respectively in which any director is a partner or a director or a member should be separately stated.

D. Cash and Cash Equivalents:

- a. Balances with banks;
- b. Cheques, drafts on hand;
- c. Cash on hand;

If the company has Bank Fixed Deposits having a maturity of more than 12 months it should be disclosed separately.

E. Short-term Loans and Advances:

- a. Loans and Advances to related parties (giving details thereof);
- b. Others .

F. Other Current Assets : This is an all-inclusive heading, which incorporates current assets that do not fit into any other assets categories.

(vii) Contingencies and Commitments:

Contingencies and Commitments consists of

(i) **Contingent liabilities:**

- a. Claims against the company not acknowledged as debt;
- b. Guarantees;
- c. Other money for which the company is contingently liable

(ii) **Commitments :**

- a. Estimated amount of contracts remaining to be executed on capital account and not provided for;
- b. Uncalled liability on shares and other investments partly paid;
- c. Other commitments .

(iii) Arrears of fixed cumulative dividends on Preference Shares shall also be disclosed separately.

(viii) Accounting Standard 1:

- 1) Accounting policies refers to specific accounting principles and the method of applying those principles adopted by the enterprises in preparation and presentation of the financial statements.
- 2) At the time of preparation of financial statements i.e. Balance sheet, profit and loss account, there are many areas, which have more than one method of accounting treatment such as:

Methods of depreciation, conversion or translation of foreign currency item, valuation of inventories, valuation of investments, treatment of retirement benefits etc.

There are many other areas where more than one method can be followed in preparation of Balance sheet and profit and loss account. What methods have been followed must be disclosed as accounting policies. Hence, accounting policies contain the information about the method adopted in preparation of financial statements. Statement of accounting policies are a part of financial statements.

- 3) For proper and better understanding of financial statement it is required that all the significant accounting policies followed in preparation of financial statements should be disclosed because assets and liabilities in the balance sheet and profit and loss account are significantly affected by the accounting policies followed. All significant accounting policies should be disclosed at one place because it would be helpful to the reader of financial statement.

4) Selection of accounting policies

The basic objective of selection of accounting policies is that the financial statements should be prepared on the basis of such accounting policies, which exhibits true and fair view of the state of affairs of the Balance sheet and profit and loss account.

Major points which are considered for the purpose of selection and application of accounting policies are:

- a) **Prudence** – Generally maker of financial statement has to face uncertainties at the time of preparation of financial statement. These uncertainties may be regarding collection of receivables, number of warranty claims that may occur. Prudence means making of estimates, which are required under conditions of uncertainty.
- b) **Substance over form** – It means that transaction should be accounted for in accordance with the actual happening and economic reality of the transaction and not by its legal form. Like in hire purchase if the assets are purchased on hire purchase by hire purchaser, the assets and are shown in the books of hire purchaser inspite of the fact that the hire purchaser is not the legal owner of the assets purchased. Under the hire purchase agreement, the purchaser becomes the owner only on the payment of last installment. Therefore, the legal form of the transaction is ignored and the transaction is accounted as per its substance.
- c) **Materiality** – Financial statement should disclose all the items and facts which are sufficient enough to influence the decisions of the reader/user of financial statements.

5) Changes in accounting policies

A change in accounting policies should be made in the following conditions:

- a) When it is required for compliance of statute.
- b) For compliance of accounting standard and
- c) For better presentation of financial statements.

If there is any change in accounting policies in preparation of financial statement from one period to subsequent period and such change affects the state of affairs of the balance sheet and profit and loss account of current period or the financial statement of later period, then such change must be disclosed in financial statement. The amount, by which the financial statement is affected should be disclosed to the extent ascertainable.

6) **Fundamental accounting assumption**

The institute of chartered accountants of India issued accounting standard (AS1) disclosure of accounting policies which states that there are three fundamental accounting assumptions:-

- i. Going concern
- ii. Consistency
- iii. Accrual

The institute issued the frame work for the preparation and presentation of financial statements in year 2000 which defines the underlying assumptions as follows:-

Going concern –

The financial statements are normally prepared on the assumption that an enterprise is a going concern and will continue in operation for the near future. Hence it is assumed that the enterprise has neither the intention nor the need to liquidate or curtail materially the scale of its operations, if such an intention or need exists, the financial statements may have to be prepared on a different basis and if so the basis used is disclosed.

Consistency -

In order to achieve comparability of the financial statements of an enterprise through time, the accounting policies are followed consistently from one period to another; a change in an accounting policy is made only in certain exceptional circumstances.

Accrual

In order to meet their objectives, financial statements are prepared on the accrual basis of accounting. Under this basis the effects of transactions and other events are recognized when they occur (and not as cash or cash equivalent is received or paid) and they are recorded in accounting records and reported in financial statements of the periods to which they relate. Financial statements prepared on the accrual basis inform users not only of the past events involving the payment and receipt of cash but also of obligation to pay cash in the future and of resources that represent cash to be received in the future. Hence, they provide the type of information about past transactions and other events that is most useful to users in making economic decisions.

If nothing has been written about the fundamental accounting assumptions in financial statements, it is assumed that fundamental accounting assumption has been followed in preparation of financial statement.

If any fundamental accounting assumption is not followed in the financial statements, then this fact should be disclosed in the financial statement.

- 7) **Notes to accounts** - Notes to accounts are integral part of financial statement. Notes to accounts are the explanation of the management about the items in the financial statements (profit and loss account and the balance sheet). The management gives more explanation and information about the items profit and loss account and balance sheet and any other items by way of notes to accounts.

Balance Sheet as on
Final Accounts Format

Particular	Sch. No.	Current Year	Previous Year
I] EQUITY AND LIABILITIES			
A. SHAREHOLDERS FUND			
1. Share Capital	1	xx	
2. Reserves & surplus	2	xx	
3. Money received against share warrant		xx	
B. Application of Money received, pending allotment		xx	
C. NON CURRENT LIABILITIES			
1. Long term borrowings	3	xx	
2. Deferred Tax Liability (Net)		xx	
3. Other long term Liabilities	4	xx	
4. Long term provision	5	xx	
D. CURRENT LIABILITIES			
1. Short term borrowings	6	xx	
2. Trade payable	7	xx	
3. Other current liabilities	8	xx	
4. Short term provision	9	xx	
TOTAL		xxx	
II] ASSETS			
A. NON CURRENT ASSETS			
1. Fixed Assets			
a. Tangible Assets	10	xx	
b. Intangible Assets	11	xx	
c. Capital WIP		xx	
d. Intangible assets under development		xx	
2. NON CURRENT INVESTMENT	12	xx	
3. Deferred Tax assets (Net)		xx	
4. Long term loans & advances	13	xx	
5. Other non current assets	14	xx	
B. CURRENT ASSETS			
1. Current Investment	15	xx	
2. inventories	16	xx	
3. Trade Receivable	17	xx	
4. Short term loans & advances	18	xx	
5. Cash & Bank Equivalent	19	xx	

6. Other current Assets	20	xx	
TOTAL		xxx	
* Contingent Liabilities	21	xx	

SCH. 1	
Authorised Share Capital	xx
Issued, subscribed, paid up _____ equity shares of Rs. ____ each, Rs. _____ called up	xx
_____ % of preference shares of Rs. _____ each, Rs. _____ called up	xx
Less: calls in arrears	(xx)
Add: share forfeiture	xx
	xx
NOTE: 1	
Out of the above state how many shares were issued for consideration other than cash.	
NOTE: 2	
State out of the above how many shares were issued as bonus shares	
SCH. 2	
Reserves and Surplus	
Capital Reserves	xx
Capital Redemption Reserves	xx
Security premium	xx
Reserve Fund	xx
General Reserve	xx
Revaluation Reserve	xx
Profit and Loss A/c 'Cr' balance	xx
	xxx
SCH. 3	
Long Term Borrowings	
Debentures / Bonds,	xx
Loan taken from financial institutions	xx
Mortgage Loan	xx
Loan from commercial Banks	xx
In accrued and due on the above	xx
NOTE: 1	
State what kind of an assets has been given as security. Also state the period of redemption And rate of redemption.	
SCH. 4	
Other Long Term Liabilities	
Public deposits	xx
Fixed deposits accepted from people	xx
Loan from directors	xx
Intercompany Loans	xx
	xx

SCH. 5	
Long Term Provisions	
Employee Benefits	XX
Staff Provided Fund	XX
	XX
SCH. 6	
Short Term Borrowings	
Bank Overdrafts	XX
Cash / Credit	XX
Short term loans	XX
Treasury Bills	XX
	XX
SCH. 7	
Trade Payable	
Trade Creditors	XX
Bills Payable	XX
	XX
SCH. 8	
Other Current Liabilities	
Outstanding Expenses	XX
Income received in advance	XX
Any short term liability	XX
Interest accrued but not due	XX
	XX
SCH. 9	
Short Term Provisions	
Proposed dividend	XX
Provision for tax	XX
Workmen compensation fund	XX
	XX
SCH. 11	
Intangible Assets	
Goodwill	XX
Copyrights	XX
Patents	XX
Trademarks	XX
	XX
SCH. 12	
Non Current Investment	
Trade Investment	XX
Long term investment	XX
Investments in Govt. Securities	XX
Investment in Subsidiary	XX
	XX
NOTE: 3	
Investment will always be valued at cost price, if market price or face value are given there are to be shown as Information.	

SCH. 13	
Long Term Loans and Advances	
Security Deposits	XX
Loan given to subsidiary company	XX
	XX
SCH. 14	
Other Non Current Assets	
Preliminary Expenses	XX
Underwriting commission	XX
Formation Expenses	XX
Share issue Expenses	XX
Discount on issue of shares & debentures	XX
	XX
NOTE:	
The above amount are to the extend not written off	
SCH. 15	
Current Investment	
Short term investment	XX
Marketable investment	XX
	XX
SCH. 16	
Inventories	
Stock of Raw Material	XX
Stock of WIP	XX
Stock of Finished Goods	XX
Stock of loose tools	XX
	XX
SCH. 17	
Trade Receivable	
Debtors	XX
	XX
NOTE:	
State out of the above debtors how many are due for a period exceeding 6 months and how many are doubtful	
SCH. 18	
Short Term Loans and Advances	
Prepaid Expenses	XX
Bills Receivable	XX
Advance Tax	XX
Advance to Suppliers	XX
	XX
NOTE:	
According to the disclosure between advance tax and provisions for tax any one is to be shown. Hence we will let of whichever is greater.	

SCH. 19		
Cash Bank Equivalents		
Cash in Hand		XX
Cash at Bank		XX
		XX
SCH. 20		
Other Current Assets		
Income Receivable		XX
Stock of stationary		XX
Other Assets		XX
		XX
SCH. 21		
Contingent Liabilities		
Court case pending		XX
Arrears of preference dividend		XX
Any amount payable on occurring of an event		XX
Any amount payable on party paid up invt.		XX
		XX

SCH. 10. Tangible Assets

Particular	Gross Block		Prov. For Dep ⁿ .				Net Block	
	Op. Bal.	C/S Bal.	Op. Bal.	On Sale	C. yr. Dep.	Closing Bal.	Op. WDV	Cl. WDV
	(1)	(2)	(3)	(4)	(5)	6=(3-4+5)	(7)=(1)-(3)	(8)=(2)-6
Land & Bldg. Furn. & Fixt. Plt & Mach. Com & Equip.								
	xxx	Xxx	xxx	xxx	xxx	xxx	xxx	xxx

This will be shown in income statement

This will be in balance sheet



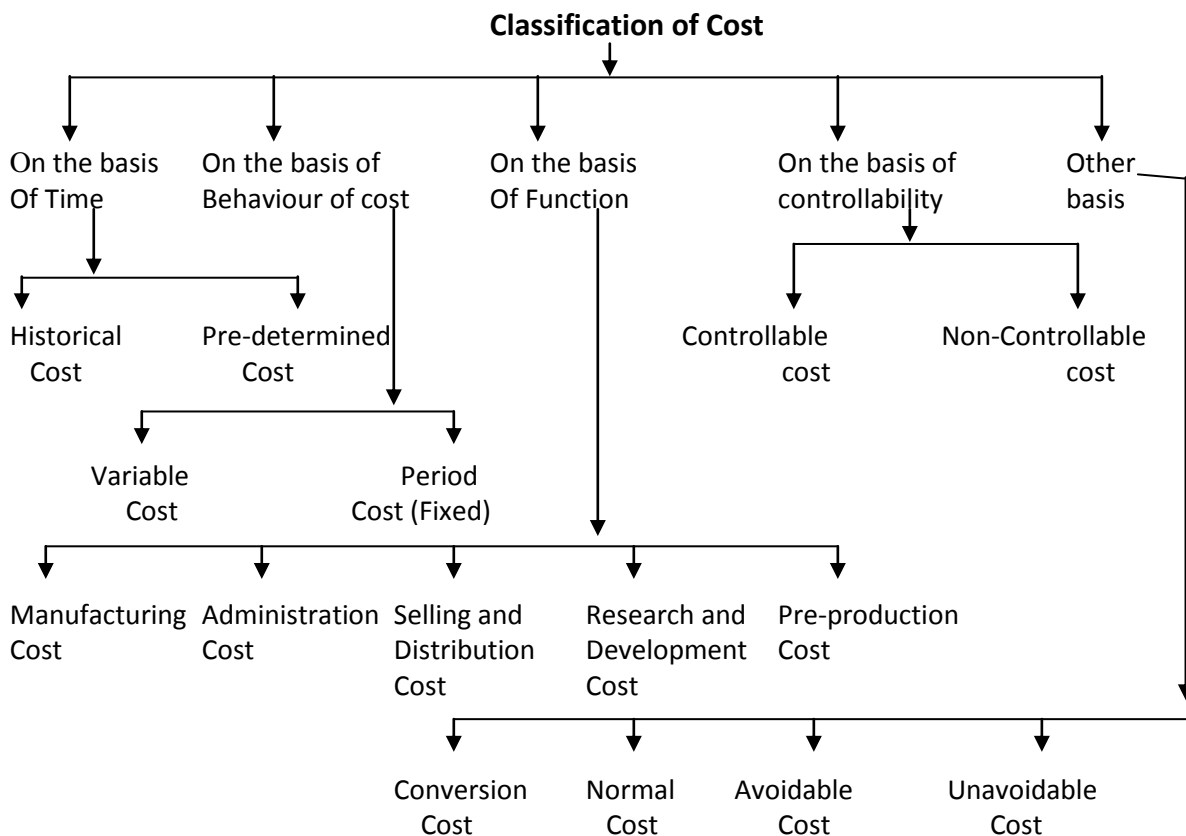
SECTION IV COSTING

16.0 Meaning of Cost

'Cost' is the amount of expenditure incurred on a given thing. Cost has been defined as the amount measured in money or cash expended or other property transferred, capital stock issued, services performed or a liability incurred in consideration of goods or services received or to be received. By cost, we mean the actual cost i.e. historical cost. ICWA (UK) defines cost as the amount of expenditure (actual or notional) incurred on, or attributable to a specified thing or activity.

16.1 Classification of Cost

Cost classification is the process of grouping costs according to their common features. Costs are to be classified in such a manner that they are identified with cost center or cost unit. The following chart shows the classification of cost:

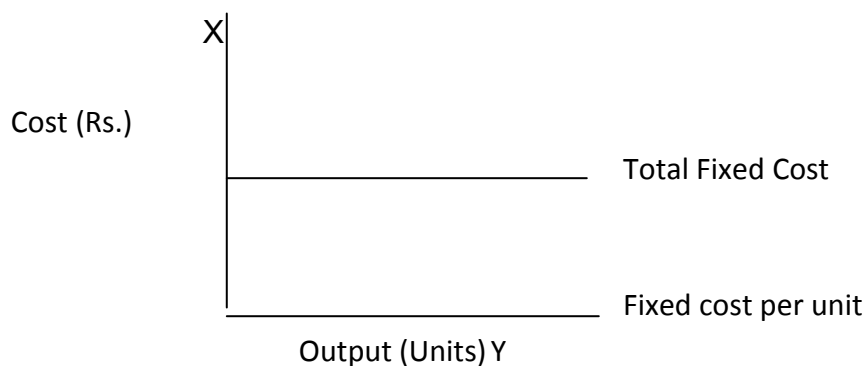


16.2 On the basis of behaviour of cost:

Behavior means change in cost due to change in output. On the basis of behavior cost is classified into the following categories:

16.3 Fixed Cost

It is that portion of the total cost, which remains constant irrespective of output up to the capacity limit. It is called as a period cost as it is concerned with period. It depends upon the passage of time. It is also referred to as non-variable cost or stand by cost or capacity cost or "period" cost. It tends to be unaffected by variations in output. These costs provide conditions for production rather than costs of production. They are created by contractual obligations and managerial decisions. Rent of premises, taxes and insurance, staff salaries constitute fixed cost. It is shown in the diagram given below:

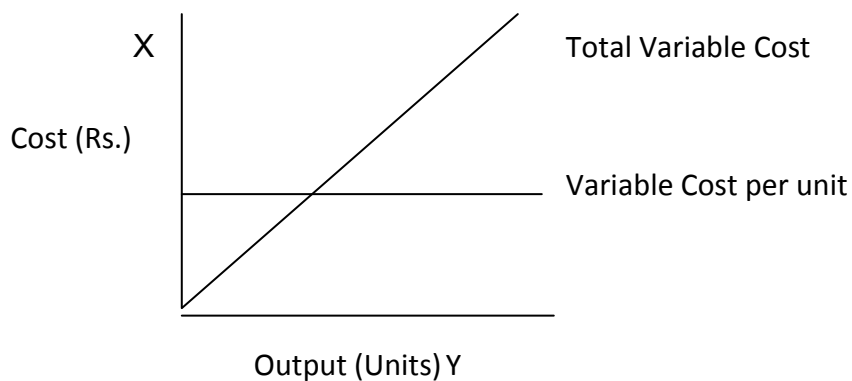


Key characteristics of fixed cost are as follows:

1. Large in value.
2. Indivisible cannot be broken in small penny pocket.
3. Irreversible, fixed cost decisions require greater thought.
4. Influence variable costs and working capital.
5. Higher Break-Even point if fixed cost is larger.
6. Image value, large fixed cost has high image value.
7. Indirect cost.
8. Lesser degree of controllability.

16.4 Variable Cost

This cost varies according to the output. In other words, it is a cost, which changes according to the changes in output. It tends to vary in direct proportion to output. If the output is decreased, variable cost also will decrease. It is concerned with output or product. Therefore, it is called as a "product" cost. If the output is doubled, variable cost will also be doubled. For example, Variable Cost, direct material, direct labour, direct expenses and variable overheads. It is shown in the diagram below:

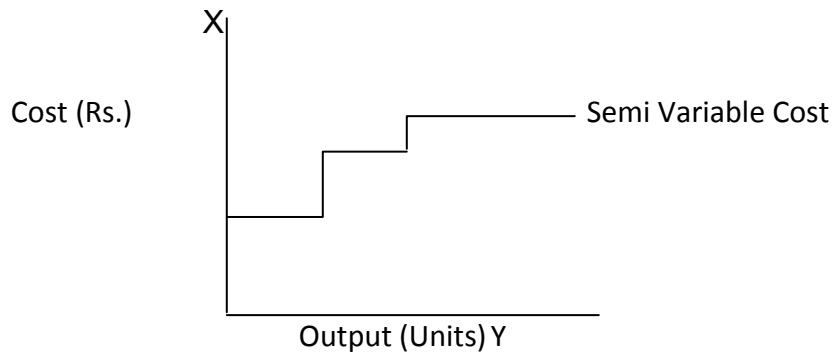


Characteristics of Variable Cost:

1. Total cost changes in direct proportion to change in total output.
2. Variable cost per unit remains constant.
3. It is quite divisible.
4. Per unit variable cost is smaller value.
5. It is identifiable with the individual cost unit.
6. Functional managers can exercise control over variable cost.

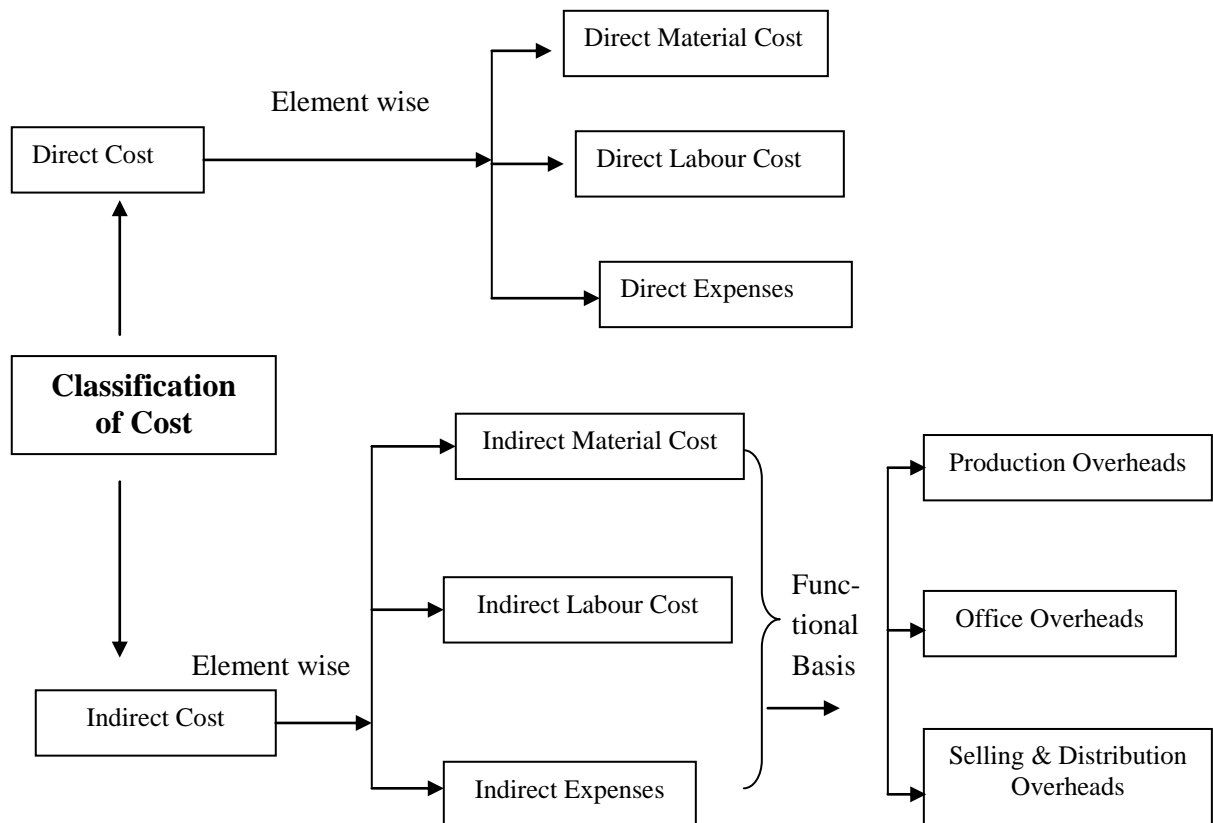
16.5 Semi-variable Cost

This is also referred to as semi-fixed or partly variable cost. It remains constant up to a certain level and registers change afterwards. These costs vary in some degree with volume but not in direct or same proportion. Such costs are fixed only in relation to specified constant conditions. For example, repairs and maintenance of machinery, telephone charges, maintenance of building, supervision, professional tax etc. It is shown in the diagram given below:



16.6 On the basis of elements of cost

Elements means nature of Items. A cost is composed of three elements: material, labour and expenses. Each of these three elements can be direct and indirect.



16.7 Direct cost

It is the cost, which is directly chargeable to the product manufactured. It is easily identifiable. Direct cost consists of three elements, which are as follows:

Direct Material

It is the cost of basic raw material used for manufacturing a product. It becomes a part of the product. No finished product can be manufactured without basic raw materials. It is easily identifiable and chargeable to the product. For example, leather in leather wares, pulp in paper, steel in steel furniture, sugarcane for sugar etc. What is raw material for one manufacturer might be finished product for another. Direct material includes the following:

1. All materials specially purchased for production or the process.
2. All components purchased for production or the process.
3. Material transferred from one cost center to another or one process to another.
4. Primary packing materials, wrappings, cardboard boxes etc. necessary for preservation or protection of product.

Some of the Items like nails or thread in the store are part of finished product. They are not treated as direct materials in view of negligible cost.

Direct Labour or Direct Wages

It is the amount of wages paid to those workers who are engaged on the manufacturing line for conversion of raw materials into finished goods. The amount of wages can be easily identified and directly charged to the product. These workers directly handle raw materials, wipe and finished goods on the production line. Wages paid to workers operating lathes, drilling, cutting machines etc. are direct wages. Direct wages are also known as productive labour, process labour or prime cost labour.

Direct wages include the payment made to the following group of workers:

1. Labour engaged on the actual production of the product.
2. Labour engaged in aiding the operations viz. Supervisor, Foreman, Shop clerks and worker on internal transport.
3. Inspectors, Analysts needed for such production.

Direct Expenses or Chargeable Expenses

It is the amount of expenses, which is directly chargeable to the product manufactured, or which may be allocated to product directly. It can be easily identified with the product. For example, hire charges of a special machine used for manufacturing a product, cost of designing the product, cost of patterns, architects fees/surveyors fees, or job cost of experimental work carried out specially for a job etc, cost of special drawings, cost of special layout designs, patents, patterns, cost of models, surveyors fees, Excise duty. Royalty on production cost of rectifying defective work, license fees for a product. Utility of such expenses is exhausted on completion of the job.

16.8 Indirect Cost

It is that portion of the total cost, which cannot be identified and charged direct to the product. It has to be allocated, apportioned and absorbed over the units manufactured on a suitable basis. It consists of the following three elements:

Indirect Material

It is the cost of material other than direct material, which cannot be charged to the product directly. It cannot be treated as part of the product. It is also known as expenses materials. It is the material which cannot be allocated to the product but which can be apportioned to the cost units. Examples are as follows:

1. Lubricants, cotton waste, Grease, Oil, stationery etc.
2. Small tools for general use.
3. Some minor Items such as thread in dressmaking, cost of nails in shoe making etc.

Indirect Labour

It is the amount of wages paid to those workers who are not engaged on the manufacturing line, for example, wages of workers in administration department, watch and ward department, sales department, general supervision.

Indirect Expenses

It is the amount of expenses, which is not chargeable to the product directly. It is the cost of giving service to the production department. It includes factory expenses, administrative expenses, selling and distribution expenses etc.

Internet based firms need to treat customer as a primary cost objective in differentiating between direct and indirect costs. In other words, in accumulating and allocating costs, Internet based firms need to adopt a customer focus.

16.9 Overheads or On Cost or Burden or Supplementary Cost

Aggregate of indirect cost is referred to as overheads. It arises as a result of overall operation of a business. According to Weldon overhead means "the cost of indirect material, indirect labour and such other expenses including services as cannot conveniently be charged direct to specific cost units. It includes all manufacturing and non-manufacturing supplies and services. These costs cannot be associated with a particular product. The principal feature of overheads is the lack of direct traceability to individual product. It remains relatively constant from period to period. The amount of overheads is not directly chargeable i.e. it has to be properly allocated, apportioned and absorbed on some equitable basis.

16.10 Classification of Overheads:

1. **Factory Overheads:** It is the aggregate of all the factory expenses incurred in connection with manufacture of a product. These are incurred in connection with running of factory. It includes the items of expenses viz., factory salary, work manager's salary, factory repairs, rent of factory premises, factory lighting, lubricants, factory power, drawing office salary, haulage (cost of internal transport), depreciation of plant and machinery, unproductive wages, estimation expenses, royalties, loose tools w/off, material handling charges, time office salaries, counting house salaries, etc.
2. **Administrative Overheads or Office Overheads:** It is the aggregate of all the expenses as regards administration. It is the cost of office service or decision-making. It consists of the following expenses: staff salaries, Printing and stationery, postage and telegram, telephone charges, rent of office premises, office Conveyance, printing and stationery and repairs and depreciation of office premises and furniture etc.
2. **Selling and Distribution Overheads:** It is the aggregate of all the expenses Incurred in connection with sales and distribution of finished product and services. It is the cost of sales and distribution services. Selling expenses are such expenses, which are incurred in, acquiring and retaining customers.

It includes the following expenses: (a) Advertisement (b) Show room expenses (c) Travelling expenses (d) Commission to agents. (e) Salaries of Sales office (f) Cost of catalogues (g) Discount allowed (h) Bad debts written off (i) Commission on sales (j) Rent of Sales Room (k) Samples and Free gifts (l) After sales service expenses (m) Expenses on demonstration and technical advice to prospective customers (n) Free repairs and servicing expenses (o) Expenses on market research (p) fancy packing and demonstration. Distribution expenses include all those expenses, which are incurred in connection with making the goods available to customers. These expenses include the following: (a) Packing charges (b) Loading charges (c) Carriage on sales (d) Rent of warehouse (e) Insurance and lighting of warehouse (f) Insurance of delivery van (g) Expenses on delivery van (h) Salaries of Godown keeper, drivers and packing staff.

17.0 Marginal Costing:

We have studied in the earlier unit that cost can be classified into two groups viz. fixed cost and variable cost. Variable cost varies with the changes in the volume of output or level of activity. As against this, fixed cost relates to time and does not vary with the changes in the level of activity. Because of inclusion of fixed cost in determination of total cost of a product, the cost per unit or process varies from period to period according to the volume. This has given rise to the concept of marginal costing. Marginal costing is concerned with determination of product cost which consists of direct material, direct labour, direct expenses and variable overheads. It should be kept in mind that variable costs per unit are fixed and fixed costs per unit are variable with changes in the level of output. In United Kingdom, variable costing is generally known as marginal costing. Marginal costing is also known as direct costing, contributory costing and incremental costing.

The ICMA has defined marginal cost “as the amount at any given volume of output by which aggregate costs are changed if the volume of output is increased or decreased by one unit.” From the analysis of this definition it is clear that increase / decrease in one unit of output increases / reduces the total cost from the existing level to the new level. This increase / decrease in variable cost from existing level to the new level is called as marginal cost.

Suppose the cost of producing 100 units is Rs. 200. If 101 units are manufactured the cost goes up by Rs. 2 and becomes Rs. 202. If 99 units are manufactured, the cost is reduced by Rs. 2 i.e. to Rs. 198. With the increase or decrease in the volume the cost is increased or decreased by Rs. 2 respectively. Thus Rs. 2 will be called as the marginal cost.

Marginal costing means “the ascertainment of marginal costs and of the effect on profit of changes in volume or type of output by differentiating between fixed and variable costs”.

Marginal costing is not a method of costing. It is a technique of controlling by bringing out relationship between profit and volume.

17.1 Key Features of Marginal Costing:

- The elements of cost are differentiated between fixed costs and variable costs.
- Only the variable or marginal cost is considered while calculating product costs.
- Stock of finished products and work-in-progress are valued at variable cost.
- Contribution is the difference between sales and marginal cost.
- Fixed costs do not find place in the product cost.
- Prices are based on marginal cost plus contribution.
- It is a technique of cost recording and cost reporting.
- Profitability of various products is determined in terms of marginal contribution.
- Presentation of data is oriented to highlight the total contribution and contribution from each product.

17.2 Advantages of Marginal Costing:

- **Constant in Nature:** Marginal cost remains the same per unit of output whether there is increase or decrease in production.
- **Realistic:** It is realistic as fixed cost is eliminated. Inventory is valued at marginal cost. Therefore, it is more realistic and uniform. No fictitious profit arises.
- **Simplified Overhead Treatment:** There is no complication of over-absorption and under-absorption of overheads.
- **Facilitates Control:** Classification of cost as fixed and variable helps to have greater control over costs.
- **Meaningful Reporting:** The reporting made on management is more meaningful as the reports are based on sales figures rather than production. Comparison of efficiency can be done in a better way.

- **Relative Profitability:** In case a number of products are manufactured, marginal costing helps management in the determination of relative profitability of each product.
- **Aid to Profit Planning:** The technique of marginal costing helps management in profit planning. The management can plan the volume of sales for earning a required profit.
- **Break-even Point:** It can be determined only on the basis of marginal costing.
- **Pricing Decisions:** These decisions can be based on contribution levels of individual products.
- **Responsibility Accounting:** It becomes more effective when based on marginal costing. Managers can identify their responsibilities clearly.

17.3 Limitations of Marginal Costing:

- **Analysis of Overheads:** In marginal costing, costs are to be classified into fixed and variable costs. Considerable difficulties are experienced in analyzing overheads into fixed and variable categories. Therefore, segregation of costs into fixed and variable is rather difficult and cannot be done with precision.
- **Greater emphasis on Sales:** Marginal costing technique lays greater emphasis on sales rather than production. In fact, efficiency of business is to be judged by considering both sales and production.
- **Difficulty in Application:** Marginal costing is not applicable in those concerns where large stocks have to be carried by way of work-in-progress.
- **Improper basis for fixation of selling price:** In marginal costing selling price is fixed on the basis of contribution alone which is not proper.
- **Less effective in Capital Intensive Industry:** Marginal costing technique is less effective in capital intensive industry where fixed costs are more.
- **Lack of standard for control:** Marginal costing does not provide any standard for control purpose. In fact, budgetary control and standard costing are more effective tools in controlling costs.
- **Elimination of Fixed Cost:** In marginal costing technique fixed costs are not included in the value of finished goods and work-in-progress. Since fixed costs are incurred, these should also form part of the costs of the product. Elimination of fixed costs from finished stock and work-in-progress results into the understating of the stocks. The understating of the stocks affects the profit and loss account and the balance sheet, which leads to deflation of profit.

- **Incomplete Information:** Marginal cost does not give complete information. For example, increase in production and sales may be due to so many factors such as extensive use of machinery, expansion of resources and by automation. The exact cause is not disclosed by marginal costing.
- **Useful only for short term assessment:** Marginal costing is useful for short-term assessment of profitability. However, long-term assessment of profit can be correctly determined on full costs basis only.
- **Not acceptable for tax:** Income tax authorities do not recognize marginal costing for inventory valuation.

17.4 Contribution:

Contribution is the excess of selling price over variable costs. It is known as contribution because it contributes towards recovery of the fixed costs and profits. Contribution is a pool of amount from which total fixed costs will be deducted to arrive at the profit or loss. By equation the concept of contribution can be stated as follows:

$$C = S - V$$

C = Contribution

S = Sales

V = Variable Cost

17.5 Profit / Volume Ratio:

This is popularly known as P/V Ratio. It expresses the relationship between contribution and sales. It is expressed in percentage. P/V ratio is given by the formula:

$$P/V \text{ ratio} = \frac{S - V}{S} \times 100 = \frac{C}{S} \times 100$$

Where C = Contribution, (being the difference between sales and variable costs)

S = Sales

V = Variable Costs

P/V ratio can be determined by expressing change in profit or loss in relation to change in sales. P/V ratio indicates the relative profitability of different products, processes and departments.

If information about two periods is given, P/V ratio is calculated as follows:

$$\text{P/V Ratio} = \frac{\text{Change in Profit}}{\text{Change in Sales}} \times 100$$

17.6 Break Even Point [BEP]:

Break-even point means the point of no profit and loss. BEP is the volume of output or sales at which the total cost is exactly equal to the revenue. Below the BEP, the concerns make losses, at the BEP, the concern makes neither profit nor loss, above the BEP, the concerns earns profits. BEP is calculated in terms of either units or value. Thus,

$$\text{BEP (in Units)} = \frac{\text{Fixed Cost}}{\text{Contribution per unit}}$$

$$\text{BEP (in Rs.)} = \frac{\text{Fixed cost}}{\text{PV Ratio}} = \frac{F}{\text{PVR}}$$

17.7 Margin of Safety [MS]:

Margin of Safety is the difference between the Actual Sales and the Sales at the Break-even Point. Thus,

$$\text{Margin of Safety (Rs.)} = \text{Actual sales} - \text{BEP (Rs.)}$$

$$\text{Margin of Safety (Units)} = \text{Actual sales (units)} - \text{BEP (units)}$$

Larger MS indicates stronger business. Such business can continue to earn profits, even if the sales decrease (i.e. in recession).

17.8 Marginal Cost Statement

There is no fixed format for marginal cost statement. However, the information will be recorded as follows.

	Sales	XX	
	(-) <u>Variable Cost</u>	<u>XX</u>	
	Contribution	XX	
	(-) <u>Fixed Cost</u>	<u>XX</u>	
	Profit / Loss	XX	
		□ □ □	

SECTION V

DEPRECIATION

Fixed assets like machines, vehicles, furniture etc. can be used in the business for many years. However, as time goes by these assets lose their value due to constant use, wear and tear etc. When an asset becomes totally useless after some years, its value will be nil. Depreciation means the decrease in value of a fixed asset over the years. The reduction in the value of assets is a loss for the business. Such loss must be recorded in the books by passing an entry for depreciation at the year-end. Depreciation is debited to the profit and loss account every year so as to show the correct profits. Depreciation is also deducted from the book value of the assets so that the balance sheet shows the correct value of the assets. Depreciation is charged in such a way that by the time the asset becomes useless, its total cost is written off in the books.

15.1 Key Features of Depreciation:

The above discussion brings out the following features of depreciation:

- **Decrease in Value:** Depreciation is a decrease in the value of a fixed asset. A fixed asset is an asset (a) which is expected to be used during more than one accounting period; (b) which has a limited useful life; and (c) which is held by a concern as a source of earning income and not for the purpose of sale.
- **Permanent Decrease:** Such decrease in value is not temporary; it is permanent in nature. Once the value of an asset decreases, it will not go up in future.
- **Gradual Decrease:** The decrease is gradual; it is not sudden. The value decreases slowly over a long period of time. The value falls step by step over many years of the useful life of the asset.
- **Reasons of Decrease:** The decrease in value is caused mainly by the use of the asset. But there may be other reasons such as passing of time, new inventions etc., which reduce the value of the asset.

15.2 Causes of Depreciation:

- **Wear and Tear due to Use:** The value of asset falls due to use. When a machine is used, there is wear and tear of its parts. An old machine gives less output.

- **Efflux of Time:** Even if an asset is not used, its value falls over a period of time. So, depreciation is charged even on an idle machine. Some assets like lease, patents have a fixed life. A lease for 6 years has nil value at the end of the 6th year. The total cost of such lease is written off over 6 years (i.e. 1/6 every year). Such writing off is known as amortization.
- **Obsolescence:** As asset may become outdated (obsolete) due to new inventions or new technology (e.g. computers). The old asset is scrapped and written off as depreciation.
- **Damage:** An asset, which is damaged by accident, fire, flood etc., loses its value and it will be scrapped. The loss of value is written off as depreciation.
- **Exhaustion:** A mine contains a limited quantity of minerals. The value of a mine as the minerals is taken out over a period of time. When all the minerals are taken out of the mine the value of mine will be zero. In this case the depreciation arises due to exhaustion or depletion.

15.3 Why to Account for Depreciation:

- **Correct Amount of Profits:** Let us take an example to see why depreciation must be charged every year to arrive at the correct amount of profits. Suppose, Mr. A purchases a machine worth Rs. 20,000 having a useful life of 10 years. His total profits for next 10 years come to Rs. 50,000 at the rate of Rs. 5,000 per year. It is clear that his net profits for 10 years are Rs. 50,000 - Rs. 20,000 = Rs. 30,000 after deducting cost of the machine. Mr. A should write off the cost of machine over 10 years. He can charge proportionate cost of machine Rs. 2,000 (Rs. 20,000 / 10) as depreciation every year. Thus, his profit and loss A/c will show a net profit of Rs. 3,000 (5,000 - 2,000) every year. If he does not charge depreciation every year, he will show profits of Rs. 5,000 every year for 10 years. In the last year the machine will become useless. Mr. A will have to write off the entire cost of Rs. 20,000 and show it as a loss in the profit and loss A/c of the last year. Instead of showing a big loss in the last year, it is better to charge depreciation and show smaller profits every year.
- **Match Revenue with Cost:** If a machine is used to earn income for 10 years, the cost of machine must also be written off over its useful life of 10 years. Depreciation is the proportionate cost of using the machine during a year for earning income in that year.

- **Replacement of Assets:** In the above example, Mr. A will have to buy a new machine at the end of the 10th year. If he has charged depreciation of say Rs. 2,000 every year, he will have Rs. 20,000 after 10 years to buy a new machine. This is because depreciation is a non-cash expense. When depreciation of Rs. 2,000 is debited to the profit & loss A/c, it does not mean that cash of Rs. 2,000 is actually spent. The cash remains in the business and is accumulated over the years. The accumulated cash can be used to buy a new asset.
- **Correct Value of Asset:** In the above example, if depreciation is not recorded, Mr. A's Balance Sheet will show the value of the machine at Rs. 20,000 for all 10 years. This is not correct. As time goes by, the machine must be shown at a lower and lower value in the balance sheet. The book value of the machine must be reduced every year by charging depreciation, so that in the last year the book value becomes zero.
- **Comply with Law:** Under the Companies Act, 1956 a limited company must charge depreciation before it can declare dividends.

15.5 Methods of Depreciation:

There are two main methods, of charging depreciation: (1) Straight Line Method and (2) Written Down Value Method. The yearly amount of depreciation may be different under each method. But finally, under both methods, the total net cost will be written off over the useful life of the asset. Computation of the yearly depreciation is known as the 'allocation of depreciation'.

Straight Line Method (SLM) :

Straight Line method is also known as Fixed Installment method. In this method, the yearly depreciation is equal to the Net Cost of asset divided by the No. of Years of its useful life. The amount of depreciation remains the same every year. Thus, if the net cost of the assets is Rs. 48,000 and the useful life is 10 years. The yearly depreciation will be $\text{Rs.}48,000 / 10 = \text{Rs.}4,800$. Rs.4,800 will be charged as depreciation to the profit and loss account every year for 10 years. Since the amount of depreciation is like a fixed installment, this is known as fixed installment method.

Under this method, depreciation is charged as a fixed percentage on the original cost every year. Thus, in the above example, we can charge depreciation @ 10% of the original cost of Rs. 48,000 every year.

Depreciation is computed under the straight-line method by the following formula:

$$\text{Total Cost} - \text{Scrap Value} / \text{No. of Years of Useful life} \quad \text{OR} \quad [C - S] / [Y]$$

Thus, if an asset is purchased for Rs. 50,000; installation expenses of Rs. 10,000 are incurred; its expected life is 5 years; and its expected scrap value in the end is Rs. 5,000, depreciation under this method is $50,000 + 10,000 - 5,000 = 55,000 / 5 \text{ years} = \text{Rs. } 11,000$. Thus, depreciation can be charged @ 20% per year (p.a.) on the cost of Rs. 55,000. This fixed percentage is equal to $100 / \text{No. of Years} (100 / 5 = 20\%)$.

Total Cost (C) means invoice cost of asset plus incidental expenses such as freight, cartage, installation expenses, wages paid for erection etc. till the asset is actually put to use for the first time.

Scrap Value (S) means the money expected or actually received at the end of the useful life of the asset on sale as scrap etc.

No. of Years of Useful Life (Y) means the number of years the asset is expected to be used in the business. Technical experts such as engineers fix this period.

Written Down Value (WDV) Method

Written Down Value method is also known as Reducing Balance Method or Diminishing Balance method. In this method, the yearly depreciation is not a fixed amount. The rate of depreciation is fixed in the beginning. In the Straight Line method, this rate is applied to the original cost in all years. However, under the Written Down method, the rate is applied to the written down value. Thus suppose the net cost of a new asset is Rs. 48,000 and depreciation is charged @ 10% on the written down value. In the first year, the depreciation is $\text{Rs. } 48,000 \times 10\% = \text{Rs. } 4,800$. The written down value is $\text{Rs. } 48,000 - \text{Rs. } 4,800 = \text{Rs. } 43,200$. Next year, depreciation will be $\text{Rs. } 43,200 \times 10\% = \text{Rs. } 4,320$. The yearly depreciation will thus go on decreasing. This is because the depreciation is charged not on original cost, but on the written down value. Under this method, depreciation is charged as a fixed percentage on the written down value every year.

Depreciation is computed under the written down value (wdv) method by the following formula:

$$\% \text{ of Depreciation} \times \text{Opening WDV}$$

Thus, if an asset is purchased on 1-1-2000 for Rs. 50,000; installation expenses of Rs. 10,000 are incurred; and the rate of depreciation is 10%, yearly depreciation under this method is:

Depreciation for 2000:

$$\begin{aligned} &= \% \text{ of Depreciation} \times \text{Opening WDV} \\ &= 10\% \times \text{Rs. } 60,000 = \text{Rs. } 6,000. \end{aligned}$$

Written Down Value On 31-12-2000/1-1-2001:

$$\begin{aligned} &= \text{Opening WDV} - \text{Depreciation} \\ &= \text{Rs. } 60,000 - \text{Rs. } 6,000 = \text{Rs. } 54,000. \end{aligned}$$

Depreciation for 2001:

$$\begin{aligned} &= \% \text{ of Depreciation} \times \text{Opening WDV} \\ &= 10\% \times \text{Rs. } 54,000 = \text{Rs. } 5,400. \end{aligned}$$

Written Down Value On 31-12-2001/1-1-2002:

$$\begin{aligned} &= \text{Opening WDV} - \text{Depreciation} \\ &= \text{Rs. } 54,000 - \text{Rs. } 5,400 = \text{Rs. } 48,600. \end{aligned}$$

Depreciation For 2002:

$$\begin{aligned} &= \% \text{ of Depreciation} \times \text{Opening WDV} \\ &= 10\% \times \text{Rs. } 48,600 = \text{Rs. } 4,860: \end{aligned}$$

Written Down Value On 31-12-2002/1-1-2003:

$$\begin{aligned} &= \text{Opening WDV} - \text{Depreciation} \\ &= \text{Rs. } 48,600 - \text{Rs. } 4,860 = \text{Rs. } 43,740. \end{aligned}$$

Thus, depreciation is charged @ 10 % per year on the opening written down value of the asset. The above details can be better understood in the form of a table:

Year	Opening Cost \ WDV	Depreciation for the year		Closing WDV
		Formula (C)	Amount (D)	
(A)	(B)			(E) = (B - D)
2000	60,000	10 % * 60,000	6,000	54,000
2001	54,000	10 % * 54,000	5,400	48,600
2002	48,600	10 % * 48,600	4,860	43,740

Difference between SLM and WDV methods of Depreciation

Factors	SLM	WDV
1. Formula	Calculated as % of Original Cost.	Calculated as % of Written Down Value.
2. Yearly Charge	Yearly depreciation is constant.	Yearly depreciation decreases.
3. Total Charge	Total charge (repairs + depreciation) increases.	Total charge remains constant.
4. Nil Book Value	Book value at the end of life becomes zero.	Book value at the end of life does not become zero.
5. Suitable	Suitable for assets with fixed life e.g. lease.	Suitable for assets whose life reduces due to use, e.g. Plant.
6. Income-tax Act	Not allowed under the Income- tax Act	Only method allowed under, Income tax Act.

15.6 Performa Journal Entries:

Entries for purchase of assets:

- (1) Purchase of Asset By Cash/Cheque:

Asset A/c Dr.
 To Cash/Bank A/c

(Being the purchase of asset)

- (2) Purchase of Asset On Credit:

Asset A/c Dr.,
 To Party's A/c

(Being the purchase of asset)

- (3) Incidental Expenses on New Asset:

Asset A/c Dr.
 To Cash/Bank A/c

(Being the freight/installation/legal expenses on new asset)

Entries for depreciation:

- (4) Record Depreciation at Year End:

Depreciation A/c Dr.
 To Asset A/c

(Being the depreciation @ ... % on Rs.... for the period fromto the year end)

- (5) Transfer Depreciation to P & L A/c:

Profit & Loss A/c Dr.
 To Depreciation A/c

(Being the amount of depreciation transferred to P & LA/c)

Note: Depreciation is a 'charge' against the profits. Hence depreciation is debited to the P & L A/c even if there is loss.

Entries on Sale of Asset:

- (6) Depreciation till Date of Sale:
Depreciation A/c Dr.
 To Asset A/c
(Being the depreciation @ ... % on Rs. for the period from ... to the date of sale)
- (7) Sale of Asset:
Cash/Bank/Party A/c Dr.
 To Asset A/c
(Being the sale price of asset)
- (8) Profit on Sale of Asset:
Asset A/c Dr.
 To Profit & Loss A/c
(Being the profit on sale of asset: Sale Price - WD.V.)

OR

- Loss on Sale of Asset:
Profit & Loss A/c Dr.
 To Asset A/c
(Being the loss on sale of asset: WD.V. - Sale Price)
- (9) Transfer Depreciation to P & L A/c:
Profit & Loss A/c Dr.
 To Depreciation A/c
(Being the amount of depreciation till date of sale, transferred)

15.7 Recording Depreciation – Provision Method

In the afore-mentioned entries, the direct method has been used i.e. depreciation has been recorded directly in the concerned Asset A/c. However, Depreciation can also be recorded by another i.e. maintaining a separate account known as Provision for depreciation account. The entries under the 'provision method' for depreciation on purchase or sale of asset are passed as shown below:

Purchase of Assets

The entries for purchase of asset etc. are same in both the methods; only the method for depreciation (entry no. 4 shown under 'Purchase of Assets' above) is different. The entry is

- (4) Record Depreciation at Year End:

Depreciation A/c Dr.

 To Provision for Depreciation A/c

(Being the depreciation @ ..% on Rs. for the period from to the year end)

Depreciation is, thus, credited to the Provision for Depreciation A/c (instead of Asset A/c). In this method, the Asset A/c shows the gross (original) cost, the Provision for Depreciation A/c shows the accumulated depreciation till date, and their difference (Asset less Provision for Depreciation) shows the written down value (WDV) of the asset. In the balance sheet, the amounts are shown on the asset side as follows:

Asset (gross cost)	xxx
Less: Provision for Depreciation	<u>xxx</u>
Net Block (or written down value)	<u>xxx</u>

The entries for purchase of new assets, incidental expenses, depreciation etc. are the same under both the methods, i.e. SLM as well as WDV. Under WDV method also, the amount of depreciation depends upon the number of days the asset is used during the year. If the asset is purchased at the beginning of the year, full depreciation is charged on the total cost of the asset. However, if the asset is purchased in the middle of the year, amount of depreciation will depend upon the details available.

Sale of Asset

When a Provision for Depreciation A/c is maintained, an Asset Disposal A/c is opened to ascertain the profit/loss on sale. The entries are passed as shown below:

Entries for on sale of asset:

- (1) Depreciation till Date of Sale:

Depreciation A/c Dr.

 To Prov. for Depreciation A/c

(Being the depreciation @ ... % on Rs... for the period from ... to the date of sale).

- (2) Transfer Asset A/c Balance:
Asset Disposal A/c Dr.
 To Asset A/c
(Being the transfer of gross cost of asset sold)
- (3) Transfer Prov. for Depreciation A/e Balance:
Prov. for Depreciation A/c Dr.
 To Asset Disposal A/c
(Being the transfer of accumulated depreciation on the asset sold)

[Note: At this stage the balance of Asset Disposal A/c indicates the WDV of the asset on the date of sale i.e. Gross cost less Accumulated depreciation].

- (4) Sale of Asset:
Cash/Bank/Party A/c Dr.
 To Asset Disposal A/c
(Being the sale price of asset)
- (5) Profit on Sale of Asset:
Asset Disposal A/c Dr.
 To Profit & Loss A/c
(Being the profit on sale of asset: Sale Price - W.D.V.)

OR

Loss on Sale of Asset:
Profit & Loss A/c Dr.
 To Asset Disposal A/c
(Being the loss on sale of asset: W.D.V. - Sale Price)

[Note: After this entry Asset Disposal A/c gets closed].

The entries for sale of assets, profit or loss on sale etc. are same under both methods, i.e. SLM as well as WDV. If the asset is sold at the beginning of the year, no depreciation is charged, because the asset was not used at all during the entire year. Thus, if an asset is sold on 1st January 2003, no depreciation is charged for the accounting year ending on 31st December 2003.

However, if the asset is sold in the middle of the year, say on 1st July, 2003, proportionate (1/2) depreciation will be charged, because the asset was used for 6 months from 1-1-2003 to 30-6-2003 till the date of sale. The depreciation will be charged on the opening written down value of the asset. Under straight-line method, depreciation would be charged on the original cost. The profit or loss is computed in the same way under both methods by comparing the sale price and the WDV on the date of sale.

15.8 Change in Method:

- (1) A business concern may change the method of charging depreciation from the straight line to written down value method or vice versa.
- (2) When a method is changed, there is a change in the amount of yearly depreciation. The new amount of yearly depreciation may be more or less than the old amount.
- (3) Further, such a change may be effective for future (prospective) or also for the past (retrospective).
- (4) In prospective change, the new method will be used only in future. The new rate will be applied to the existing balance in the asset account.
- (5) In a retrospective change, the depreciation is recalculated by applying the new rate right from the beginning. The difference between the new amount and the amount already charged as depreciation is adjusted in the profit & loss account. If the new amount of depreciation is more, the extra amount is debited to the profit and loss account. If the new amount is less, the difference is credited to the profit & loss account. The asset account is adjusted as if the new rate is in use from the date of original purchase of the asset. A new WDV is calculated for the asset, which is equal to Original Cost - New depreciation till Date of Change, the new rate will then be applied to such new WDV in future.
- (6) According to Accounting Standard AS 6 issued by the Institute of Chartered Accountants of India, the change in method should have only retrospective effect. Thus, AS 6 does not approve of giving prospective effect to a change in the method of depreciation. Hence only retrospective change in method has been explained and illustrated below.
- (7) Suppose a concern, which started business from 1-4-1997, changes its method of depreciation from 1-4-2003, with retrospective effect. The following Table sums up the steps for recording this in the book:

15.9 Change in Method with Retrospective Effect:

Step What is to be done:

- A. Calculate depreciation on assets existing as on 1-4-2003 debited to the profit and loss A/c from 1-4-1997 to 31-3-2003 under the old method.

[Ignore assets sold etc. between 1-4-1997 and 1-4-2003]

- B. Calculate depreciation on such assets by using the new method right from 1-4-1997.
- C. Calculate the difference between (A) and (B).
- D. There is surplus [A is more than B], pass a Journal entry on 1-4-2003 crediting such surplus to profit & loss A/c and debiting the Asset A/c.

OR

If there is deficit [A is less than B], pass a Journal entry on 1-4-2003 debiting such deficit to profit & loss A/c and crediting the Asset A/c.

- E. Calculate and charge depreciation for the year beginning on 1-4-2003 and new method, on the new value of the Asset.



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LAW GENERAL

UNIT - I

Indian Legal System - Salient features of the Indian Constitution, fundamental rights, directive principles of the state policy

Government : Executive, Legislature and Judiciary

INTRODUCTION

While studying any laws of any Country, it important to know the legal frame work and nature of legal system prevailing and applicable in the Country. In India we have written constitution, which provides for legal system in country.

STRUCTURE OF THE UNIT

- 1.1** Objectives
- 1.2** The Preamble to the Constitution
- 1.3** Salient Features of Constitution of Indian
- 1.4** Nature of Constitution of India
 - 1.4.1** Main Characteristics of a Federal Constitution
 - 1.4.2** Constitution of India is Federal but with Unitary Bias
- 1.5** Fundamental Rights
- 1.6** Directive Principles of State Policy
 - Differences between Fundamental rights and Directives
- 1.7** Distribution of Powers

1.1 OBJECTIVES

By the end of this Unit it is intended that the student will learn about-

- Nature and objects of the constitution of India
- Salient features of the Constitution of the India
- What are the fundamental rights guaranteed under the constitution of India
- What are the Directive principals of State policies
- Relation between Central and state governments

1.2 THE PREAMBLE OF THE CONSTITUTION

The Preamble to our constitution indicates the source from which the Constitution derives its authority; and objects which it seeks to established and promote.

It is as given under -

“We, the people of India, having solemnly resolved to constitute India into a sovereign, socialist, secular, democratic republic and to secure to all its citizens –

Justice	-	social, economic and political
Liberty	-	of thought, expression, belief, faith and worship
Equality	-	of status and of opportunity and to promote among them all
Fraternity	-	assuring the dignity of the individual and the unity and integrity of the Nation

In our constitution Assembly this 26th day of November, 1949 do hereby ADOPT, ENACT and GIVE TO OURSELVES THIS CONSTITUTION.”

The Constitution of India is ordained by the people of India through their representatives assembled in a sovereign Constituent Assembly which was competent to determine the political future of the country in any manner it liked.

It declares India as sovereign, socialist, secular and democratic Republic State. Sovereign means the independent authority of a State. It means that it has the power to legislate on any subject; and that it is not subject to the control of any other State or external power. Democratic denotes a Government in which the mass of the adult

population has a direct or indirect say in the governance of the state. The constitution holds out equality to all citizens in the matters of choice of their representatives, who are to run the governmental machinery. Republic means a government by the people and for the people. Socialist state means that the principal means of production are under social ownership and not concentrated in few hands and there is equitable distribution of the national wealth. The insertion of the word 'socialist' would enable the courts "to lean more and more in favour of nationalization and state ownership of industry." A secular State, guaranteeing freedom of religion to all it means that the state protects all religions equally and does not itself uphold any religion as the state religion.

1.3 SALIENT FEATURES OF CONSTITUTION OF INDIA

Constitution of India is perhaps the best Constitution in the world. Our constitution makers, gathered the best features of each of the existing constitution and adapted them to the existing conditions and needs of India. Hence this feature is the first Salient Feature of the Constitution of India. The chapter on the Fundamental Rights was based on the American Constitution, Parliamentary System of Government on the British System, while the concept of the Directive Principles of State Policy was borrowed from Irish Constitution. The elaborate provisions relating to Emergencies are based on the Constitution of the German Republic and the Government of India Act, 1935. Our Constitution also embodies the modified results of judicial decisions delivered elsewhere-interpreting comparable provisions in order to minimize uncertainty and litigation.

The next important feature is that our Constitution reproduced the Government of India Act, 1935 in providing matters of administrative details, going one step ahead of the American constitution, which only laid down the fundamental principles of Governance. This step was taken to prevent perversion of the Constitution by changing the form of Administration which will be now impossible unless the Constitution is changed.

The Constitution of India contains detailed provisions about the Organization of the Judiciary, the Services, the Public Service Commission and the like.

The Constitution of India has taken into account the vastness of the country and the peculiar problems to be solved, by devoting one entire part (Part XVI) relating to the Scheduled Castes & Tribes and other backward classes, one part (Part XVII) relating to

Official language and another (Part XVIII) relating to Emergency Provisions.

The Constitution of India provides for the Constitution of both the Union and the State with the same fullness and precisions with the exception of the State of Jammu & Kashmir which was allowed to make it's own Constitution.

The Constitution of Indian provides details about the relations between the Federation and the Units and among the Units inter se, whether Legislative or Administrative. This has given the Constitution of India a unitary bias. In another manner also it confers upon a federal system the strength of a unitary government by assuming powers of States by imposing emergencies (Part XVIII).

The Constitution of India also contains Directive Principles (Part V) which do not confer any justiciable rights upon the individuals but are regarded as Fundamental in the governance of the country being in the nature of "Principles of Social Policy" as contained in the Constitution of Eire, to serve as moral constraints upon future governments.

Through the 42nd amendments, one new chapter of Fundamental duties of citizens to be read along with Fundamental Rights was added.

One more salient feature is that the Constitution of India seeks to impart a flexibility to a written Federal Constitution. The amendment of only a few of the provisions of the Constitution require ratification by half of the State Legislatures. The rest of the Constitution, can be amended by a special majority of the Union Parliament i.e. a majority of not less than two-third of the members of each House present and voting which again must be a majority of the House.

The Constitution of India is unique in the sense that it wonderfully adopts the via-media between the American System of Judicial Supremacy and the English Principle of Parliamentary Supremacy by conferring upon the judiciary the power of declaring a law as unconstitutional if it is beyond the competence of the legislature according to the distribution of powers provided by the Constitution or if it contravenes the Fundamental Rights guaranteed by the Constitution or any other mandatory provision of the Constitution. At the same time, the judiciary has no power of judicial review of the wisdom of the Legislative Policy.

The balancing between the supremacy of the Constitution & Sovereignty of the

Legislature is illustrated by the novel declaration of Fundamental Rights in the Constitution of India. This guarantee of individual Rights has been carefully balanced with the need for security of the State itself.

The adoption of Universal Adult Suffrage (Article 326) without any qualification of sex, property, taxation or the like is a bold experiment in India considering the large population including many illiterates and the vast size of the country. This embodiment of popular Sovereignty is the basic feature of our Constitution has made our country the largest democracy in the world.

The last but not the least an important and outstanding feature of our Constitution is the integration or Union of 552 then Indian States with the rest of India. Elaborate provisions were made in our Constitution by making 216 States merge as Part - B States, 61 States as centrally administered areas and also constituting Union of States with Raj Pramukhs as their heads.

The Basic Elements / Structure of Constitution of India may briefly be stated as under-

1. The supremacy of the constitution.
2. Republic and democratic forms of government and the sovereignty of the country.
3. Secular and federal structure of the constitution.
4. Demarcation of powers between the executive, legislature and judiciary.
5. The dignity of the individual.
6. The unity and integrity of the nation.

1.4 NATURE OF CONSTITUTION OF INDIA

The constitution of India is basically federal in nature with unitary features.

Let us first understand the federal system of governance. Federalism is a form of government where two sets of government operate and function simultaneously. Each state has its own government, which functions independently in the local matters like education, health, police etc.. But matters of national importance, e.g., defence, coins and currency, foreign affairs, are not left in the hands of the State Government.

Federalism is a principle by means of which there is co-ordinate division of powers between the Central Government and the State Government and whereby each of

such governments exercise direct and simultaneous authority in their limited sphere over the same territory.

1.4.1 Main Characteristics of a Federal Constitution

Dual Government

In a federal state, there are two governments – the national or federal government and the government of each state.

Distribution of Powers

There is a distribution of legislative and executive powers between the federal government and the state government.

Supremacy of the Constitution

As there is division of power, such division must be evidenced in a written document. The constitution, which provides for such division of power is a document of fundamental importance, and it is from such constitution that a federal polity derives its existence.

Authority of Courts

The interpretation of the constitution assumes great importance in the successful working of a federal constitution. This power of interpretation is vested in the courts. The courts are empowered to declare any action on the part of the government to be ultra virus; if such action violets the provisions of the constitution. Therefore, the judiciary acting as the constitution and guardian of the constitution assumes immense importance in a federal state.

1.4.2 Constitution of India is Federal but with Unitary Bias

It may appear that the Constitution of India has all characteristics of a federal polity. However, this is not so and there is departure from the federal principle in various respects.

Prof. Wheare has observed that - “The Constitution of India provides a unitary state

with subsidiary federal features, rather than federal state with subsidiary unitary features”

Characteristics of the Constitution of India-

Formation of the Constitution

Federations elsewhere have been the result of a voluntary agreement between number of sovereign and independent states coming under a common administration of certain specific purposes. But in India, federation was not a process of integration, but a process of decentralization. The former imperialistic unitary state was converted into a democratic union by the constitution.

Distribution of Powers

It provides for the distribution of power on various matters through Union list, State list and Concurrent list and also provides for residuary power on the matters not covered in the above lists. The constitution of India provides for clear and definite distribution of administrative power between centre and state.

No double Citizenship

There is single citizenship for the whole union and there is no citizenship for the state.

No dual system of Judiciary

There is no bifurcation of the judiciary between the federal (Union) and state government. The same systems of courts, headed by the Supreme Court, administer both the union laws and the state laws as per applicable to the cases coming up for adjudication. This is again in contrast to the American System, where there are Federal Courts and State Courts. There are equal laws for whole country.

Election, Accounts and Audit

The machinery for election, accounts and audits is also similarly integrated as single judiciary.

Power of Union during the failure of Constitutional Machinery in the State

Where there is a failure to the constitutional machinery in a state, the president can suspend the constitution of the state and assume responsibility for administration of the state. In such circumstances, the parliament may legislate for such a state.

Formation of New States

The Union Legislative has the power to form new states, to increase or diminish the area of existing states and to alter their boundaries or names.

1.5 FUNDAMENTAL RIGHTS

In every democratic system of Government, there are some rights which are regarded as 'fundamental'. They are also regarded because they are 'vitality' necessary for the attainment by the individual of his moral and spiritual status. Without these rights, the individuals' moral and spiritual life would remain stunted, and he would not be able to develop his potential. Such rights are embodied in Part-III of the Constitution of India. The Constitution itself classifies the Fundamental Rights under seven groups as under-

Right to Equality (Article 14 to 18)

1. Equality before law

It means 'any person shall not be given any specific rights and common law will be applied to all individuals.'

Each state has to recognize certain exception of principle of principle of equality before law due to political and international reasons.

2. Equal protection of law

The law will treat uniformly to all individuals in equal circumstances. All individuals are equal in the eyes of law and therefore, there shall not be any kinds. There should be no discrimination between one person and another if, as regards the subject matter of the legislation, their position is same.

3. Prohibition of discrimination on ground only of religion, race, caste, sex or place of birth (Article 15).

4. Equality of opportunity in matters of public employment (Article 16).
5. Abolition of untouchability (Article 17).
6. Abolition of titles (Article 18).

Right to Freedom

1. Freedom of speech and expression (Articles 19 (1)(a) and (2))
2. Freedom of assembly (Article 19 (1)(b) and (3))
3. Freedom to form associations or unions.
4. Freedom to move freely throughout India.
5. Freedom to reside and settle in any part of India.
6. Freedom to acquire, hold and dispose of properties (omitted).
7. Freedom to practice any profession

Protection in respect of Conviction for Offences (Article 20)

1. Protection against ex-post facto laws (Article 20(1))
2. Protection against double jeopardy (Article 20(2))
3. Protection against self-incriminations (Article 20(3))

Protection of life and Personal Liberty (Article 21)

Protection against Arrest and Detention in certain cases

Right against exploitation (Article 23 – 24)

1. Prohibition of traffic in human beings and forced labor [Art. 23].
2. Prohibition of employment of children in hazardous employment [Art. 24].

Right to Freedom of Religion (Article 25 – 28)

1. Freedom of conscience and free profession of religion (Article 25)
2. Freedom to manage religious affairs (Article 26)
3. Freedom from payment of taxes for promotion of any particular religion (Article 27)

4. Freedom to attend religious instructions in certain educational institutions (Article 28)

Cultural and Educational Rights

1. Protection of language, script or culture of minorities.(Article 29)
2. Right of minorities to establish and administer educational institutions (Article 30)

Right to Property

It is omitted by the Constitution (44th Amendment) Act, 1978

Right to Constitutional Remedies

Remedies for enforcement of the fundamental rights conferred by this Part - writs of habeas corpus, mandamus, prohi-bition, certiorari and quo warranto [Art. 32].

1.6 DIRECTIVE PRINCIPLES OF STATE POLICY

Part IV of the Constitution (Atr. 36-51) contains the Directive Principles of state Policy. They are directions to the state to meet those social, economic and cultural reforms which the framers of the constitution looked upon as the ideas of the new order, but to which they did not give legal effect in the framework of the organic law itself.

They are like the instruments of instructions which shall be followed by the state both in the matter of administration as well as in the making of laws.

They can be used for the purpose of private and political criticism, but they confer no legal rights and create no legal remedies. They are good guides, but they cannot be enforced. They are not enforceable in a Court of Law does not, however mean that no judicial notice is taken of such principles. The state, while it implements these principles, should take care to see that the fundamental rights are also protected at the same time.

They may be under several groups as under-

- (i) Directives in the Nature of Ideals of the state that it should strive for
- (ii) Directives shaping the policy of the state (legislative and executive)
- (iii) Non-justiciable Rights of Citizens

Scope

It shall be the duty of state to follow these principles. They embody the object of the state under the republic constitution i.e. 'Welfare State' and not a 'Police State'. Aim at the establishment of the economic and social democracy which is pledge for in the preamble.

1.7 DISTRIBUTION OF POWERS

The relation between the Union and the State is according to the constitution of three kinds:

- (i) Legislative
- (ii) Administrative
- (iii) Financial

(A) The Scheme of Distribution of legislative powers – based on –

- (i) The Territory, and
- (ii) The Subject

- (i) The Territory - Extent of Union and State legislation

The Union

The Parliament has the power to legislate for 'the whole or any part of the territory of India.' It also possesses the power of 'Extra territorial legislation'.

There are certain limitations to the territorial jurisdiction of the Parliament with respect to Union Territory and Scheduled Areas

The State

A state legislature makes a law relating to a subject within its competence, it must be read as referring to persons or subjects situated within the territory of the state concerned. It can make laws for the whole or any part of the state to which it belongs.

It is not possible for a state legislature to enlarge its territorial jurisdiction under any circumstances except when the boundary of the state itself is wended by an Act of Parliament.

Distribution of Legislative Subject

The constitution adopts this scheme from the Government of India Act, 1935 by enumerating possible subjects to legislate under three legislative lists in Schedule VII of the constitution.

List – I - (Union List)

It includes subjects or entries over which the union shall have exclusive power of legislation.

List – II - (State List)

It comprises such subject or entries over which the state legislature shall have exclusive power of legislation.

List – III – (Concurrent List)

It gives concurrent powers both to the Union and State Legislatures. such subject or entries.

In case of overlapping of a matter as between the three lists, predominance has been given to the Union legislature.

In the concurrent sphere, in case of repugnancy between a Union and a State law relating to the same subject, the former prevails.

Residuary Power

The power to legislate, with respect to any matter not enumerated in any one of the three lists, vests in the Union legislature and the final determination as to whether a particular matter fall under the residuary power or not is that of the Courts.

Expansion of the legislative powers of the Union under different circumstances.

In the National Interest

The Parliament shall have the power to make law with respect to any matter included in the state list for a temporary period, if the council of states, declares by a resolution of 2/3 of its members present and voting that it is necessary in the National Interest

that Parliament shall have power to legislate over such matters.

Under a Proclamation of Emergency

While a proclamation of Emergency made by the President is in operation, Parliament shall have similar power to legislate with respect to State subjects.

By agreement between States

If the legislatures of two or more States resolve that it shall be lawful for Parliament to make laws with respect to any matters included in state list relating to those States, Parliament shall have such power as regards such States.

To implement Treaties

Parliament shall have the power to legislate with respect to any subject for the purpose of implementing treaties or international agreements and conventions.

Under a proclamation of failure of constitution of machinery in the states.

When such a Proclamation is made by the President, the President may declare that the powers of the Legislature of the state shall be exercisable by or under the authority of Parliament.

(B) Distribution of Executive Powers

The distribution of executive powers between the Union and States is somewhat more complicated than that of the legislative powers. In general, it follows the scheme of distribution of the legislative powers. In the result, the executive power of a state is, in the main, coextensive with its legislative powers,- which means that the executive power of state shall extend only to its own territory and with respect to those subjects over which it has legislative competence. Conversely, the Union shall have executive power over (a) the matters with respect to which Parliament has exclusive power to make laws, and (b) the exercise of its powers conferred by any treaty or agreement. On other hand, a State shall have exclusive executive power over matters included in List II. The Union may, whenever it thinks fit, itself take up the administration of Union laws relating to any Concurrent subject.

(C) Distribution of Financial Powers

The Constitution has made elaborate provisions, for both the Union and States to have at their disposal adequate financial resources to enable them to discharge their respective responsibilities under the Constitution.

The constitution has made provides relating to the distribution of the taxes as well as non-tax revenue and the power of borrowing, supplemented by provisions for grants-in-aid by the Union to the States.

UNIT – II

THE INDIAN CONTRACT ACT

(Act IX of 1872)

INTRODUCTION :

Laws were made to govern every walk of life, including Trade and Commerce. One of them so far as India is concerned took the form of “The Indian Contract Act, 1872”. It is not complete code dealing with the law relating to all kinds of contracts. There are separate Acts relating to contracts like the Sale of Goods Act, 1930, the Partnership Act, 1932, the Transfer of Property Act governing contracts of Sale of immovable property, mortgage, lease, etc. which therefore are not dealt with in The Indian Contract Act, 1872.

In this section, the emphasis is made to analyze, discuss and understand Contracts, the law relating to Contracts with an eye on the Indian Contract Act, 1872. It is understanding of this Section where we would be able to understand:

- What is a contract?
- How it can be formed?
- What are the different types of contracts?
- How a contract is discharged? and
- Special form of contracts.

The Indian Contract Act came in force from 1st Sep.1872. It is applicable to the whole of Indian except the state of Jammu and Kashmir. The Act can be divided into two heads viz. General Principles of Contracts and specific kinds of contracts.

Part - 1

STRUCTURE OF Part - 1 :

- 1.1** Objectives
- 1.2** Scope
- 1.3** What is contract
 - 1.3.1** Definition of Agreement
- 1.4** Presence of all essential elements of contract
 - 1.4.1** Presence of all essential elements of contract
 - 1.4.2** All agreements are not contracts
- 1.5** Essential Elements of a Valid Contract
 - (1) an agreement
 - (2) which is legally enforceable
 - (3) where the concerned parties are competent to contract
 - (4) their consent is free
 - (5) lawful consideration is present
 - (6) its object is lawful
 - (7) Contract Act has not expressly declared it void
 - (8) certainty of the terms
 - (9) possibility of performance
- 1.6** Classification of contracts
 - 1.6.1** Classification on the Basis of Validity
 - 1.6.2** Classification on the Basis of Formation
 - 1.6.3** Classification on the Basis of Performance

1.1 OBJECTIVES:

By the end of this Unit, it is intended that the students will learn about –

- What is Contract?
- What is an Agreement? Does it differ from Contract?
- What are the essential elements for formation of a contract?
- Definitions : a promise, consideration and agreement, a contract
- Classification of contracts

1.2 SCOPE

When two parties enter into an agreement with an intention to hold the other party liable in case of non-performance, It is Law of Contracts which governs these contracts. It provides a framework of rules and regulation which governs formation and performance of contract by the parties. The court of law act as an enforcing body which intervenes in case of non-performance of contract.

Most interesting aspect is that rules of contract law govern only the making of contract and abiding the contract so made by the parties. As far as the mutual rights and duties of the contracting parties are concerned they are decided by the parties themselves. The law will not itself come to intervene. It is only when one of the parties does not meet his part of obligations and the other party who is aggrieved, calls judiciary to intervene and take care of his interest, the law comes into picture.

But, there is legislative interference with the right of the parties to make any contract they like.

1.3 WHAT IS CONTRACT

As per s. 2(h), 'Contract' is an 'agreement' enforceable by law. Thus, for the formation of a contract, there must be an agreement and something in addition to that, i.e. an agreement and its enforceability at law. Therefore it is all the more essential to understand what is meant by an Agreement?

1.3.1 Definition of Agreement

An agreement, therefore to submit minimum, is a reasonable and definite

understanding between two or more persons as to what each party is to do.

Mr. A agrees to sell his Maruti 800 car to Mr. Y for Rs. 70,000/-, this an agreement. But while Mr. Y agrees to purchase thinking that he is purchasing Maruti 1000, then no agreement is made.

Let's see, how the Indian Contract Act looks at the agreement. It defines Agreement thus :-

Every promise and every set of promises, forming the consideration for each other is an agreement. [s.2 (e)].

When the person to whom the proposal is made signifies his assent there to, the proposal is said to be accepted, A proposal when accepted becomes a promise. [s.2 (b)].

An agreement is a promise or a set of reciprocal promises. A promise comes into existence when a proposal is made by one and accepted by the other. These mutual promises must form consideration, i.e. something in return to each other.

An agreement and its enforceability at law since is of almost importance for formation of any contract since an agreement must be enforceable at law to become a contract.

As seen earlier, An agreement is a set of promises whereby all the parties to an agreement promise to perform something in return to the performance of the others. If a party does not perform, what he has promised, then, what to do? Although it is moral duty of a person to do as he promised, but moral duties cannot be enforced in the court of law unless they are supported by legal recognition. But if it becomes legal duty of a person to perform as he promised and he fails to do so, law has a power to intervene and enforce the performance. As given in earlier example if R does not turn up for dinner, A cannot ask R for payment he made for table booking in the absence of any specific understanding. But payment he made for table booking to V, if A does not pay, V can go to court and recover table booking charges from A.

Power of the law to enforce the performance of an agreement is termed as its legal enforceability.

Whether an agreement is legally enforceable or not would depend upon two factors-

1. Intention of parties to enforce it legally
2. Presence of all essential elements of a contract as per s.10.

What does one mean by 'intention of the parties to enforce and agreement legally'? A legal obligation will arise only when the parties to an agreement want to make themselves legally bound to perform the duties assigned in the agreement. For example when we agree to meet a friend for dinner or we agree with an electrician, that he will install new switch for fan next day, we may not have any intention to legally bind the other person who is accepting it, but when we agree 10. a.m. delivery of urgent letter with a courier service and pay extra charges for the same, the intention here is to make the things legally binding as non-delivery of such letter in time may lead one to suffer losses.

It is difficult to ascertain what was in the minds of the persons at the time of making an agreement. However, it may be inferred from the circumstances and type of contracts whether the contracting parties intended to be legally bound. As general rule it is presumed that the agreement of social nature are not made with an intention to create legal relations while the trade agreements are made with an intention to create legal obligations.

1.4 PRESENCE OF ALL ESSENTIAL ELEMENTS OF CONTRACT :

1.4.1 Presence of all essential elements of contract

When the parties to an agreement intend to make it legally enforceable, the agreement should be so made as to satisfy the criteria provided by section 10 of the Indian Contract Act, 1872. Law will recognise an agreement as a contract only when the agreement is so made that all the essential elements of a contract as prescribed by section 10 of the Indian Contract Act are present in it. If any of these elements lacks, an agreement shall not be enforceable at law. These elements are discussed under next heading.

1.4.2 All agreements are not contracts

From the above discussion, we can conclude that all agreements are not contracts but all contracts are agreements.

Agreement is a wider term. It may be legally enforceable. It may not be legally enforceable. A contract is a legally enforceable agreement. In other words, to constitute a contract, we need an agreement + legal enforceability. Legal enforceability further depends upon two factors:

1. Intention of the parties making an agreement.
2. Presence of all the essential elements of a contract as per section 10 of the Indian Contract Act.

Thus an agreement acquires the form of a contract if certain 'ifs' and 'buts' are complied with. But in any case contract is made out of an agreement only.

1.5 ESSENTIAL ELEMENTS OF A VALID CONTRACT

Section 10 of the Indian Contract Act, 1872 provides that, "All agreements are contracts if they are made by the free consent of the parties competent to contract, for a lawful consideration and with a lawful object, and are not hereby expressly declared to be void."

Thus to form a contract, there must be-

- (1) an agreement*
- (2) which is legally enforceable*
- (3) where the concerned parties are competent to contract*
- (4) their consent is free*
- (5) lawful consideration is present*
- (6) its object is lawful*
- (7) Contract Act has not expressly declared it void.*
- (8) certainty of the terms*
- (9) Possibility of performance*

(i) and (ii) First two elements are already discussed above. Rest is discussed in detail in the following chapters. For the purpose of having a broad idea of the subject, here we will briefly discuss them:

(3) Competency of parties - When we say that the parties must be competent to contract, first question arises as to who can be considered as competent to

contract. Section 11 of the Indian Contract Act provides that the law recognize a person as competent to contract, provided:

1. He is of the age of majority, like when a person attains the age of 18 years; he is considered as major by the Indian Law,
2. He is of sound mind, i.e., he should not be insane, and
3. He is not specifically disqualified by any law to enter into a contract. Like when a person's estate is under court's custody for decree, he is disqualified from entering into a contract to sell it.

Thus, if any of the parties to the agreement suffers from minority, lunacy, or disqualification under any law, the agreement is not enforceable at law. There are certain exceptions to this rule as per section 68 of the Indian Contract Act, which we will discuss in detail in forthcoming chapters.

(4) Free Consent - The concept of free consent has two aspects, one, a consent should be made; second, it should be free from any pressure or misunderstanding.

The parties entering in an agreement must have a mutual consent on it. Two or more parties are said to consent when they agree upon the same *thing* in the same sense. Like when A agrees to sell his 'Maruti' car to B, where B is ready to pay Rs. 1 lakh for the same, there is a consensus ad idem, i.e., identity of minds. But when A agrees to buy a car from B thinking that the B is talking about his 'Maruti' while B in fact was talking about his 'Fiat', there is no identity of minds and no consent is said to be made.

The consent should be genuine i.e., the person concerned should make the consent out of his free will. It should not be affected by any kind of influence or misunderstandings. Law recognize a consent to be free when it is not caused by :

- **Coercion** - using physical force such as obtaining consent on gun point.
- **Undue influence** - using psychological pressure.
- **Fraud** - deceiving or misleading the other person by intentionally providing wrong information.
- **Misrepresentation** - providing wrong information without having knowledge that it is wrong.
- **Mistake** - misconception as to a matter of fact, or as to a matter of law.

(5) Lawful consideration - Consideration means something in exchange. If a person makes an agreement, to do something for the other without expecting anything in return (i.e., consideration); it does not constitute a valid contract. Presence of consideration is a must to form a contract.

Moreover this consideration should be lawful. It should not be fraudulent, or immoral, or opposed to the public policy, or forbidden by any law.

(6) Lawful Object - Object means the purpose or design of the contract. The object of an agreement must be lawful. The object is said to be unlawful if :

- (a) it is of such a nature that if permitted it would defeat the provisions of any law;*
- (b) it is fraudulent;*
- (c) it involves an injury to the person or property of the another;*
- (d) the court regards it as immoral or opposed to public policy.*

(7) Contracts expressly declared void - A void contract is one which does not give rise to any legal consequence. Despite having all other essential elements of a contract, a contract may be treated as void because the Indian Contract Act has declared it to be void. The contracts which are specifically declared as void by the Act are as follows:

- (a) Agreements where both parties are under mistake as to the matter of fact [Section 20]-explained through example*
- (b) Agreements with unlawful object or consideration [Section 24]- already dealt above*
- (c) Agreements without consideration [Section 25] - already dealt above*
- (d) Agreement in restraint of marriage [Section 26] - explained through example*
- (e) Agreement in restraint of trade [Section 27] - explained through example*
- (f) Agreement in restraint of legal proceedings [Section 28] - explained through example*
- (g) Agreement having uncertain meaning [Section 29] - dealt below separately*
- (h) Wagering agreement [Section 30] - explained through example*
- (i) Agreement to do an impossible act [Section 56] - dealt below separately*

To become legally enforceable a contract should not have been expressly declared void by law.

(8) Certainty of the terms - The terms of an agreement must be clear, complete and certain. If an agreement is vague, or illusory, or its meaning is not clear, it cannot

be enforced by a court of law. It does not give rise to any legal binding and cannot be termed as a contract.

(9) Possibility of performance - An agreement must be capable of being performed. An agreement to do an impossible act in itself is void.

The above elements must be present to convert an agreement into a contract.

1.6 CLASSIFICATION OF CONTRACTS :

For the purpose of our discussion we may classify the contracts according to their:

Validity	Formation	Performance
(a) Valid contract	(a) Express contract	(a) Executed contract
(b) Void contract contract	(b) Implied contract	(b) Executory
(c) Voidable contract	(c) Quasi contract	(c) Bilateral contract
(d) Illegal or unlawful contract contract		(d) Unilateral
(e) Unenforceable contract		

1.6.1 Classification on the Basis of Validity

An agreement is enforceable at law when certain essentials stipulated in section 10 of the Indian Contract Act are complied with. It forms a valid contract. If any one of the elements is missing, then the agreement may either be void, voidable, illegal or unenforceable. These terms have been elaborated below for better understanding.

(a) Valid contract - Contracts which have all essential elements as laid down by section 10 of the Indian Contract Act, are enforceable at law. Such contracts are called valid contracts.

Note: A contract to enter into a contract is, however, not a valid contract.

(b) Void contract - Legal meaning of the term 'void' is - null and ineffectual having no legal force or binding effect, and unable in law to support the purpose for which it was intended.

A void agreement or a void contract is a total nullity and has no legal effect in the

eyes of law. It creates no rights or obligations. None of the parties can enforce it in the court of law.

Void agreement - An agreement not enforceable by law is said to be void [Section 2(g)].

If an agreement fails to meet the basic criteria to become a contract as per section 10 of the Act, it is termed as void ab initio. The literal meaning of the term void ab initio is void since beginning. It may be noted here that a void agreement never attains the form of a contract. To quote a few examples, agreements made by a minor or lunatic, agreements made with unlawful object, agreements made without consideration are void agreements.

Void contract - It may happen that a valid contract is formed initially which subsequently becomes void. The Indian Contract Act provides that A contract which ceases to be enforceable by law becomes void when it ceases to be enforceable [Section 2(j)].

A valid contract may become void subsequently due to supervening impossibility or illegality etc.

The term void contract is little confusing because an agreement is called contract when it is legally enforceable, and a void contract is a contract which is not enforceable at law. Although the terminology is faulty but it is capable of depicting the actual meaning of the expression.

An act or contract neither wrong in itself nor against public policy may be declared void by statute for the protection or benefit of a certain party or class of party. Indian Contract Act has expressly declared certain contracts as void. Such contracts are already discussed under the heading 'contracts expressly declared void'.

(c) Voidable contract - A contract which can be put to an end at the option of some of the parties to the contract, is a voidable contract. The party(s) entitled to avoid the contract may or may not do so. If the parties decide to avoid it, it no longer can be enforced in the court of law. If the parties opt not to avoid the contract, it is as good as any other valid contract.

An agreement which is enforceable by law at the option of one or more of the

parties thereto, but not at the option of other or others, is a voidable contract [Section 2(i)].

When a contract becomes voidable - When the consent of one or more of the parties to a contract is obtained by coercion, or undue influence, or misrepresentation, or fraud, the contract becomes voidable at the option of the party(s) whose consent was so obtained. Such party is termed as aggrieved party. [Sections 15 to 18].

When a contract contains reciprocal promises, and one party to the contract prevents the other from performing his promise, the contract becomes voidable at the option of the party so prevented [Section 53]. The idea is that no man can complain of another's failure to do something which he has himself prevented the other from doing or performing.

When time is the essence of a contract and it is required to be performed by a specified time, and a party fails to perform it within this time, the contract becomes voidable at the option of the other party [Section 55].

(d) Illegal or unlawful contract [Section 23] - A contract is considered as illegal or unlawful, if its consideration, or its object is :

1. Forbidden by law- All states have criminal statutes; these not only prohibit certain acts but provides for the imposition of fine, or imprisonment on persons who violate the relevant laws. Any contract for commission of a crime is clearly unlawful. Some other statutes simply prohibit the performance of the certain acts without imposing a penalty. Contracts for the performance of these acts are also unlawful.
2. Of such nature, that if permitted would defeat the provisions of any law - The term 'law' include any enactment or rule of law for the time being in force in India. Any agreement defying the provisions of law is unlawful. For example, as per the Indian Companies Act, 1956, A trading partnership of more than 20 persons is illegal unless registered as a company. If 21 persons make an agreement to form a trading partnership, the agreement is unlawful as it would defeat the provisions of the Companies Act.

3. Fraudulent - Where the parties agree to impose a fraud on third person, their agreement is unlawful.
4. Injurious to the person or property of another - An agreement between two persons to injure the person or property of another is unlawful.
5. Immoral - What is 'immoral' depends on the standards of morality prevailing in the society. From time to time courts establish what is immoral through the cases presented before them. Certain kinds of acts have been regarded as immoral by the courts like prostitution, interference with the marital relations, etc. An immoral agreement is considered as unlawful.

Against public policy - Where the court or the state feels that the performance of certain acts will have an adverse effect on the society, contracts for performance of such acts are unlawful.

A contract may be illegal since its formation, or it may become illegal subsequently after the formation.

Effect of illegal contract - An illegal contract is not enforceable at the court of law, i.e., the court will not assist a party to such an agreement either directly or indirectly. As a consequence of this rule, money or property transferred under an illegal contract cannot be recovered by a legal action. Thus when A agrees with B that they will share the dacoity money fifty-fifty, and later on refuses to do so, B cannot have any claim in the court of law for his share, because this is illegal contract which is a nullity in the eyes of law.

Effect on collateral transactions - Where an agreement is illegal, other agreements which are incidental or collateral to it are also illegal, and hence not enforceable at law. The underlying reason for this rule is that the courts will not assist or enforce any agreement entered into with the object of assisting or encouraging an illegal transaction.

All illegal contracts are void but all void contracts are not illegal.

We have discussed above that illegality makes a contract void, i.e., ineffective in the eyes of law. When a contract is void because of illegality of purpose, consideration or performance; it is termed as illegal contract.

Void contract is a wider term which encompasses all the contracts which are not enforceable at law for whatever reason. It may be a defect in the formation of contract, or it may be impossibility of performance, or it may be express declaration by the contract law, or it may be illegality of purpose, consideration or performance - which makes a contract void.

It may be inferred from the above that an illegal contract is necessarily void, while a void contract may be void because of a reason other than illegality.

(e) Unenforceable contracts - A contract which cannot be enforced in a court of law because of some technical defect is known as unenforceable contract. In certain cases there are special provisions of law which require certain formalities to be fulfilled for formation of a contract like the contract must be registered, or it must be attested by notary, or it must be stamped, etc. If such formalities are not observed, the contract cannot be enforced by law. Some of such contracts can be enforced, if the technical defect can be removed.

1.6.2 Classification on the Basis of Formation

A contract may be either expressed or implied or may be inferred from the circumstances. It may also be of mixed character that is partly expressed or partly implied. Contract whether implied or express or constituted by circumstances gives an equal cause of action.

(a) Express contract - Section 9 of the Indian Contract Act provides that, in so far as the proposal or acceptance of any promise is made in words, the promise is said to be express'. In other words, a promise made in words is called an express promise. The express promises results in express contracts. Express contracts can be made by words spoken or written.

(b) Implied contract - Section 9 of the Indian Contract Act provides that, "in so far as such proposal or acceptance is made otherwise than in words, the promise is said to be implied." An implied promise results in implied contract. An implied contract is one which is not expressly agreed upon between the parties. It is inferred from the acts or conduct of the parties or course of dealings between them or from the surrounding circumstances.

(c) Quasi-contract - In a quasi-contract rights and obligation arise not by any agreement between the parties but by operation of law. These obligations are imposed by law because of existence of some special circumstances between the parties. For example, the finder of a lost article is under an obligation to find the owner and return it. Such contracts are based on the principle that "none should be allowed to enrich himself unjustly at the expense of another. There is no consensus, no offer and no acceptance; still the law implies a contract. As a matter of fact, these are not contracts, instead these are relations resembling contract. But Contract Law views such relations as contracts.

1.6.3 Classification on the Basis of Performance

Contracts can be classified depending upon the extent to which they have been performed. They may be executed, or executory, or bilateral, or unilateral.

(a) Executed contract - Where all the parties to a contract have performed their obligations under the contract, it is known as executed contract.

(b) Executory contract - Where all the parties to a contract have still to perform their respective obligations in a contract, the contract is known as executory contract.

Note: It may happen that some of the parties have performed their part of obligations while the others are yet to perform.

An executory contract may be bilateral or unilateral

(c) Bilateral contracts - These are contracts where as soon as the contract is made, both parties are bound by it. A typical example of bilateral contract is where A promises to sell goods to B in return for B promising to pay the purchase price. In relation to services, the same applies, so that an agreement between A and B that B will dig A's garden for Rs. 500 next Sunday is a bilateral agreement.

(d) Unilateral contracts - In a unilateral contract only one party makes a commitment. If we make a slight change in the above example, and A says to B, 'If you dig my garden next Sunday, I will pay you Rs. 500.' B makes no commitment, but says, 'I am not sure that I shall be able to, but if I do, I shall be happy to take Rs. 500.' This arrangement is not bilateral-A has committed himself to pay Rs. 500 in certain

circumstances, but B has made no commitment at all. He is totally free to decide whether he wants to dig A's garden or not. If B does not turn up on Sunday to dig the garden, A cannot do anything about it. If, however, B reaches to A's place on Sunday to do the work, it will amount to his acceptance and a contract will be formed where both parties will be bound by their performance.

Part - 2

AGREEMENT – OFFER AND ACCEPTANCE

STRUCTURE OF PART - 2

- 2.1 Objectives**
- 2.2 Proposal / Offer**
 - 2.2.1 Essential elements of offer-**
 - 2.2.2 Offer Should be Distinguished From -**
 - (i) Cross offers
 - (ii) Counter offers
 - (iii) Invitation to offer
 - (iv) Standing offer
- 2.3 Termination of Offer**
 - 2.3.1 Instances of termination of offer as per section 6 of the Act**
- 2.4 Acceptance of an Offer**
 - 2.4.1 Acceptance**
 - 2.4.2 The elements of acceptance**
 - (1) Acceptance must be made by the party to whom the offer is made
 - (2) Acceptance must be absolute and unqualified
 - (3) The acceptance must be expressed in some usual or reasonable manner
 - (4) Acceptance must be given within reasonable time
 - (5) Acceptance cannot be made in ignorance of offer
 - (6) Acceptance must be given before the offer lapses or revoked
 - (7) An acceptance must be communicated to the offeror
 - (8) Mere mental acceptance is no acceptance
- 2.5 Communication of Offer, Acceptance and Revocation**
 - 2.5.1 Communication of offer - When complete**
 - 2.5.2 Communication of acceptance - When complete**
 - 2.5.3 Effect of delay or loss of letter of acceptance in postal transit**
 - 2.5.4 Communication of revocation - When complete**

2.1 OBJECTIVES

After reading this Unit, you should be able to understand:

- What is an offer and how it can be identified amongst different statements.
- What constitutes a valid acceptance.
- When and how offer and acceptance can be revoked.
- When the communication of a proposal, acceptance and revocation is complete.

2.2 PROPOSAL/OFFER :

S. 2 (a) of the Act defines the term 'proposal' as under :

'When one person signifies to another his willingness to do or abstain from doing anything, with a view to obtaining the assent of that other to such act or abstinence, he is said to make a proposal.'

Offers are not mere requests or information, nor statements of fact, nor statements as to person's intention. An offer must be distinguished as more than all these. An offer is a statement of terms which it appears you are willing to standby.

The person, who makes an offer, promise to perform certain act on the condition that the other person accepts his offer. Thus an offer is a conditional promise. When I offer anything to a person, what I mean is "I will do that if you choose to assent to it."

For example, if buyer and seller are negotiating the sale of rice, seller may at some point say, "I promise to deliver 200 rice bags to you on January 31, if you promise to pay me Rs. 40,000 Seller's statement is an offer and seller is an offeror because he is making a promise ("I promise to deliver....") which is conditional upon the acceptance of the given terms ("....If you promise to pay me Rs. 40,000") by the buyer, the offeree. If the offeree does not choose to accept it, no agreement will come into existence. But if he says I promise to pay you Rs. 40,000 for the rice bags," he has accepted the offer, and the seller's promise is transformed into a contract.

2.2.1 Essential elements of offer-

The elements of offer are as under :

- (i) Offer must be communicated to the offeree.

- (ii) Offer constitutes willingness to do or abstinence to do some act.
- (iii) Offer must be made to other person.
- (iv) Offer must be made with a view of obtaining the assent of the other.
- (v) Offer may be express or implied.
- (vi) Offer may be conditional.
- (vii) Offer must be capable of creating legal relationship.
- (viii) The terms of offer must be certain.
- (ix) Offer must not thrust the burden of acceptance on the offeree.

(i) Offer must be communicated to the offeree - The definition of proposal contains the words. "when one person signifies to another his willingness". It infers that the offer must be conveyed to the offeree.

Section 4 of the Contract Act lays down that, "the communication of a proposal is complete when it comes to the knowledge of the person to whom it is made."

Thus the law recognizes a proposal when it is communicated. Communication is complete only when it comes to the knowledge of the person to whom it is made. As a corollary, there can be no acceptance of a proposal which is not communicated because a person cannot assent to something which he is not aware of.

Example: A proposes, by letter, to sell a cow to B at price of Rs. 6000/-. The communication of the proposal is complete when B receives the letter.

The communication of a proposal is complete when it comes to the knowledge of the person to whom it is made [s.4]

(ii) Offer constitutes a willingness to do some act or abstinence - An offer is a promise to do or not to do something which an offeror purports to perform provided the offeree gives his consent to it.

Examples:

1. A says to B, "I will paint a picture for you if you are ready to pay Rs. 10,000 for it." This is an offer where A is willing to perform certain act for certain price.

2. X says to Y, "If you will pay me Rs. 500 per month, I will not play tabla every night." This is an offer where X is willing to abstain from something for a consideration.

(iii) The offer must be made to other person - An offer cannot be made by a person to himself. On the basis of the fact to whom an offer is made, it can be categorized as follows:

Offer made to -

- (a) one particular person is a specific offer
- (b) a particular group of persons is specific offer
- (c) the whole world, i.e. anyone having knowledge of its existence is general offer

Offer to one particular person - Where an offer is made to one particular person, it can only be accepted by that person.

Offer to a group of persons - Where an offer is made to a particular group of persons, it may be accepted by any member of that group.

Offer to the whole world - Where an offer is made to the whole world, it can be accepted by anyone having knowledge of its existence.

Certain points are to be kept in mind while dealing the cases of the offer made to public at large which are -

- a. Giving an offer only does not constitute a contract with the public at large. The contract comes into existence only when the offer is accepted by some ascertained person.
- b. If the offer at large is of continuing nature, it may be accepted by a number of persons. If a large number of persons accepts such offer. There would be equal number of contracts.
- c. If the offer at large is an offer of reward for some information or restoration of a missing article. The offer is open for acceptance by only one individual who performs the required condition first of all, and as soon as the condition is first performed, the offer is closed. For example when a person offers a reward to

anybody who will find his lost dog, the moment an individual finds the dog, the offer is closed for rest of the world.

(iv) Offer must be made with a view of obtaining the assent of the other- An offer must be addressed to another person in order to obtain his assent to the proposal. It must be distinguished from an expression of intention or enquiry.

Thus a casual enquiry- "Do you intend to sell your car?" - is not a proposal. Similarly a mere statement of intention - "I may sell my car if I can get Rs. 50,000 for it" - is not a proposal. But if X says to Y, "Will you buy my car for Rs. 50,000", we have a proposal as it has been made with the object of obtaining the assent of Y.

Examples:

1. A says to B, "I will sell you my house if you are ready to pay Rs. 1 Lakh for it". B says, "I accept your offer." Here what A said to B was with a view to obtain his assent. A contract is formed.
2. A, jokingly said that he was willing to sell his horse for Rs. 2,000. B knowing that A was not seriously making the offer, said that he has accepted the offer. In this case A's offer is not the real offer as he did not make it with the view to obtain the consent of B.

(v) An offer may be express or implied - An offer may be expressed by words or may be inferred from conduct. Section 3 of the Indian Contract Act provides two modes of communication - (i) an act or (ii) omission.

Act includes:

1. express words spoken which includes telephone messages - it is also known as an express oral offer.
2. written words which includes letters, telegrams, telex, advertisements etc. - it is also known as an express written offer.
3. conduct would include positive acts or signs so that the other person understands what the person acting or making signs mean to say or convey - it is an implied offer.

Examples:

1. A says to B, "will you buy this car for Rs. 80,000?" This is an express oral proposal.
2. A writes a letter to B stating the above offer. It is an express written proposal.
3. The BEST runs buses on different routes to carry passengers at the scheduled fares. This is an implied offer by the BEST.

Omission would not mean silence but would include such conduct or forbearance on one's part that the other person takes it as his willingness or assent. For example A says to B, "I will leave 80 % of my property for you if you will not drink alcohol till I am alive." B who was very fond of alcohol does not say anything but abstain from drinking alcohol. B's acceptance is conveyed.

(vi) An offer may be conditional- An offeror may attach any terms and conditions to the offer he makes. In such case it can be accepted only when that condition is fulfilled. It is immaterial if the terms are hard and ridiculous. If one chooses to stipulate some eccentric act as the only manner in which the offer may be accepted like place your letter of acceptance in the hollow tree before midnight - it is effective. It is open to a person to whom a conditional offer is addressed to accept or not to accept the offer.

Example - A gave an offer to B to sell his car for Rs. 50,000 if he sends his acceptance by telegram immediately on receiving the offer. B, sends a letter of acceptance instead of a telegram. No contract is made.

However, in such cases, offeror's status can be viewed as follows - The offeror may opt to treat the acceptance valid even if the offeree does not comply with the condition stipulated by him. Thus in the above example, if A choose to consider the letter of acceptance as valid, a contract will come into existence.

If the offeror does not opt to treat the acceptance valid, it is a duty on his part to make it very clear to the offeree that he will not accept the acceptance because of non-performance of the condition by him. In case, the offeror does not communicate to this effect to the offeree, he becomes bound by the acceptance.

[Section 7(2)]

Considering the above example, it is duty of A to convey B that his acceptance will not hold good because he has not sent his acceptance by telegram. If A does not make this clear to B, he will be bound by the acceptance made by B, and a contract will be made.

(vii) Offer must be capable of creating legal relationship - A valid offer must intend to create legal relations. If the parties to the agreement have no intention to create legal relationships, it is not an offer in the eyes of law.

It may be noted here that the basic testing criteria is "intention of the party" - Even in a business transaction the party can specifically rule out the legal enforceability, and even in domestic transactions things can be made legally enforceable if the parties decides so.

Examples:

1. X makes a promise with his wife Y that he will pay her Rs. 1000 per month if she will leave her job, in writing with the specific mention that they want to be legally bound by it, it is enforceable in the court of law.
2. X and Y agree to contribute Rs. 1 Lakh each and start a partnership business with a specific clause in their partnership deed that any partnership dispute is not to be taken in the court of law, the agreement lacks legal enforceability.

(viii) The terms of offer must be certain - A contract may fail to come into existence, even though there is an offer and an acceptance, because of uncertainty as to what has been agreed. A vague offer does not convey what it exactly means. In particular this will be the case where the parties have left essential terms to be settled between them. Thus where parties enter into an agreement for sale of goods but fail to state the price at which the goods are to be sold, the courts are not able to enforce such promise.

Examples:

1. Where a person states that he is prepared to purchase the property for a reasonable sum, the proposal cannot be construed as an offer to purchase for any definite amount.

2. A promised to buy the horse from B if it proved lucky. This is a vague and loose offer. Thus it cannot give rise to any contract.

Limitations to the rule - The rule that an offer is not valid if its terms are not certain, can be ignored in the following cases:

1. If only a minor term is meaningless, it may simply be ignored and the rest of the contract may be treated as binding.
2. If the parties have had previous dealings similar to the present transaction, the courts can use these matters to ascertain the terms of the contract.

It is worth noting that simply absence of few terms does not render uncertainty to the contract. If the missing terms make an essential part of the contract without which the responsibility of the parties cannot be fixed, then only a contract can be held void because of uncertainty.

(ix) An offer must not thrust the burden of acceptance on the offeree - The offeror cannot say that if the acceptance is not communicated within a fixed period of time, the offer would be considered as accepted. The offer should not impose on the offeree, an obligation to reply.

Example- A writes to B "I will sell you my horse for Rs. 500. If I do not receive a reply by Sunday next, I shall assume you have accepted the offer." B does not reply. There is no contract.

2.2.2 Offer Should be Distinguished From :

(i) Cross offers - Two offers meeting cross purposes, made by two parties to each other, in ignorance of each other's, offer are termed as 'cross offers'. Cross offers do not amount to acceptance of one's offer by the other and do not constitute a completed agreement.

Example - A wrote a letter to B, a firm of furniture dealers to supply him 5,000 chairs of a particular type and at a certain price. The same firm on *the* same day posted a letter to A offering to sell 5,000 chairs of the same quality at the same price. The letters crossed each other in the post. Here, the letters are cross offers,

and neither is acceptance of the other because each side was ignorant of the proposal other party at the time of writing the letter.

Comment: It may be noted here that the offer made by A and the offer made by B are good offers in their individual capacity. If B gives an acceptance to the offer given by A or vice versa, an agreement will be formed. The idea is that the two similar offers cannot be treated as offer and acceptance.

(ii) Counter offers. - Acceptance to an offer with a variation is no acceptance. It is simply a counter offer. A contract can be concluded only when the exact terms of the offer are accepted by the offeree. A counter offer amounts to the rejection of the original offer and has the effect of canceling the original offer. An offer once rejected is dead and cannot be accepted unless renewed.

Example: A offered B to sell his horse at Rs. 1000. B replied that he can pay Rs. 800 for the horse. B's reply is a counter offer.

When a counter offer is made by an offeree, following situations may occur :

- (i) The offeror refuse to accept the counter offer, original offer comes to an end.
Result - No contract.
- (ii) The offeror choose to accept the counter offer, original offer comes to an end, counter offer amounts to new offer; acceptance of counter offer by the original offeror amounts to acceptance, a contract is formed.
- (iii) The offeror refuse to accept the counter offer, original offer comes to an end. The offeror renews the offer and the offeree now accepts it. A new contract is formed.

(iii) Invitation to offer - When a person makes an invitation to offer, the purpose is not to obtain the assent of the other person but merely to circulate the information that he is willing to deal with anybody, who on such information is willing to open the negotiations with him.

If I park my car on the driveway of my house with a 'For Sale' notice on the windscreen, it is an example of an invitation to offer, not an offer. The idea behind this invitation is that anybody who is interested in buying the car can come and talk

to me.

An invitation to offer is not the same thing as offer. An offer is a final expression of willingness of the offeror. If the offeree accepts it, a contract will be made and both the parties will be bound by it. Invitation to offer is an invitation to open negotiations. Acceptance to an invitation to offer cannot give rise to a contract.

We shall discuss below some of the possible forms an 'invitation to offer' may take:

- (1) **Displaying goods for sale** - Displaying goods that are for sale does not amount to making an offer to sell. It is something you do to encourage the people who come forward and negotiate.

Where goods with a price tag attached are displayed in a shop window, this does not amount to an offer by the shop to sell the goods, but it is merely an invitation by the shop to the members of the public to make an offer for the goods in question. Although from a social standpoint a person may feel offended why the shopkeeper rejected to sell the goods at the price quoted by him only, but the legal situation remains the same.

A natural consequence is of course that a customer cannot demand the sale of goods to him, at the price indicated, for he is the person making the offer, which the shopkeeper must then decide whether to accept or reject.

- (2) **Price lists, catalogues** - The issue of a tradesman's circular or catalogue advertising goods for sale is usually regarded as a mere attempt to induce offers, and is not an offer in itself.
- (3) **Advertisement** - Generally speaking, an advertisement on a hoarding, a newspaper 'display', or a television commercial, etc. is not regarded as an offer. These are simply attempts to make the public aware of what is available, and will in any case not be specific enough to amount to an offer.
- (4) **Declaration of intention** - A declaration of intention, such as an advertisement to hold an auction, does not amount to an offer.
- (5) **Auctions** - At an auction sale, the auctioneer's request for bids is not an offer, instead, it is a bid that constitutes an offer. The general proposition is that the

bidder is the offeror; his bid (which may be by words or by conduct, such as waving a catalogue) is the offer, and this auctioneer may accept or reject. If the auctioneer chooses to accept the offer, it is by striking the table with his hammer. It follows that the auctioneer can withdraw any item before the fall of hammer.

- (6) **Share offers** - A company which in commercial language makes an offer to the public of new shares does not in law "offer" to allot the shares. It invites members of the public to apply for them. It reserves right to accept or reject the application.
- (7) **Tenders** - If A asks a number of tradesmen to put in tenders for supplying him with some particular goods or services, in doing so, he is not making an offer. Consequently he is not bound to accept the lowest or any other tender. The position is similar where A asks one tradesman to put in an estimate for supplying particular goods or services. It is not A, who makes the offer; the offer comes from the tradesman in the form of the tender or estimate.

A tender merely indicates a readiness to receive offers. The offer in all such cases comes from the person who receives the tender. The person inviting the tender may not accept it.

Acceptance of tender- It is essential to understand what is precisely meant by accepting a tender, since different legal results are obtained according to the wordings of the invitation to tender. Consider the following two cases:

- (a) Tenders are invited for the supply of 10,000 tons of coal to B & Co., delivery to take place as demanded between January and December 1998.
- (b) Tenders are invited for the supply of coal not exceeding 10,000 tons to B & Co., if and when demanded between January and December 1998.

Acceptance to tender replies in the case (a) - will result into binding contract.

Acceptance to tender replies in the case (b) - will result into standing offer.

- (iv) **Standing offer** - Sometimes a proposal may take the form of a continuous offer. Such offers are called 'standing offers'. It is an offer to supply certain commodity

for a certain price up to a certain period. The quantity to be supplied may or may not be specified. It usually takes the form of a tender.

2.3 TERMINATION OF OFFER

An offer remains capable of acceptance until it is terminated (i.e. stop existing). An offer may terminate by the operation of law or by the act of the parties. Section 6 of the Indian Contract Act enumerates the circumstances when an offer comes to an end. But these are not exhaustive. Following discussion covers the provisions of section 6 as well as other circumstances when an offer is said to become non-existent.

2.3.1 Instances of termination of offer as per section 6 of the Act

(1) Revocation - Two relevant provisions of the Indian Contract Act dealing with revocation are as follows:

A proposal may be revoked at any time before the communication of its acceptance is complete against the proposer, but not afterwards [Section 5].

A proposal is revoked by the communication of notice of revocation by the proposer to the other party [Section 6(1)].

It follows from the above that, the offeror may revoke (i.e. withdraw) his offer at any time before the offeree has communicated his acceptance. And that, to be effective, such revocation must be communicated to (i.e. actually brought to the attention of) the offeree, by the offeror himself or by his duly authorised agent.

Example: At an auction sale A makes the highest bid but withdraws it before the fall of the hammer, no contract is concluded because the offer has been revoked before acceptance.

How the cases are dealt when offer is kept open for a specified period of time - The above example shows that even if the offer is kept open for a specified period of time, the offeror can revoke it. The rationale is that when offeree is not bound in any way to accept the offer, why the offeror should be bound to keep it open.

But there is an exception to it. If the offeror has promised to keep the offer open for a consideration (i.e. something in return), a separate contract is formed which

is technically known as 'option'. In such a case the offeror cannot revoke the contract before the expiry of agreed period.

Example - O in consideration of the payment of Rs.1, granted in writing an option to A to purchase O's house for Rs.10000 exercisable within six months. O purported to withdraw his offer before the expiry of six months. A went to the court. It was held that the offer continued in existence and O's withdrawal of offer has no effect.

(2) Lapse of time - A proposal is revoked by the lapse of time prescribed in such proposal for its acceptance, or, if no time is prescribed, by the lapse of reasonable time, without communication of acceptance [Section 6(2)].

An offer continues in existence for so long as the offeror intends it to continue. If he states, "This offer is to remain open until noon on April 1," it remains open until that moment and then ceases to exist. It may happen that the offeror does not specify anytime for the termination of the offer but that does not mean that it is intended to last forever. The offer, therefore, comes to an end after the lapse of reasonable time.

What is reasonable time is a question of fact depending upon the circumstances of each case. For example, an offer made by telegram suggests that a reply is required urgently and if the offeree delays the communication of his acceptance even by a day or two, the offer will be considered to have lapsed.

(3) Failure of acceptor to fulfil the condition precedent to acceptance - A proposal is revoked when the acceptor fails to fulfil a condition precedent to the acceptance of the proposal [Section 6(3)].

If there is a *condition* therein the proposal, without fulfilling which, the acceptor cannot accept the proposal; the proposal will naturally be revoked if the acceptor fails to fulfill that precedent condition.

Example - A, a seller agrees to sell his house subject to the condition that B, a buyer, pays the agreed price before a certain date. B fails to fulfill that condition. Hence the offer stands revoked.

(4) Death or insanity of the proposer - A proposal is revoked by the death or insanity of the proposer, if the fact of his death or insanity comes to the knowledge of the

acceptor before acceptance [Section 6(4)].

If the offeree does not know that the offeror has died or gone insane and gives his acceptance, it is a good acceptance in the eyes of law. This will result in a valid contract and legal representatives of the deceased offeror shall be bound by the contract. But where the offeree has knowledge of the offeror's death or insanity, he cannot make an effective acceptance.

Example - X had written Z, requesting him to give credit to Y and guarantying payment up to Rs. 1 lakh. The Z gave credit to Y, X, then died, and the Z, in ignorance of this fact continued credit to Y. Y failed to repay this amount. The Z now sued X's executors for guarantee amount. Here, the guarantee was to be performed out of the estate of X.

However, if the offer is of personal nature, i. e. involves personalised services like painting of picture by the offeror, in such cases, the offer stands lapsed when the offeror dies or goes insane, even if the offeree gives acceptance without the knowledge of this fact.

It is interesting to know that there is no provision in the Indian Contract Law about the effect of death of the offeree. But it may be construed that since an offer can be accepted only by an offeree and not by any other person, it cannot be accepted by his executor on his death.

(5) Other instances when an offer gets terminated - In addition to the modes mentioned in section 6 of the Indian Contract Act, an offer comes to an end in the following cases:

(a) Rejection - An offer comes to an end when the offeree rejects it. Once an offer has been refused, it ceases to exist, and no longer remains capable of acceptance.

Example - A offers to sell his 10 acre of land to B for Rs. 1 lakh, B refuses. Offer no longer exists.

The rejection of a proposal is wholly distinct from revocation as it is a deliberate act on the part of offeree while revocation is an act on the part of the offeror.

(b) Counter offer - A counter offer proposing different terms has the same effect as

refusal. It is no, less a rejection of the original offer. A party, who having made a counter offer, changes his mind and want to accept the original offer, cannot treat the first offer as still open.

Example - A offers to sell his 10 acre of land to B for Rs. 1 lakh, B offers to pay Rs. 90,000 for the same. Original offer stops existing. Now even if B is ready to pay Rs. 1 lakh for the land, the original offer is not open to him.

(c) Failure to accept according to the mode prescribed - Offer is revoked if the offeree fails to accept it according to the mode prescribed by the offeror.

Example - A offered to buy flour from B requesting that the 'acceptance should be sent by the messenger who brought the order. B sent his acceptance by post thinking that it would reach A earlier than the messenger. In this case A was not bound by the acceptance.

It may be noted that according to section 7, if the offeree does not accept the offer according to the mode prescribed, the offer does not lapse automatically. It is duty of the offeror to reject such acceptance within reasonable time. Thus, if the acceptance is not in the mode prescribed, and the offeror does not reject acceptance or gives no answer, he is deemed to have accepted the acceptance.

(d) Subsequent illegality or destruction of the subject matter - An offer lapses if it subsequently becomes illegal.

Example - An offer is made for the sale of 100 bags of cement at the rate of Rs. 100 per bag, and subsequently a law passed prohibiting the sale of cement by the private individuals, the offer becomes illegal and stands lapsed.

When the subject matter of an offer gets destroyed, the offer lapses automatically.

Example - A offers to B that he will supply him 10 cans of groundnut oil if his ship will reach safely to the shore. B accepts the offer. The ship wrecks on the way, the offer stands lapsed irrespective of the fact whether B has knowledge of this event or not.

2.4 ACCEPTANCE OF AN OFFER

Once the existence of an offer has been proved, a valid acceptance is required to form a contract. An acceptance is an expression, by words or conduct, which clearly indicates that the person making it agrees to be bound by the terms of the offer. The acceptance must be unqualified and must correspond to all the terms of the offer.

Whether there has been an acceptance by one party to an offer made to him by the other may be collected from the words or documents that have passed between them or may be inferred from their conduct.

2.4.1 Acceptance :

Section 2(b) of the Indian Contract Act provides that, "When the person to whom the proposal is made signifies his assent thereto, the proposal is said to be accepted. A proposal when accepted becomes a promise." Thus, acceptance is the act of giving consent to the proposal. A proposal when accepted becomes a contract.

This definition can be broken into the following elements:

1. When the person to whom the proposal is made
2. Signifies his assent thereto
3. The proposal is said to be accepted.

The word "thereto" in the above definition emphasizes that the acceptance should be made exactly to whatever has been offered.

2.4.2 The elements of acceptance

The elements of acceptance are discussed below along with the other legal rules which are applied to see when and how an acceptance comes into existence.

The elements of acceptance are as under :

- (1)** *Acceptance must be made by the party to whom the offer is made*
- (2)** *Acceptance must be absolute and unqualified*
- (3)** *The acceptance must be expressed in some usual or reasonable manner*
- (4)** *Acceptance must be given within reasonable time*

- (5) *Acceptance cannot be made in ignorance of offer*
- (6) *Acceptance must be given before the offer lapses or revoked*
- (7) *An acceptance must be communicated to the offeror*
- (8) *Mere mental acceptance is no acceptance*

(1) Acceptance must be made by the party to whom the offer is made - When an offer is made to a particular person, it can be accepted only by that person, when an offer is made to a class of persons, it can be accepted only by a member of that class, and when an offer is made to the public at large, it can be accepted by any member of the public.

Examples:

1. X offered to sell his house to Y for Rs. 1 lakh. Z, who was overhearing, came forward and said that he is ready to buy X's house on X's terms. Result is 'no contract'.
2. X gave advertisement in the paper that whoever will bring his lost cat will get a reward of Rs. 500. Any member of the public can accept this offer.

(2) Acceptance must be absolute and unqualified [Section 7(1)] - An acceptance should be unconditional assent by the offeree to all the terms of the offer. A conditional or qualified acceptance is no acceptance at all. If there is any variation, even of unimportant point, there is no contract. An acceptance with a variation is a counter proposal which may or may not be accepted by the person (i.e. the original offeror) to whom it is made.

Examples:

1. R offered to purchase D's house with vacant possession from 25th July. D sent an acceptance letter suggesting acceptance from 1st August. Here, it was no acceptance of R's offer.
2. A offers to sell his house to B for Rs. 1,00,000. B replies, "I am willing to buy your house for Rs. 1,00,000 if you buy my 1960 model Fiat for Rs. 50,000." There is no acceptance on the part of B.

(3) The acceptance must be expressed in some usual or reasonable manner [Section 7(2)] - Where the offeror prescribed a particular mode of acceptance - The acceptance must be made in the prescribed manner. Thus when an offer was made on the following terms - the seller wrote to the purchaser, "I intend to sell my house for Rs. 1000. If you are willing to have it, write to F at his address." Instead of writing to F, the purchaser sent an agent to F and agreed to purchase. Here, It is an invalid acceptance.

A departure from the prescribed manner does not of itself invalidate the acceptance. Law imposes a duty on the offeror to reject such acceptance within reasonable time of receipt of acceptance. If he fails to do so, he becomes bound by the acceptance. Thus in the above case, if the seller does not deny the sale of the house within the reasonable time insisting upon the deviated manner of acceptance of by the purchaser, a valid contract will be formed.

Where the offer does not prescribe any mode of acceptance - The acceptance must be made in a reasonable manner. This expression includes what must have been done according to the ordinary practice followed in a particular trade or business or place. However, what is reasonable depends on the facts and circumstances of each case.

Thus a contract of insurance will be concluded only when a party to whom an offer has been made accepts it unconditionally and communicates his acceptance to the person making the offer - because this is the normal mode of acceptance of an insurance proposal.

(4) Acceptance must be given within reasonable time- If the offeror specifies time limit within which the offer can be accepted and the acceptance is not made within such time, the offer automatically lapses. If any time limit is not specified in the offer, it can be accepted within reasonable time. What is reasonable will depend on the facts and circumstances of each case. Thus an offer to sell perishable goods should be replied quickly.

(5) Acceptance cannot be made in ignorance of offer – The rule is that the acceptance follows the offer. If the offer is not communicated to the other person, he cannot accept it.

Example - B found A's lost dog, and not having seen the advertisement given by A

offering a reward for his return, returned it out of goodness of heart. Here B will not be able to claim the reward because he has acted in ignorance of the offer.

(6) Acceptance must be given before the offer lapses or revoked - Acceptance can be given only to an existing offer. When an offer terminates, it stops existing and hence cannot be accepted. How and when an offer terminates has already been discussed.

Example - O offered to sell A his farm for Rs. 10,000. A, replied that he could buy the farm for Rs. 9,500. O refused this counter offer. A then accepted the offer to buy the farm for Rs. 10,000. He was too late. That offer terminated when O received the counter offer. A's acceptance was a nullity.

(7) An acceptance must be communicated to the offeror- As per the definition of acceptance, when a person signifies his assent to a proposal, it is said to be accepted. The offeree should do something to signify his assent, i.e. to communicate his acceptance. An acceptance can be communicated in any of the following modes:

1. By words spoken
2. By words written
3. By conduct - (i) By performance of conditions
(ii) By acceptance of consideration

Examples:

1. P offers to buy Q's bicycle at Rs. 2500. Q may accept this offer by stating so orally or through the telephone - oral acceptance.
2. P offers to buy bicycle at Rs. 50. Q accepts the offer by writing a letter or by sending a telegram to that effect - written acceptance.
3. A widow promised to settle some immovable property on her niece if the niece stayed with her at her residence. The niece stayed at her residence till her death. Here, the niece was entitled to the property because she has accepted the aunt's offer by going to her residence and staying with her as desired - acceptance by performance of condition.

4. T offers to pay S Rs. 50 if he would jump from the first floor of a house to the ground floor. S jumps down from the first floor to the ground floor - the offer has been accepted by conduct of jumping from first floor.

It may be understood from the above illustrations that in any case, the offeree has to perform certain act to convey his acceptance. If the offeree does not react in any way to signify his assent, the acceptance is not said to have occurred. Mere mental acceptance is no acceptance. It has to be accompanied by some external indication.

Example: A person received an offer by letter. In reply he wrote a letter of acceptance, put the letter in his drawer and forgot all about it. In this case, there was no contract because the other party was not informed.

(8) Mere mental acceptance is no acceptance - A mere mental acceptance, not evidenced by words or conduct is, in the eyes of law, no acceptance.

Example - A draft agreement relating to the supply of coal was sent to the manager of a Railway company for his approval. The manager put the words 'approved' on the agreement but by an oversight the draft remained in his drawer. In this case, there was no contract because of no communication

A contract will thus be binding only when the acceptor has done something to signify his intention to accept and not when he has only made up his mind to do so. A natural corollary to this rule is that the Silence cannot be construed as acceptance.

As a general rule, silence on the part of the offeree does not constitute an acceptance. This is true even when the offeror states, "If you do not reply within 10 days, I shall conclude that you have accepted." In such a case, even if the offeree does not reply within 10 days, his acceptance cannot be presumed.

Possible cases where acceptance by silence can be construed as acceptance - There may be exceptional circumstances, where silence on the part of the offeree does constitute an acceptance. While it is difficult to generalize about these exceptional situations, following types of cases present little controversy:

1. When an offeree initially indicates that silence on his/her part can be taken as acceptance, his silence will infer his acceptance. Thus if A says to B, "If you do not hear from me by March 1, you can conclude that we have a contract," and maintains silence till March 1, the contract will be formed.

Note: It may be noted here that it is offeree who is ready to construe silence as a mode of acceptance. An offeror cannot decide by himself to construe silence as a mode of acceptance.

2. When a series of past dealings exist between the parties. For example, A retail jewelry store has over the years, received periodic shipments from a big supplier and has always paid for any unordered goods not returned within two weeks. A failure by the retail dealer to reject a particular shipment within two weeks will amount to acceptance.
3. Where the offeree having reasonable opportunity to reject the offered goods or services takes the benefit of them. It will amount to acceptance.

Example - A landlord served a notice on the tenant demanding enhancement of rent. The tenant did not protest against it and continued to occupy the premises. The conduct of the tenant amounts to acceptance of the offer to pay the rent at the higher rate.

2.5 COMMUNICATION OF OFFER, ACCEPTANCE AND REVOCATION

When people talk face to face, the message is communicated then and there. Thus where A and B are sitting across and A says to B, "I am ready to sell my house to you for Rs. 1 lakh." And B replies, "I agree to buy your house for Rs. 1 lakh." the communication of offer and acceptance is complete instantaneously and contract is formed.

But when parties are at a distance to each other, different modes of communication like letter, telegram, telephone, telex, fax, E-mail, etc., may be used to communicate.

In case of telephone/fax/telex etc., it is presumed that there is instantaneous communication. But while communicating, if the equipment which is being used goes out of order or some other disturbance occurs due to which the message is not conveyed properly, the communication is not treated as complete. Thus where a

contract is affected by telephonic conversation, the contract is not complete till acceptance of the offer by the offeree is clearly heard and understood by the offeror.

The *spirit of the law* is that the message reaches to the party concerned - The words of Justice Denning are worth mentioning here - "Let me first consider a case where two people make a contract by words of mouth in the presence of each other. Suppose for instance, that I shout an offer to a man across a river or a courtyard, but I do not hear his reply because it is drowned by an aircraft flying overhead. There is no contract at the moment. If he wishes to make a contract, he must wait till the aircraft is gone and then shout back his acceptance so that I can hear what he says. Now take a case where two people make a contract by telephone. Suppose for instance, that I make an offer to a man by telephone and in the middle of his reply, the line goes 'dead', so that I do not hear his words of acceptance. There is no contract at that moment.

When the parties negotiate a contract through the mail or by telegram, there is a considerable time lag between putting the message in the course of transmission by one party and its receipt by the other party. In such cases, it is very important to decide the precise moment when communication is said to be complete. Section 4 of the Indian Contract Act explains when a communication will be treated as complete in the eyes of law. The language of section 4 depicts that it is applicable in the cases where contract is made through correspondence.

Note: Indian Contract Law does not deal precisely with the contracts made in the presence of both the parties or over the telephone.

2.5.1 Communication of offer-When complete

Section 4 provides that "the communication of proposal is complete when it comes to the knowledge of the person to whom it is made." The definition provides two stages. The communication of the proposal is the first stage. Receipt of the communication by the acceptor is the second stage. When offer is given by posting a letter or telegram, it is complete when it is received by the offeree.

Examples:

1. A proposes, by a letter to sell his house to B at certain price. The letter is posted on 1st June at 10.00 a.m. It reaches to B on 3rd June at 3.00 p.m. The

communication of the offer is complete when B receives the letter, i.e. at 3.00 p.m. on 3rd June.

2. A sends a letter to B offering to sell his house for Rs. 10 lakh. The letter never reaches B. The offer is not complete.

Note: Offer by letter must be deemed to have reached to the addressee, when the letter ordinarily would be delivered at the addressee's residence. Any delay in addressee actually receiving it in his hands, caused owing to his failure to make proper arrangements to receive the communication will not be considered.

2.5.2 Communication of acceptance - When complete

Section 4 provides that "The communication of an acceptance is complete-

as against the proposer :

When it is put in a course of transmission to him, so as to be out of power of the acceptor

as against the acceptor :

When it comes to the knowledge of the proposer."

It is to be noted here that the communication of an acceptance is complete at different times for the offeror and the acceptor. Thus, the offeror becomes bound by the acceptance as soon as the letter of acceptance is posted by the acceptor. And for the acceptor, the communication of acceptance is complete, i.e., he is bound by the acceptance when it comes to the knowledge of the offeror.

Examples:

1. Continuing with the first illustration given above, on 5th June at 2.00 p.m., B hands over the letter of acceptance to his peon for posting. Peon actually posted the letter at 2.30 p.m. The letter reaches A on 8th June, 11.00 a.m.
Communication of acceptance is complete:

As against A, the offeror- when letter is actually posted at 2.30 p.m. on 5th June (not at 2.00 p.m. when it was handed over to the peon, since the letter is

said to be out of the power of the acceptor only when the letter is actually posted).

As against B, the acceptor - On 8th June at 11.00 a.m. when letter is received by A.

2. A offers to sell his car to B by a letter dated 1st January. B receives the letter on 2nd January at 1 p.m. B posts the letter of acceptance on 3rd January at 11 a.m. The letter reaches A on 4th January at 4 p.m. In this case:

(i) Communication of offer is complete on 2nd January at 1 p.m., when the offeree receives letter containing the offer.

(ii) Communication of acceptance is complete,

As against A, the offeror - On 3rd January at 11 a.m., when the letter of acceptance is posted by B, so as to be out of his power.

As against B, the acceptor - On 4th January at 4 p.m., when the letter of acceptance is received by A.

2.5.3 Effect of delay or loss of letter of acceptance in postal transit

Where there is an offer by mail and acceptance by mail, the acceptance is effective the moment it is deposited in the mail box in a properly addressed and stamped envelope. Even if the letter is lost on the way and never reaches to offeror, the contract is formed.

If the letter of acceptance is misdirected because it has not been addressed correctly, no acceptance will take place. But if the wrong address is furnished by the offeror, and the letter is addressed accordingly, the offeror will be bound by such acceptance.

In such cases, the acceptor is at an advantageous position. The moment letter is posted by the acceptor; the communication of acceptance is complete as against the offeror. The acceptor is in a position to bind the offeror by the contract. When letter is lost on the way, it does not reach the offeror. The communication of acceptance is not complete as against the acceptor till the time letter of acceptance reaches the offeror. The acceptor has an option to withdraw his acceptance if he chooses to do so.

Example - G made an offer by the post to purchase shares of Company H. The offer was accepted by the company. The letter of allotment duly posted by the company never reached the offeror. Here, that the acceptance was complete as against G as soon as the letter of acceptance was posted.

2.5.4 Communication of revocation - When complete

Section 4 of the Indian Contract Act provides. "The communication of revocation is complete -

as against the person who makes it:

when it is put into a course of transmission to the person to whom it is made so as to be out of the power of the person who makes it;

as against the person to whom it is made,

when it comes to his knowledge."

The rules regarding communication of revocation are on the same line as the rules regarding the communication of acceptance.

Examples:

A offers to sell his house to B by a letter dated 3rd March.

B receives the letter on 5th March.

A posts letter of revocation on 4th March.

B receives letter of revocation on 6th March.

The revocation of offer is complete as against A, on 4th March, when the letter is posted. It is complete as against B on 6th March when the letter of revocation is received by him.

What is important to decide here as a first step is that when an offer or an acceptance can be revoked.

(1) When an offer may be revoked - A proposal may be revoked at any time before the communication of its acceptance is complete as against the proposer, but not afterwards. [Sec. 5]

In simple words it can be said that an offer can be revoked before its acceptance. But the communication of revocation of offer should reach offeree before he posts the letter of acceptance.

To illustrate:

Case	June 2 - X	mails offer to Y.
	June 3 - Y	receives offer at noon.
	June 3 - X	mails letter of revocation at 2 p.m.
	June 3 - Y	mails acceptance at 5 p.m.
	June 4 - Y	receives the revocation.
	June 5 - X	receives Y's acceptance.

Result- A contract was formed at 5 p.m. on June 3, when Y mailed his acceptance (since a revocation is not effective until it is received, the letter that X mailed on June 3 could have no effect until June 4, by which time the contract had already been formed).

(2) When an acceptance may be revoked - An acceptance may be revoked at any time before the communication of acceptance is complete as against the acceptor, but not afterwards. [Sec. 5]

Thus an acceptance can be revoked any time before the letter of acceptance reaches to the offeror. Once the acceptance comes to the knowledge of the offeror, it cannot be revoked.

Case 1 :

July 2 – X	mails offer to Y.
July 3 – Y	receives offer at noon.
July 3 – X	mails letter of rejection at 5 p.m.
July 4 – Y	changes his mind and at 10 a.m. mails a letter of acceptance which X receives on July 6.
July 5 - X	receives letter of rejection.

Result - No contract. The rejection has reached the offeror before the acceptance.

Case 2:

July 2 -X	mails offer to Y.
July 3 -Y	receives offer at noon.
July 3 -Y	mails letter of rejection at 5 p.m.
July 4 -Y	changes his mind and at 10 a.m. calls X on the telephone accepts the offer, telling X to disregard his letter of rejection.
July 5 – X	receives letter of rejection.

Result - A contract was formed at 10 a.m. June 4, when Y gave X actual notice of his acceptance. Y's letter of rejection could have had no effect until June 5 by which time, the contract was already formed.

An interesting situation may occur when the letter of acceptance and the letter of revocation of acceptance, both reach offeror at the same time. At that time the formation of contract depends on the fact that which letter was opened first by the offeror. If he first opens the letter of acceptance, a contract is formed which cannot be revoked. And if he opens the letter of revocation first, the acceptance stands revoked and no contract comes into being.

Part - 3

Consideration

STRUCTURE OF PART - 3:

- 3.1** Objectives
- 3.2** What is Consideration?
 - 3.2.1** Essential elements of Consideration
 - 3.2.2** Rules regarding consideration
- 3.3** Exceptions to the doctrine of Consideration
- 3.4** Stranger to contract Vis-à-vis stranger to consideration
 - 3.4.1** Stranger to the contract
 - 3.4.2** Stranger to the consideration
 - 3.4.3** Exceptions to the doctrine of privity to contract
- 3.5** Legality of object and consideration
- 3.6** Agreement opposed to public policy
- 3.7** Effect on unlawful object and consideration
 - 3.7.1** Object and consideration wholly unlawful
 - 3.7.2** Objects and Consideration unlawful in part

3.1 OBJECTIVES

After reading this Unit you should be able to understand:

- The concept of consideration, and its importance for a contract.
- The circumstances when a contract is valid even without consideration.
- Concept of "stranger to a contract" vis-a-vis "stranger to consideration"
- When the object and consideration of a contract can be considered as lawful.
- What is the effect of an unlawful contract?

3.2 WHAT IS CONSIDERATION

Consideration to say least means something in exchange. It is an essential element ordinarily required in a contract. One of the basic ideas underlying the present day requirement of consideration is that one party to an agreement should not be bound by it if the other party is not similarly bound. Generally, if an agreement lacks consideration, neither party can enforce it, even if it is in writing.

Stating it positively, the concept of consideration requires that both parties to a contract shall have given and have received something as the "price" of their respective promises. For example: X promise to install a home-air conditioning unit for Y, and Y promises to pay X Rs. 1,100 for the job. Here the price X has received (in return for his obligation to install the unit) is the right to a payment of Rs. 1,100 from Y when the job is done; similarly, the price Y has received (for her promise to pay the Rs. 1,100) is her right to have the unit installed.

Section 2(d) of the Indian Contract Act defines consideration as: 'When, at the desire of the promisor, the promisee or any other person has done or abstained, from doing or does or abstains from doing, or promises to do or to abstain from doing something, such act or abstinence or promise is called a consideration for the promise.

As per this definition, consideration is something in return of a promise which consists of:

1. an act, abstinence or forbearance,
2. done at the desire of the promisor,
3. by the promisee or any other person,

4. which can be either already executed or is in the process of execution or may still be executory.

Thus if at the desire of A, B agrees to paint a picture for him at an agreed remuneration, the painting of the picture would be regarded as consideration moving from B and the remuneration as consideration moving from A.

3.2.1 Essential Elements of Consideration

The above elements of consideration can be elaborated as follows:

(1) Consideration must move at the desire of the promisor - An act or abstinence without any request from the promisor is a voluntary act and does not come within the definition of consideration. Similarly an act or abstinence done at the request of any person other than the promisor does not constitute consideration. In other words an act shall not be a good consideration unless it is done at the desire of the promisor.

Example - A sees B drowning and saves his life. A cannot demand payment for his services as it is a voluntary act on his part and B never asked him to do so.

(2) Consideration may move from the promisee or any other person - It means that so long as there is consideration for promise, it is immaterial who has furnished it. It may move from the promisee or from any other person if the promisor has no objection.

Examples -

1. In marine insurance, broker's undertaking to pay premium is consideration though it moves from a third person.
2. An old lady, by a deed of gift made over certain property to her daughter D under the direction that she should pay her aunt, P (sister of the old lady), a certain sum of money annually. The same day D entered into an agreement with P to pay her the agreed amount. Later, D refused to pay the amount on the plea that no consideration had moved from P to D. Here, P was entitled to maintain the suit as consideration had moved from old lady, sister of P, to the daughter D.

Note: A consideration moving from third party who is a minor is no consideration

(3) Consideration is an act, abstinence, forbearance or detriment - At times consideration is taken as misnomer of money form of exchange. The legal term consideration does not mean payment of money only. The Contract Act says that the consideration can be in the form of an act, abstinence, forbearance or detriment.

(a) Consideration as an act - An act done by a person can constitute consideration. Where a person executes an undertaking in favour of a bank on the basis of which he receives a substantial benefit of having a current overdraft account with a bank, the facility of overdraft account cannot be said to be without consideration.

(b) Consideration as an abstinence - To constitute abstinence as consideration, one must refrain or promise to refrain from doing something that he or she is privileged to do.

Example - X promised to pay his nephew Y, a sum of Rs. 50,000 if he would refrain from drinking, using tobacco, swearing and playing cards for money until he becomes 21 years of age. The nephew refrained from all the specified activities as he was requested to do but his uncle died without making the payment. He claimed the money out of the uncle's estate as his legal right. Here, he abandoned his legal right and restricted his lawful freedom of action upon the faith of his uncle's agreement although it may seem that such performance actually did not prove to be a benefit to the promisor. Such detriment however amounted to consideration and he can be granted the promised sum of Rs. 50,000.

(c) Consideration as forbearance - Forbearance means foregoing one's legal right or claim. Creditor forbearing to enforce execution and allowing time to pay at the request of the debtor is a good consideration.

Example- An agreement to accept a decree and not to appeal against it when parties to it would have appealed is one which is supported by good consideration.

(d) Consideration as detriment - A detriment suffered by the promisee or any other person, whether actual or prospective, can constitute a good consideration. The ordinary contract of guarantee is good example of detriment form of

consideration. In consideration of A's lending B Rs.1000, C promises to repay the loan if B does not. Here C derives no benefit, but A suffers detriment by parting with his money, and this is enough consideration to support C's promise provided A lends the money at C's request.

Example- X, a publisher, promises Y "If you will loan Rs. 5,000 to my nephew for one year, I will run all your advertisements during that time at half the regular rate." Y makes the loan, but X refuses to provide advertising space at the reduced rate. If Y sues X to recover damages for breach of contract - that is, Y seeks to enforce X's promise - X is liable. Y's act of making the loan to the nephew constituted not only an acceptance of X's offer but a detriment to Y - the parting with something of value where he was not otherwise legally obligated to do so. Thus X's promise, supported by consideration, is enforceable against him.

Note: That it is not necessary for the promisor to receive any benefit as long as the promisee or someone else suffers a detriment.

(4) Consideration can be past, present or future

(a) Past consideration - A past consideration consists in an act already done by one as consideration for a promise of the other. Thus when a person promises to compensate another in return for what the latter had done for the promisor in the past or before making of the promise, such promise is said to be for past consideration, i.e. consideration which took place in the past. Past consideration is as good as present or future consideration. For example A does some work for B in the month of April without expecting any return from B. Later on, in June, B promises to pay him some money for the work done in April. This constitutes a valid contract as the work done by A is of the nature of past consideration.

Example - "A" provided extra services to B (his master), after which B promised him a bonus for the same. Later on B refused to pay the bonus. Here, if the servants put forth extra work in consideration whereof a bonus is subsequently promised to them by the masters, it is in law a promise for past services which is good under Indian Law.

(b) Present (Executed) Consideration- The consideration which moves simultaneously with the promise is present consideration. It consists in "doing" or "abstaining from doing something". The best example of present consideration is cash sale where

performance by both the parties (seller and buyer) is simultaneous. Another example is a contract of marriage where there is simultaneous performance by both the parties.

The present consideration is also known as executed consideration because it emphasizes on the execution part of performance.

(c) Future (Executory) Consideration - A promise to do something in future is legal consideration. When the consideration from one party to another is to move at some future date, it is called future consideration. The consideration for A's promise to B may be a promise by B to A. The consideration is then said to be executory. If A promises to marry B in consideration of B promising to marry A, the promise made by each is the consideration for the promise made by the other.

Example- M and B enter into a contract in April under the terms of which M agrees to build a swimming pool for B in June, B promising to pay Rs. 2,500 in return. M later refuses to perform, and B sues him to recover damages for breach of contract. M is liable; that is, his promise is enforceable.

3.2.2 Rules Regarding Consideration

In addition to the elements of consideration, the other general rules regarding consideration are as follows:

(1) Adequacy of consideration - Consideration, means "something in return". This "something in return" need not necessarily be equal in value to "something given". The law simply provides that a contract should be supported by consideration. So long as consideration exists, the Courts are not concerned as to its adequacy, provided it is of some value. The adequacy of the consideration is for the parties to consider at the time of making the agreement, not for the Court when it is sought to be enforced.

Consideration must, however, be something to which the law attaches value though it need not be equal in value to the promise made. The Courts do not exist for concerned to repair bad bargains.

Explanation 2 to section 25 of the Act says that an agreement to which the consent

of the promisor is freely given is not void merely because the consideration is inadequate; but the inadequacy of consideration may be taken into account by the court in determining the question whether the consent of the promisor was freely given.

(2) It must have some value in the eyes of law - A valuable consideration may consist either in some right, interest or property accruing to one party or some loss or responsibility suffered or undertaken by the other. Moreover, consideration must be certain. A promise to give a reasonable sum in return for a service cannot be enforced on the grounds of uncertainty.

Although the court will not inquire into the adequacy of the consideration, there are certain acts and promises which, for reasons of policy, are deemed to be of no value in the eye of law and which are, therefore, an insufficient consideration. A promise to do any act, or forbearance from doing any act, which the promisor might lawfully do, is generally a sufficient consideration; but the law regards some promises as void and, if a promise is void, it is a nullity, it is not a sufficient consideration for a counter promise.

(3) It must be real not illusory-The consideration should be real, i.e. it must not consist of impossible act or promise. It must not be illusory or sham, e.g. to discover a treasure by magic. The impossibilities can be categorized as:

- Physical impossibility - A promises to pay B Rs. 1,00,000 in consideration of B bringing a star from the sky to the earth. This is unreal because B's promise is absurd and physically impossible.
- Legal impossibility - A owes Rs. 1,000 to B. He promises to pay Rs. 200 to C, the servant of B who in return promises to discharge A from the debt. This is legally impossible because C cannot give discharge for a debt due to B, his master.
- Illusory consideration - Illusory consideration gives impression of consideration which is not actually there. These agreements lack mutuality.

Example-

Two seamen deserted the ship, their Captain promised to divide their wages among the rest of the crew if they helped him take the ship home. The consideration was illusory as the crew was already duty bound to take the ship home.

(4) It must be something which a promisor is not already bound to do - Where one is doing, or promising to do something which one is already under an obligation to do will not form a good consideration. One can already be bound:

(a) Under a duty imposed by law: Where a person is responsible to perform certain duty under laws of land, performance of such duties cannot form a consideration to constitute a valid contract. Thus, where A promise to pay B, who had received summons to appear at a trial in a civil suit, a certain sum being a compensation for the loss of time during his attendance. Here, the promise was without consideration as B was already under a duty imposed by law to appear and give evidence –

(b) Under a duty emanating from an existing contract: If a person is bound to perform certain act under an existing contract, the same performance cannot form a good consideration for any other contract. There was a promise to pay the advocate an additional sum if the suit was successful. Here, the promise was void for want of consideration. The advocate was under a pre-existing contractual obligation to render the best of his services under the original contract.

However, where a person being already under a legal contractual duty to do something undertakes to do something more than what he is bound to do under the original contract, this will be a good consideration for the promise, e.g., where a police constable who sued for reward offered for the supply of the information, leading to a conviction, had rendered services outside the scope of his ordinary duties, he may be held entitled to recover.

(5) Consideration must be lawful- According to section 10 of the Act, "All agreements are contracts if they are made for a lawful consideration". So a consideration must be lawful without which an agreement is void. Section 23 states that consideration is unlawful if –

- (a) it is forbidden by law; or
- (b) is of such a nature that if allowed it would defeat some law of the country;
- (c) it is fraudulent;
- (d) it involves injury to the property or person of the other;
- (e) court regards it as immoral or opposed to the public policy.

There may be cases where one part of consideration is unlawful but the other is

not. In such cases the whole agreement is void if the unlawful part cannot be separated from the lawful part.

Example - A promises to work for B who runs both illegal and legal business for a sum of Rs. 4,000 per month and B agrees to pay this amount to A. The legal business can be separated from illegal business; the part of salary pertaining to legal business is lawful consideration.

In the above case, if legal and illegal businesses cannot be separated, whole salary of A will constitute unlawful consideration.

Lawfulness of consideration is discussed in detail in this Chapter under the heading 'Legality of Object and Consideration'.

3.3 EXCEPTIONS TO THE DOCTRINE OF CONSIDERATION

So far, we have seen that an agreement has to be supported by consideration to be enforceable at law. But there may be certain circumstances where it will not be reasonable to apply the doctrine of consideration to meet the basic motives of the law. Section 25 of the Indian Contract Act, 1872 takes care of such circumstances. It says that, "An agreement without consideration is void unless it is in writing and registered or is a promise to compensate for something done, or is a promise to pay a debt barred by limitation law."

Such circumstances are elaborated below:

(1) Love and affection [Sec. 25(1)] - An agreement is enforceable even if there is no consideration, if it is -

- (i) expressed in writing,
- (ii) registered under the law for the time being in force for the registration of documents,
- (iii) is made on account of natural love and affection, and
- (iv) between parties standing in a near relation to each other.

In simple words, a written and registered agreement based on natural love and affection between near relatives is enforceable even if it is without consideration –

Examples:

1. F, for natural love and affection, promises to give his son, S, Rs. 1,000. F puts his promise to S in writing and registers it. This is a contract.
2. A Hindu, husband, after referring to quarrels and disagreement between him and his wife executed a registered document in favour of his wife agreeing to pay her for maintenance, but no consideration moved from the wife. Here, the agreement was void for want of consideration. as the essential requirement that the agreement is made on account of natural love and affection between the parties was missing.

(2) Compensation for past voluntary services [Sec. 25 (2)] - A promise to compensate, wholly or in part, a person who has already voluntarily done something for the promisor, is enforceable, even though without consideration. In simple words, a promise to pay for a past voluntary service is binding.

Examples:

1. A finds B's purse and gives it to him. B promises to give A Rs. 50. This is a contract.
2. A supports B's infant son. B promises to pay A's expenses in so doing. This is a contract.
3. A says to B, "At the risk of your life you saved me from a serious accident. I promise to pay you Rs. 1,000: There is a contract between A and B.

(3) Promise to pay a time-barred debt [Sec. 25(3)] - A time barred debt is a debt which is not recoverable because of lapse of specified time (presently 3 years) under the Limitation Act. In the normal course, once a debt becomes time barred, the lender is left with no remedy to get his money back. Therefore a debtor is not legally bound to pay the debt if it becomes time-barred.

In such a case, if the debtor subsequently promises to pay the time barred debt, apparently there is no consideration moving from the other party but the contract is still enforceable. This is because, under section 25(3) of the Act, a promise by a

debtor to pay a time-barred debt is enforceable provided:

- (i) it is made in writing,
- (ii) is signed by the debtor or by his agent generally or specially authorized in that behalf, and
- (iii) the debt must be such "of which the creditor might have enforced payment but for the Law of the limitation of suits."

The promise may be to pay the whole or any part of the debt.

Example - D owes C Rs. 1,000 but the debt is barred by the Limitation Act. D signs a written promise to pay C Rs. 1,000 on account of the debt. This is a contract.

Note: Section 25(3) applies only:

(a) When a promisor himself was liable for the time barred debt. This means sub-section 25(3) would not apply to a case of a promise to pay a time barred debt payable by a third party.

If however, a Hindu promises to pay a time barred debt due by his father, he can be held liable, because the Hindu law makes the son responsible for his father's debts to the extent to which he has received property from his deceased father or to the extent of his ancestral estate.

(b) Where the promise is to pay an ascertained amount. A promise to pay what is due after taking accounts is not a promise within the meaning of section 25(3).

(4) Completed gift [Explanation 1 to Sec. 25] - The rule "No consideration, no contract" does not apply to completed gifts. According to Explanation 1 section 25, nothing in section 25 shall affect the validity, as between the donor and the donee, of any gift actually made.

Thus transfer of properties by one person to the other as a gift according to the provisions of the Transfer of Property Act (i.e. by a written and registered document) is valid and a person transferring the property cannot subsequently demand the property back on the ground that there was no consideration.

Note: In earlier paras we have discussed that gratuitous promises/ gifts are not enforceable at the court of law because in such cases there is no consideration for the donor. This is to be distinguished from the Explanation 1 to section 25 because as per the latter once a gift has actually been made, the donor cannot demand it back on the ground that there was no consideration.

(5) Agency [Sec. 185] - Under section 185 of the Indian Contract Act, no consideration is necessary to create an agency, i.e. a transaction of agency. For giving a person authority to act as agent, consideration is not necessary. Thus if A authorises B to act on his behalf (act as an agent) before C, and B agrees to do so, the contract is enforceable at the court of law although no consideration is moving from A to B. A will be bound by the acts done by B on his behalf as against C. Even a gratuitous agent can be held liable for negligence. The principle of Promissory Estoppel emanates from this provision.

(6) Remission - Under section 63 of the Act, no consideration is necessary for an agreement to receive less than what is due, known as remission in the law.

Example - Creditor A agrees to accept Rs. 500 from B in full satisfaction of the debt of Rs. 1000. A subsequently cannot claim the amount of Rs. 500 which he has rescind.

(7) Guarantee [Sec. 127J] - A contract of guarantee is made without consideration.

3.4 STRANGER TO CONTRACT VIS-A- VIS STRANGER TO CONSIDERATION

A stranger to the contract, not being a party to the contract, can neither sue nor be sued upon under it. However, if a party to contract is a stranger to consideration, it does not affect his legal rights under the contract.

3.4.1 Stranger to the contract

A person who is not a party (i.e. neither a promisor nor a promisee) to the contract is a stranger to the contract. Under the law of contract, an agreement can be binding on and can only be enforced against the parties to it. Since a contract is a private relationship between the parties who make it, the rights and obligations under such a contract are strictly confined to them. This is known as the doctrine of privity of contract. From this follows a general rule of law that only parties to a contract may sue and be sued on a contract. Privity of contract means relationship subsisting between the parties who have entered into contractual obligations. The consequences of the doctrine of privity of contract are:

- (1) a person who is not a party to a contract cannot sue upon it even though he has provided the consideration.

- (2) a contract cannot confer rights or impose obligations arising under it on any person other than the parties to it. Thus if there is a contract between X and Y, Z cannot enforce it.

Example - A clause in a Motor Insurance Policy providing that the Insurance Company shall indemnify the insured against his legal liability in respect of death of or accident of other passengers cannot give a right of suit against the insurance company for the money due under the policy to a passenger who is a mere stranger to the contract of insurance.

The principle that a person who is not a party to the contract cannot take advantage of its provisions is subject to certain recognized exceptions discussed under the heading 'exceptions to the doctrine of privity of contract'.

3.4.2 Stranger to Consideration

In the Indian Contract Act, in order to constitute a valid contract, the consideration may move from the promisee or any other person. In case, the consideration moves from a person other than the promisee, the promisee can be categorized as a stranger to the consideration. For example, if A promises to B that he will pay Rs. 1000 to B, if B can get a picture painted from C for A. Here consideration is moving from C to A (painting of picture by C for A) and from A to B (Rs. 1000) and there is no consideration from B to either party, i.e. B is stranger to the consideration, but the relationship of promisor and promisee subsists between A and B only. The relationship between A and C is that of the privity of consideration. But the privity of consideration does not confer any right to the party providing consideration to enforce the contract at the court of law, unless he is a party to the contract. This is known as the doctrine of privity of consideration. In the given example if A does not perform his part of the contract, C cannot sue upon A in the court for its enforcement, only B is entitled to do so. Conversely it can be said that a stranger to the consideration has a right to enforce a contract, provided he is party to the contract.

Example - Where a person transfers property to another and stipulates that money be paid to a third person, a suit to enforce that stipulation by that third party will not stand.

3.4.3 Exceptions to the Doctrine of Privity to Contract

Following are the exceptions to the rule that a stranger to a contract cannot sue:

(1) Beneficiary under trust or a charge - When a trust is created, the beneficiary can enforce the rights given to him under the trust, even though he was not a party to the contract between the settler and the trustees.

Example - A transfers some property in favour of B to be held by him in trust for the benefit of X. X can enforce the agreement even though he is a stranger to the contract.

(2) Doctrine of promissory estoppel- Courts have at times been confronted by the cases involving gratuitous promises and unaccepted offers, which are without consideration and hence not enforceable at law. Under certain circumstances, the courts will enforce gratuitous promises and unaccepted offers.

If a person makes a promise to the other, and that other person incurs a detriment relying upon the promise, in such a case, the promiser is estopped from going back from his promise to the extent the promisee has incurred a detriment on the basis of such promise. This is known as the doctrine of promissory estoppel.

For example, A promises to make a gift of Rs. 3,000 towards the repairs of temple. The trustee of the temple on the faith of his promise incurs liability worth Rs. 2,500. A does not pay. Can the trustee recover the promised amount from A ? Yes, because the trustee has taken action (i.e. spent amount on repair of the temple) on the basis of the promise made by B to the extent of amount spent by him, i.e. Rs. 2,500.

The basic idea underlying this doctrine is that if the promisor makes a promise under circumstances in which he or she should realise that the promisee is almost certainly going to react to the promise in a particular way, and if the promisee does so react, thereby causing a substantial change in his or her position, the promisor is bound by the promise even though the consideration is lacking.

Example - A tenant takes a building on lease from the landlord from January 1, 1967 to December 31, 1968. In early December 1968, the tenant indicated his intention of renovating the premises and asked for renewal of lease for two years.

The landlord replied to him that, we will get to work on a new lease soon. I don't know about two years, but you can count on one year for sure. The tenant then spent Rs. 5000 over the next few weeks on renovating the house but the parties never executed a new lease. The landlord sought to evict the tenant in March 1969 on the ground that no renewal contract had been formed, he was held unsuccessful and was held to fulfil his promise regarding the year 1969. In this case, the landlord should have realised the likelihood of the tenant's conduct in consequence of his promise, he is said to be "stopped by his promises"; he cannot contend that the lack of consideration on the tenant's part caused his promise to be unenforceable.

(3) Family Settlements - Family arrangements or compromises made among male members for the benefit of female members of the family can be enforced by the female members, although the female members are not a party to those arrangements. Thus where an agreement is made in connection with marriage, partition or other family arrangement and a provision is made for the benefit of a person, that person may take advantage of that agreement although he is not a party to it.

Example - On the partition of a joint Hindu family property, an agreement was entered among its male members to make provision for the marriage expenses of a female member. Here, the female member was entitled to sue the parties to the partition deed to enforce the provision in her favour.

(4) Marriage Settlement of Minor - In case of provisions of marriage settlement of minors, the minor is entitled to sue to enforce his claim. This is because in India, marriages are contracted for minors by their parents and guardians and therefore the *Doctrine of Privity of Contract* does not apply in this case.

Example- R's father entered into an agreement for her marriage with J. Subsequently, J refused to marry. Here' R after attaining majority could sue J for damages of breach of the promise and J could not take the plea that R was not a party to the agreement.

(5) Agency - Contracts entered into by an agent can be enforced by the principal.

Example- A appoints B as his agent for selling the goods. B sold the goods to a buyer C. C sued A for defective goods. In this, though there is no direct contract

between A and C, yet A is liable because B has sold the goods to C as A's agent.

When an agent sent the goods to a foreign buyer, not as his own, but as agent of principal, there is privity of contract between the principal and the foreign buyer, even in cases when the agent has not disclosed the name of the principal.

(6) Covenants running with the land - In cases of transfer of immovable property, the purchaser of land is bound by certain conditions or covenants created by an agreement between the original buyer and the concerned authority effecting the land although he was not a party to the original agreement which contained those conditions or covenants.

3.5 LEGALITY OF OBJECT AND CONSIDERATION

According to section 10 of the Indian Contract Act, 1872, lawful consideration and object is one of the essential ingredients to constitute a valid contract. Section 23 lays down the cases where the *consideration* and object (purpose or design) of an agreement can be deemed to be unlawful. It can, therefore, safely be inferred that every consideration is lawful unless deemed to be unlawful in the Act.

Anything which is not lawful within section 23 is unlawful for the purpose of an agreement or compromise, and a decree incorporating such an agreement or compromise is a nullity. The section declares following *agreements to be void for unlawfulness*:

(1) Where the consideration or object is forbidden by law - A contract which is expressly forbidden and made criminal by statute can give no cause of action to a party who seeks to enforce it.

Examples -

1. A promises to obtain for B an employment in the public service, and B promises to pay Rs. 1,000 to A. The agreement is void as the consideration for it is unlawful.
2. Oral sale of any immovable property under the J&K Transfer of Property Act is forbidden and thus such oral contract would be void under section 23 of the Contract Act.

3. An agreement to sell paddy above the maximum price fixed under Maximum Price Control Order - it is unlawful or void.

(2) Where the consideration or object defeats the provisions of any law - Where a contract is to do a thing which cannot be performed without an infringement of law, it is void whether parties knew the law or not.

Examples -

1. A promises B to drop a prosecution which he has instituted against B for robbery, and B promises to restore the value of the things taken. The agreement is void as its purpose is to defeat provisions of law.
2. A's estate is sold for arrears of revenue under the provisions of an Act of the Legislature, by which the defaulter is prohibited from purchasing the estate. B, upon an understanding with A, becomes the purchaser, and agrees to convey the estate to A upon receiving from him the price which B has paid. The agreement is void as it renders the transaction, in effect, a purchase by the defaulter, and would so defeat the object of the law.
3. Where the consideration or object is of such nature that it is fraudulent- Where agreement involves the commission of a wrong, or commission of a fraud against a third person or the commission of fraud against the public, they are unlawful and unenforceable.

Examples -

1. A, B and C enter into an agreement for the division among them, of gains acquired, or to be acquired, by them by fraud. The agreement is void.
2. A, being agent for a landed proprietor, agrees for money, without the knowledge of his principal, to obtain for B a lease of land belonging to his principal. The agreement between A and B is void, as it implies a fraud by concealment by A on his principal.

(4) Where the consideration or object of the agreement involves or implies injury to other's person or property - The word 'injury' means criminal or wrongful harm. An agreement to cause injury to the person or property of another is void.

Example- A promised to pay B, an editor of the newspaper, Rs. 500 in consideration of his publishing a defamatory article against C. The agreement between A and B is void as it involves injury to the person of C.

(5) Where the consideration or object is regarded by the court as immoral - Word 'immoral' means inconsistent with what is right. The only aspect of immorality which the law courts have dealt with is sexual immorality. Certain kinds of acts have been regarded as immoral, e.g. illicit cohabitation, prostitution, interference with the marital relations, etc. Any contract which involves, or assists or promotes sexual immorality is void.

Examples -

1. A man who knowingly lets out quarters to a prostitute to carry out prostitution cannot recover the rent in a court of law.
2. A agrees to let her daughter hire to B for concubinage. The agreement is void because it is immoral, though the letting may not be punishable under the Indian Penal Code.
3. A, a bachelor gave money to B, a married woman, to obtain a divorce from her husband. A agreed to marry him as soon as she obtained a divorce. The contract is void. A will not be able to recover the amount from B, if she does not take the divorce.

(6) Where the consideration or object is regarded by the court as opposed to public policy - The phrase 'public policy' denotes 'public good'. An agreement which is injurious to the public or against the interests of the society is said to be opposed to public policy. A contract may be against public policy either from the nature of the acts to be performed or from the nature of the consideration. Certain kinds of contracts are regarded as being 'opposed to public policy'. These are discussed in detail under a separate heading.

Examples:

1. An agreement between two firms according to which firm A is to submit tender for Government contract for higher amount and firm B is to pay certain amount

to A if B's tender is accepted, is an agreement opposed to public policy as it involves unfair trade practice.

2. An agreement to acknowledge a forged signature in consideration of the other party forbearing to prosecute the actual forger is against the public policy and void.

3.6 AGREEMENTS OPPOSED TO PUBLIC POLICY

Public policy is not the policy of a particular Government. It is a policy which should be followed by people so that they do not cause any harm to the society. The law seeks to prevent any transaction which is opposed to public policy.

The Indian Contract Act does not specifically identify the instances which are to be considered against the public policy. But it very clearly states its intention that any contract opposed to public policy is unlawful. The courts try to determine what public policy is by considering the Constitution, Statutes, Executive orders, previous decisions of courts, and the customs and opinions of society.

Since the courts have wide discretionary powers to decide whether an agreement is opposed to public policy or not, these are to be used very carefully and scarcely. However, some well-established instances of the agreements opposed to public policy are discussed below:

(1) Trading with an enemy - The State can declare any country as enemy country according to its political status, such as on declaration of war. The contract entered into with an enemy is considered as opposed to public policy. Sometimes it may happen that a contract is entered during peace times and a war breaks out later. In such cases either the contract has to be suspended till the restoration of peace, or has to be dissolved by the parties.

(2) Agreements interfering with the administration of justice

(i) Agreements interfering with the course of justice - An agreement which obstructs the ordinary process of justice is unlawful, and is void. It may take the form of making an improper influence over the judiciary or giving false evidence, or stopping a person from giving evidence which he is required to give under law, etc.

Example - A promise to give money to induce a person to give false evidence is void.

(ii) Stifling (confining) prosecution - The public interest requires that the criminals should be prosecuted and punished. An agreement to stifle a prosecution, i.e. to prevent a prosecution, or to compromise a prosecution is illegal and void. The principal is that - "if you are aware that a crime has been committed, you shall not convert that crime into a source of profit or benefit to yourself."

Examples -

1. A settlement made by a father with certain bankers in order to shield his son from a criminal prosecution on the charge of forgery is void.
2. A instituted a prosecution against B for robbery. A promised to drop the prosecution, and B promised to restore the value of the robbed articles. Object of the agreement is to stifle prosecution. It is a void agreement.

The reason is that the effect of such an agreement is to take the administration of the law out of the hands of the judges and put it in the hands of a private individual and so has a tendency to overthrow public justice.

(3) Maintenance and Champerty - When a person agrees to help the other by money or otherwise in litigation in which he is not himself interested, it is called 'Maintenance'. When a person helps the other in litigation in exchange of a promise to hand over a portion of the fruits of the litigation, if any, it is called 'Champerty'.

Examples -

1. A files a suit against B for the recovery of a house. A did not have money to pay the advocate. X, a well-wisher lends the required money to A. This is a 'Maintenance' agreement.
2. A files a suit against B for the recovery of a house. X promises to advance Rs. 1,000 to A for the costs of the litigation and A promises X a portion of his house if he is successful in the suit. This is a champertous agreement. Indian Law considers these agreements as void only when they are made against public interest. Otherwise these contracts are as good as any other valid contract.

Thus an agreement made for improper object, e.g. gambling in litigation, or for injuring others, etc., is contrary to public policy and void. When object of such a contract is not to stir up litigation but to assist the other in making a reasonable claim arising out of a contract, it is perfectly valid.

It may be inferred that a 'Maintenance' or 'Champerty' contract is valid if the motive of the contract is bona fide.

Example - An advocate entered into an agreement to provide his professional services to his client and take the remuneration whenever it is convenient to the client, in order to assist him to fight his claim. It is a valid contract of 'maintenance'.

However, if payment of remuneration of the advocate is dependent upon winning of the case like if he will win the case, he will get this much and if the case is lost no payment will be made, the agreement is void. It will amount to gambling in litigation.

Whether an agreement is fair and made with a bona fide motive is to be decided on case to case basis. In the cases of Champerty, the quantum of share in the fruits of litigation which a person agrees to pay as a price for the assistance provided to him may provide a good basis to adjudge its fairness.

Example - An advocate entered into an agreement with his client by which the latter promised to pay to the former 50% whatever is recovered from the decree of the court. The agreement is void.

However the agreement to pay the 1/6th, or 1/8th of the proceeds are held valid in different cases. Again the final discretion is in the hands of the court of law.

(4) Traffic in public offices - 'Traffic' or sale in public offices means trading in public offices to obtain some gain which otherwise cannot be obtained in the normal course of governmental working. It may take the form of giving bribe for appointments in public offices, or procurement of public recognition by payment of some consideration (money or some other value), etc. This is based on the principle that an agreement which is intended to induce a Government servant to act corruptly is contrary to public policy.

Examples -

1. A promises to obtain for B an employment in the public service, and B promises to pay Rs. 10,000 to A. The agreement is void.
2. A paid B, a public servant, a certain amount inducing him to retire from service, so that A can be appointed in his place. The agreement is void.
3. The secretary of certain college promised P that if he donates 3,000 pounds to the college, he would use his influence to secure a knighthood for him. P made the donation but did not get a knighthood and sued for the recovery of the money. The action failed because the agreement was against the public policy.

(5) Agreements creating an interest opposed to duty - The public policy requires that a person must perform his duties honestly. If a person agrees to do something which is against his public or professional duty, the agreement is void.

Examples-

1. An agreement by a contractor with a public officer whereby the contractor agrees to give bribe if the officer accepts a particular tender in his favour is illegal and void. It tends to create a conflict between interest and duty.
2. A, an editor of a newspaper agreed not to publish reports about B for Rs. 50,000 is void.

(6) Agreements unduly restraining personal liberty - An agreement which restricts the personal liberty of an individual is void.

Example - An agreement by a debtor to work as a bonded labor for creditor is void.

(7) Agreements interfering with parental duties - The father and the mother are the natural guardians of a minor child. This right of guardianship cannot be taken away by any agreement.

Example - The father of two minor sons agreed to transfer their guardianship to Mrs. A permanently. Subsequently he wanted to set aside the agreement and take back the custody of his children. Here, the guardianship of A cannot be permanently alienated. The agreement was void and he got back the custody of boys.

(8) Marriage Brokerage agreements - In India the marriages are generally arranged by the parents or guardians of the parties. Obtaining or not obtaining the consent of persons who are going to get married does not make any difference to the contract of marriage.

But any contract through which a third person charge brokerage for fixing the marriage of two persons is void, and is not enforceable.

Example - J promised to pay Rs. 20000 to P, for procuring a wife for him. P procured a wife for J, but J refused to pay the money. P could not recover the money in the court of law because the agreement was void being opposed to public policy.

Further, agreements to pay money to the parents or guardian of minor or their agreeing to give minor in marriage is void.

Example - A promise to pay Rs. 50,000 to B if he will marry his minor daughter C to him. The agreement is void, and not enforceable.

An agreement of dowry cannot be enforced.

Example - A promised Rs. 1 lakh to B if he will marry his daughter C. After marriage A refuses to give the agreed money. B cannot recover the money from A. If the dowry has been paid, and the marriage is solemnized, it cannot be recovered back.

Example - In the above example, if A pays the money before marriage, he cannot claim to recover the same after the marriage.

If dowry has been paid, but the marriage has not been solemnized, it can be recovered. In case, the cloths or ornaments, etc. are given, they can be recovered either in specific or in terms of their value.

Example - In the above example, alternatively if A pay Rs. 1 lakh to B, but somehow the marriage does not take place, A may claim his money back from B. It may be noted that such agreements are not enforceable in terms of payment only; the validity of marriage is not affected.

(9) Miscellaneous cases - The following agreements have also been held to be

opposed to public policy from time to time:

1. Agreements creating monopolies
2. Agreement to defraud creditors
3. Agreements not to bid against each other in an auction in order to defraud some third person.
4. Agreements to defraud revenue authorities. For example, an agreement by which an employee was to get, in addition to his salary an expense allowance grossly in excess of the expenditure actually incurred by him is unlawful because it is a device to defraud the Income-tax Authorities.

The above list is not exhaustive. Landmark decisions made by the courts from time to time may consider the different situations and stipulate the events and circumstances when an agreement can be considered as opposed to public policy, and hence unlawful.

3.7 EFFECT OF UNLAWFUL OBJECT AND CONSIDERATION

There are two possibilities - either the whole contract is unlawful because of unlawful object and consideration or partly the contract is unlawful and partly it is lawful.

3.7.1 Object and consideration wholly unlawful

The effect of unlawfulness is to render a contract void, i.e. the court will not assist a party to such an agreement either directly or indirectly. As a consequence of this rule, money or property transferred under an illegal contract cannot be recovered by a legal action. Thus if A and B agree that A will pay Rs. 10,000, in consideration of B murdering C; Rs. 5,000 to be paid at the time of the agreement and the remaining Rs. 5,000 when the deed has been carried out, and A pays the initial Rs. 5,000 but B fails to carry out the murder as agreed, any action by A to recover Rs. 5,000 will fail.

Agreement collateral to unlawful agreement- Any agreement which is collateral to an unlawful agreement is also void. In the above example if A borrows money from D to give it to B for murdering C, and D knew this at the time of lending, D would not be able to recover the money from A through the court of law. The reason is, that the agreement between D and A is collateral to the unlawful agreement between A and B.

We have seen that the agreements having wholly unlawful object and consideration

and their collateral agreements are void. But there are certain exceptions to this rule.

EXCEPTIONS TO THE RULE - "ILLEGALITY MAKES A CONTRACT VOID"

1. ***Where one party repented illegal purpose prior to the date of performance-*** In the example given above, had A have informed B that he has changed his mind, and did not want C killed, he would be able to recover Rs. 5,000 given to B. It should be noted, however, that repentance must be genuine, in that it must result from a change of heart, and not as a result of some extraneous cause over which the parties had no control. If therefore, in our example C was killed in a motor accident before B had an opportunity of carrying out the agreement, A would not be able to recover the, money from B, as there would have been no genuine repentance from heart.
2. ***Where the parties are not equally at fault-*** In most unlawful contracts parties are considered equally at fault - that is, each should have known that the contract was unlawful. If, however, one party can show that he or she is innocent of wrong doing, the fault lying essentially with the other party, the innocent party may be entitled to judicial assistance. For example, X forges a warehouse receipt which makes it appear that he is owner of the **warehouse**. He shows the receipt to Y, a transport agent, and seek his services to deliver the goods from warehouse to his place of business. Y does so. Here Y is entitled to recover his transportation charges from X although it was an unlawful transaction.
3. ***Where recovery possible without relying on illegal contract*** - Where a person is lawful owner of some property and transfers it to somebody under an unlawful contract, he retains the right to recover back the same. For example, where a person passed over his property and business to his brother-in-law in order to evade taxes, he was allowed to recover the possession of the same by the court.

3.7.2 Objects and Consideration Unlawful in Part

Till now we have discussed the cases in which object or consideration of a contract is wholly unlawful. At times it may happen that some of the terms of a contract are lawful while others are unlawful. *The general rule is that where you cannot sever the illegal from the legal part of the contract, the contracts altogether void; but where you can sever them, you may reject the bad part and retain the good.*

Section 24, section 57 and section 58 of the Indian Contract Act dealing with the status of 'contracts which are not wholly unlawful' with regard to their enforceability are discussed below:

(1) Part of single consideration or object is unlawful [Section 24] - "If any part of a single consideration for one or more objects, or anyone or any part of anyone of several conditions of a single object, is unlawful, the agreement is void."

Where a single consideration supports several promises; some of which are illegal and the rest legal, in such a case if the legal part can be severed from the rest of the contract, it can be enforced. Where the legal and illegal objects cannot be separated, the whole transaction is void.

Examples-

1. A promised to pay Rs. 50 per month to B, in consideration of B living in adultery with A, and also for acting as his housekeeper. Here consideration for housekeeping is inseparable from the consideration for adultery. The whole agreement was void and B could not recover anything for services rendered to A.
2. A promised to pay Rs. 1,500 on account of old debt and Rs. 500 on account of gambling loss and executed a promissory note for Rs. 2,000 in favour of B. Here one part of the consideration (i.e. Rs. 1,500 for old debt) is lawful while the other part of consideration (i.e. Rs. 500 for gambling loss) is unlawful. These two are separable. Therefore, the lawful part can be enforced.

(2) Reciprocal promises [Section 57] - "Where persons reciprocally promise, firstly, to do certain things which are legal, secondly, under specified circumstances, to do certain other things which are illegal, the first set of promises is a contract; but the second is void agreement."

Example - A and B agrees that A shall sell B a house for Rs. 10,000, but that, if B uses it as a gambling house, he shall pay A Rs. 50,000 for it.

The first set of reciprocal promises, namely, to sell the house and to pay Rs. 10,000 for it, it is a contract.

The second set is for an unlawful object, namely that B may use the house as a gambling house, and is a void agreement.

(3) Alternative promises [Section 58 J] - "In the case of an alternative promise, one branch of which is legal and the other illegal, the legal branch alone can be enforced."

Example - A and B enters into an agreement where A promises to give Rs. 10,000 to B, and B promises to deliver either rice, or opium for the money, this is a valid contract to deliver rice. The alternative agreement to deliver opium is void.

Part - 4

Capacity Of Parties

STRUCTURE OF PART - 4

- 4.1** Objectives
- 4.2** Minors
 - 4.2.1** Who is a Minor?
 - 4.2.2** Status of the Contracts Entered into by a Minor
 - 4.2.3** The status of a minor with respect to the agreements entered into by him
 - 4.2.4** Minor and Special Contracts/Agreements
- 4.3** Persons of Unsound Mind
 - 4.3.1** Who is a person of unsound mind?
 - 4.3.2** Unsoundness of Mind may Take Various Forms
 - 4.3.3** Effect of the agreement entered into by the persons of unsound mind
 - 4.3.4** Burden of proof
- 4.4** Disqualified Persons

4.1 OBJECTIVES

After reading this Unit, you should be able to understand:

- who are the persons competent to contract.
- what is the effect of contracts entered into by the persons not competent to contract.
- whom the law regards as a minor.
- whom the law regards as a person of unsound mind.
- what is the position of a minor with respect to the contracts entered into by him.

4.2 MINORS

Contracts entered into by minors do not have any value in the eyes of law. To understand the practical impact of minor's agreements, we need to know certain rules regarding them.

4.2.1 Who is a Minor?

A minor is a person who has not attained the age of majority. The age of majority is determined by the law to which he is subject. In India, the term 'minor' is understood as explained in section 3 of the Indian Majority Act, 1875, which reads as - . A minor is a person who has not completed eighteen years of age".

However, in the following two cases, a person becomes major on completing the age of 21 years:

1. Where a guardian of a minor's person or property has been appointed under the Guardians and Wards Act, 1890.
2. Where the superintendence of minor's property is assumed by a Court of Wards.

It may happen that the law of land where a person belongs to, and the law of land where a contract is entered into prescribe different age limits to recognise a person as 'major'. For example the age of majority in India is 18 years. While in Sri Lanka it is 21 years. This kind of situation may create a legal problem like when a 20 year old Sri Lanka national enters into a contract in India, whether he should be considered as a minor or not? To deal with such cases, the courts of law follow the following approach:

1. In case of contracts relating to ordinary mercantile transactions, the age of majority is to be determined by the law of the place where the contract is made.
2. In the case of contracts relating to land, the age of majority is to be determined by the law of the place where the land is situated.

4.2.2 Status of the Contracts Entered into by a Minor

Section 10 of the Indian Contract Act provides that an agreement can become a contract when the parties to it are competent to contract. Minor is a person who is not competent to contract.

Although it is not clearly stated in the Contract Act that the agreements entered into by a minor are void, it can be clearly inferred from the above that an agreement entered into by a minor does not qualify to become a contract, and hence is void ab initio.

Still the controversy existed till 1903 as to whether a contract entered into by a minor is void or voidable. Maybe because India was ruled by the British and the English Law treats the contracts entered into by minors as voidable.

4.2.3 The status of a minor with respect to the agreements entered into by him

Following are the rules which determine status of a minor with respect to the agreements entered into by him:

(1) No ratification on attaining the age of majority - The term 'ratification' means 'confirmation of some previous act'. Thus when a party accepts obligation acquired under some previous contract, ratification is said to be made. Ratification relates back to the date of making of the contract, and therefore, a contract which was once void cannot be made valid by subsequent ratification.

As a consequence, once a minor reaches the age of majority, he or she cannot ratify any contract made during his minority.

Example - A, a minor, borrowed Rs. 10,000 from B. After attaining majority, A re-

requested B for another loan of Rs. 15,000 which B gave to A. Now A gave a combined promissory note for Rs. 25,000 to B with a promise to repay the whole amount. It is a fresh contract based on a fresh consideration where A is liable to pay Rs. 25,000 to B. There is no question of ratification in such case. A person can always make a fresh promise after attaining majority in terms of the promise made during the minority. All that is necessary is that there should be some fresh consideration for it.

Note: Where, a person after attaining majority has not only ratified but also paid the debt incurred by him during the minority, he cannot afterward recover it back. The reason being, such a debt is only void and not unlawful.

(2) No Specific Performance except in certain cases - Specific Performance means actual carrying out of the contract as agreed. A minor's agreement being void cannot be specifically enforced. Similarly minor also cannot claim specific performance from the other party. 'Specific performance' is an equitable remedy. It can be granted only when there is mutuality.

Example - A, a minor agrees to sell his car to B for Rs. 50,000. Later on, A refuses to give the car. B cannot enforce specific performance by A. The agreement is void.

However, a contract entered into by the guardian or manager of a minor on his behalf can be specifically enforced if :

1. the contract is such that the guardian or manager is competent to enter into on behalf of the minor; and
2. the contract is for the benefit of the minor.

(3) The doctrine of estoppel does not apply to a minor - The doctrine of estoppel is that - when a person makes a false representation, and the other person believes it to be true and acts accordingly, later on the person who has made false representation is estopped from denying the truth of that presentation.

Example - A told B that C wants to buy 100 kg. of rice from B for his daughter's marriage. B said he will be sending the rice to C's place in a day's time. C, who was also present at that time, did not utter a single word. Next day, B sent 100 kg. rice at C's place. Now C said that he did not want to take the rice and that he did not

make any contract with B.

In this case the legal position is that that C has to accept the rice and pay the respective price because by keeping mum at the time when A was telling B to deliver the rice at C's place, he lead B to believe that he wanted to make the said transaction. Now he is 'estopped' from denying that he did not intend to make the said transaction.

This doctrine is applicable to the contracts which are entered in to by the parties competent to contract. But this is not applicable to a minor. When a minor misrepresents his age and leads the other party to believe that he is major, and on such belief the other party enters into a contract with him, the minor is not estopped from denying his majority. He can still plead that in fact he is a minor, and not a major.

Example - A, a minor borrowed Rs. 5,000 from B by fraudulently representing himself to be a major. A refused to repay the money. B sued him for the money. A pleaded that he is a minor and the agreement between B and himself is void. Here B cannot recover his money.

However, a minor should not be left to enjoy the fruits of fraud committed upon others. Law has provided a little protection to the persons dealing with a minor when minor plays a fraud with them. This protection takes the form of 'restitution'. This topic is dealt below in detail.

(4) No Restitution except in certain cases - The term 'restitution' may be defined as an act of restoring back to the rightful owner that which has been taken away or lost.

'Restitution' explained when applied to minor - If a minor obtains goods on credit, its payment cannot be enforced but the goods can be recovered if they are still in his possession. For instance, if a minor misrepresents his age, and gets a car on credit, the car can be recovered if it is still in his possession. If he has sold the car but has the money received from its sale, he can be restrained from parting with money and the same can be recovered. If he has purchased any other thing with that money, the car dealer can still follow the thing. But if he has spent the amount, nothing can be recovered from him. In any case there is no personal liability of the minor.

In the light of the provision of the Specific Relief Act, 1963, and the Indian Contract Act, 1872, the position of minor with respect to restitution is as follows:

1. *When a minor is a defendant-* When the party other than the minor, files a suit on minor upon the transaction in which the minor has played a fraud on him or her, at the best the court may require a minor to restore the benefits obtained by him under the contract. Thus the only remedy available is restitution. Here restitution is feasible only when the advantage received by minor is traceable in his possession.

Example - A minor mortgaged his two houses and spent the money taken by him on such mortgage. The other contracting party sued him to set aside the mortgage and to recover money from him. The money could not be recovered.

2. *When a minor sues as a plaintiff -* When a minor brings upon a suit on the other party after inducing him or her, by fraud to enter into a transaction, which is otherwise legal and validly enforceable, the minor can be compelled to restore the benefit received and make any compensation required. Here the remedy is restitution and compensation.

Example - A minor sells a house for Rs. 50,000 posing that he is an adult. Later on files a suit to set aside the sale on the ground of minority, he may be directed by the court to refund the purchase money received by him before he can recover the possession of the property sold by him.

In this case even if the minor has already spent the money in specific (i.e., Rupee notes of 50,000 received from the purchaser of house), the repayment has to be made.

(Plaintiff is the person who brings out a suit in the court of law, and the person who has to defend his stand against the person who has filed a suit against him is termed as defendant.)

- (5) Agreements where minor is a beneficiary are enforceable** - Judicial decisions given from time to time establish that an agreement can be enforced for the benefit of a minor. However the Indian Contract Act, 1872, does not contain any provision to this effect.

Example - A, a minor advanced certain sum of money to B for which B executed a mortgage of his immovable property in favour of A. In this case, the mortgage can be enforced by A if B does not repay the money.

Note: It may be noted in the above case that the contracts where a minor execute a mortgage, the other party is not able to enforce it against him. But if the party other than minor has executed a mortgage in favour of a minor, he is able to enforce it because it is for his benefit. Thus law does not regard a minor as incapable of accepting benefit. A minor is capable of purchasing an immovable property and can enforce the other party to hand over its possession after making payment for it, or he can enforce promissory note executed in his favour, and the like. A few examples are quoted below:

Examples-

1. A, a minor agreed to deliver some goods to B at some price. He delivered the goods but B refused to make payment. Here, the minor was entitled to maintain a suit for recovery for the price of the goods delivered by A.
2. A minor purchased certain property and sued the vendor for possession. If the minor has performed his obligations, he is allowed to enforce the obligations against the other party.

(6) Minor's liability in case of tort - The term 'tort' may be defined as any wrong for which a civil suit can be brought. Like, if a person injures the other, he is liable to pay the damages for the same under the law of 'torts'.

Generally minors are fully liable for any torts or crime they commit. Thus, if a minor drives a car negligently, anyone injured thereby can recover damages from him or her. But in case of contract he is not liable when the 'tort' is directly connected to a contract. The logic given by the courts is that 'when a tort arises out of a contract and the contract is not enforceable against the minor, he cannot be made liable for 'tort' committed under the contract unless it can be severed from the contract'.

Examples-

1. A minor hired a horse for riding. He injured it by overriding. The court held that he is not liable to pay the damages for injuring the horse. He was guilty of

negligence in performing his part of contract. He cannot be made liable in 'tort' if he is not liable on contract.

2. A, a minor hired a horse for riding under express instructions 'not to jump'. He lent the horse to his friend who killed the horse by making it to jump. Here A's wrongful act of unauthorised lending the horse to a friend is independent of contract. Thus A was liable to pay the damages.

(7) Minor's liability for necessary. - Section 68 of the Indian Contract Act, 1872 reads as "If a person is incapable of entering into a contract or anyone whom he is legally bound to support, is supplied by another person with necessaries suited to his condition in life, the person who has furnished such supplies is entitled to be reimbursed from the property of such incapable person."

The above provision is applicable to all persons who are not competent to contract. Talking in the context of minor, if a person supplies goods or services:

- to a minor or anyone whom he is legally bound to support,
- which are necessaries suited to his condition of life,
- he is entitled to payment for the same out of minor's property.

What Constitutes a necessity - The term 'necessaries' is not defined in the Indian Contract Act, 1872. Courts have given rulings from time to time to determine the meaning and scope of this term. The term 'necessaries' is elaborated as follows:

"Things necessary are those without which an individual cannot reasonably exist. In the first place, food, cloths, lodging, and the like. About these there is no doubt. Again, for proper cultivation of mind, instruction in art, or trade, or intellectual, moral, or religious education may also be necessary. Then there are different classes in a society. One's cloths may be fine or coarse according to his rank; his education may vary according to his future plans; and the medicines will depend on the illness with which he is afflicted, etc."

But in all these cases it must first be made out that the class itself is one in which the things furnished are essential to the existence and of reasonable advantage and comfort. Thus articles of mere luxury are always excluded.

Example - A, a minor was amply supplied with proper cloths according to his position. He bought a number of new dresses, including eleven fancy waist- coats from B. Here, these were not necessities. Thus B could not recover the price.

Note: Although things may suit to life style of a particular person, it also matters that such things were actually required by the minor at the time of supply. Like in this example, the minor was already having ample cloths, his need for more cloths cannot be considered a necessity.

Payment can be made out of the property of minor - Once it is established that a person has supplied goods or services necessary for him, that person can claim his dues for the same from the property of minor. However, it may be noted that the liability of minor is not personal. It is only property of minor which is liable for the liabilities towards the necessities supplied to him. If a minor does not own any property at all, no recovery can be made from him.

Moreover, liability for necessities is not a contractual liability because the minor lacks capacity to contract. Instead recovery from the minor must be based on what is called a quasi-contract remedy. Because of this, the person providing the necessities is not entitled to the contract price agreed by the minor. The minor is liable only for the fair value of the necessities provided.

4.2.4 MINOR AND SPECIAL CONTRACTS/AGREEMENTS

(1) Contracts of apprenticeship by minor- Contracts of apprenticeship are governed by the Apprenticeship Act. The Act was passed with a view to enabling the children to learn trade, crafts, and employment, by which when they come to full age, they may gain a livelihood.

To fall within the purview of this Act, the contract must satisfy following two criteria:

1. The minor must not be less than fourteen years of age, and
2. The contract must be entered into on behalf of the minor by his guardian.

Thus the restraints imposed upon a minor, by an agreement, granting him an article of apprenticeship shall be valid and binding on him, as it is considered beneficial to him. But if a contract does not fall within the terms of the Apprenticeship Act, it is void.

(2) Service contracts - A contract for personal service by minor is void under the Indian Law and the mere fact that it is for his benefit would not entitle the minor to sue under the contract.

Example - A, a minor was allowed the role of an actress in a particular 'film' by B, the producer. This agreement was made with A's father. Subsequently B allotted the role to another artist and terminated the agreement with A's father. A went to the, court. The court held that the agreement was not enforceable being the contract of personal service. And that the contracts of personal service do not stand on the same footing as the contract of apprenticeship, or a contract of marriage of a minor.

It may be noted that when a minor has already served under a contract of service, he is entitled to enforce such contract, not for the reason that the contract is enforceable but for the reason that it is a quasi-contract where a person is supposed to get the benefit of the lawful services which he or she has already provided.

(3) Marriage contracts - A contract for the marriage of a minor is presumed to be a contract for his benefit. Thus the minor can enforce the contract of marriage against the other contracting party, but the other party cannot enforce such contract against minor.

Example - A, the father of a minor girl B, entered into a contract with C that he would marry B. Subsequently C refused to marry B. B brought a suit against C for breach of contract. Here, the contract was for the benefit of B, the minor, and she was able to recover the damages from C.

(4) Minor Partner- A partnership is created by an agreement. Since minor is incompetent to enter into a contract, he cannot be a partner of a partnership firm. However, he can be admitted to the benefits of partnership, like right to property of partnership, or right to profits, or right to have access copy of accounts of the firm etc.

(5) Minor Agent [Section 184] - A minor can become an agent but he is not personally liable for his acts towards third party. However, the principal will be liable to the third party for the acts of minor agent which he does in the ordinary course of

dealings.

(6) Position of minor's parents - The minor's contracts do not impose any liability on his parents, or guardians even if the contracts are for necessities. However, when a minor incurs an obligation as an agent to his parents or guardian, they are bound by the same.

(7) Surety for minor - When an adult stands as a surety for minor in a contract of guarantee, he is liable towards third party although the minor does not incur any liability in the contract. In such case, the position of the adult is that of a person who has directly entered into the contract.

(8) Minor and Insolvency - A minor cannot be declared insolvent because he is incapable of contracting debts. Moreover, he is not personally liable for any obligation including payment for necessities; it is only his property which is liable in such a case.

(9) Joint contract by minor and adult - Where a minor and an adult jointly enter into an agreement with another person, the minor has no liability but the contract as a whole can be enforced against the adult.

Example - A minor and an adult jointly agreed to pay a certain sum of money and executed a bond also for the amount promised. Here, the bond was not enforceable against the minor but the adult executant was liable for the full amount.

(10) Minor can execute a negotiable instrument - A negotiable instrument means and includes a promissory note, a bill of exchange, and a cheque. Thus it is a piece of paper which entitles a person to a sum of money. The minor is competent to draw, negotiate or endorse the negotiable instruments. However, the minor will not incur any personal liability under such instruments. But the negotiable instruments executed in the favour of a minor are enforceable by him.

4.3 PERSONS OF UNSOUND MIND

Persons of unsound minds are not competent to enter into a contract. However, we need to understand who is considered by law as a person of unsound mind. Note that in real life this is the most abused provision of the law of contract.

4.3.1 Who is a person of unsound mind?

A person who does not have a sound mind is considered as a person of unsound mind.

Section 12 of the Indian Contract Act, 1872 provides that, a person is said to be of 'sound mind' for the purpose of making a contract if, at the time when he makes it, he is capable of-

- understanding it, and
- of forming a rational judgment as to its effect upon his interests.

What is important here is that a person should be able to understand the nature and consequences of his or her act at the time of entering into the contract. If such understanding was not present, the person did not have contractual capacity. The agreements made by such persons are absolutely void.

To make this situation clearer, section 12 further adds two clauses -

1. A person, who is usually of unsound mind, but occasionally of sound mind, may make a contract when he is of sound mind.

Example- A, a patient, was in lunatic asylum. It was noticed that at intervals, he was of sound mind. During such an interval, A borrowed Rs. 5,000 from B and executed a promissory note in his favour for repayment of the loan. This promissory note is valid and A is liable to repay the loan taken from B.

2. A person who is usually of sound mind, but occasionally of unsound mind, may not make a contract when he is of unsound mind.

Example - A sane man, who was delirious from fever and was not in a position to make a rational judgment, sold his scooter while in that state. The transaction of sale is void.

4.3.2 Unsoundness of Mind may Take Various Forms

Idiotism - An idiot is a person who doesn't have mental faculties of thinking. His incapacity is permanent and at no time he is of sound mind.

Lunacy or insanity - A lunatic is a person whose mental faculties of thinking are deranged (disordered) due to some mental strain or disease. However, the mental capacity of such persons may not be completely lost. He may have intermittent intervals of sanity and insanity.

When the property of a lunatic is under a committee or court of wards (i.e., some caretaker is appointed by the court), he is not entitled to enter into any contract at all, not even during lucid intervals.

Drunkenness or intoxication - A drunkard or intoxicated person loses his contractual capacity when he is intoxicated so excessively as to suspend his reasoning power for the time being and create impotence of mind. Drunkenness is treated on same footing as insanity.

Example - A, a sane man, who when excessively drunk, sold his car worth Rs. 1 lakh for Rs. 20,000. The contract of sale is void.

However, the contract is void, only when a person can establish that he or she was so intoxicated as not to understand the nature of the purported agreement. Thus a lesser degree of intoxication is no grounds as to make a contract void.

In addition to above discussed forms, mental incapacity may be caused by hypnotism, or mental decay because of old age, etc.

4.3.3 Effect of the agreement entered into by the persons of unsound mind

1. A contract entered into by a person of unsound mind is absolutely void.
2. A contract for his benefit is valid and enforceable.
3. His property is, however, always liable for the necessaries supplied to him or to anyone he is legally bound to support like that of the minor.

4.3.4 Burden of proof

In the court of law burden of proving that a person was mentally incapable of contracting, lies on the party who seeks to cancel the contract on this ground. However, once it is established that a person is insane, the burden to prove that he was sane at the time of making contract is on the party who wants to establish that the contract is good.

4.4 DISQUALIFIED PERSONS

Law specifically disqualifies some persons to enter into a contract in order to protect the public from the possible consequences of being cheated or being left with no remedy to enforce such contracts. A person can be disqualified by the specific legislation to which he is subject.

(1) Alien enemies - An alien is a person who is a foreigner to the land. If the State of the alien is at peace with country, he is an alien friend. And if a war is declared between two countries, he is termed as an alien enemy. An alien friend is competent to contract, and an alien enemy is not competent to contract.

If, an alien enemy enters into a contract during the war, it is void, and not enforceable. But if a contract is entered into by him before the declaration of war, it stands suspended, and can be revived after the war.

(2) Foreign Sovereigns and Ambassadors - These persons are at liberty to enter into a contract and sue upon it. But they cannot be sued against in our courts except with the prior sanction of the Central Government. Thus anybody contracting with such persons is left without a remedy in case of non-performance by them.

Example - The staff of a foreign mission, being a tenant owed arrears of rent. No action can lay against him since he was protected by diplomatic privilege.

(3) Convict - While undergoing an imprisonment, a convict cannot enter into a contract, or sue upon any contract made by him before imprisonment. However, he can enter into a contract while 'on Parole', and after the sentence of imprisonment expires, he becomes capable of entering into a contract.

(4) Insolvent - Under the Insolvency Act, on adjudication, insolvent's property vests in the 'Official Receiver', and he has no power to deal with that property. Thus he cannot enter into any contract regarding the same. An insolvent also suffers from certain disqualifications under different legislations, like he cannot become director of a company, or a member of a local body, or a magistrate. However, an insolvent can enter into certain types of contracts, i.e., he can incur debts, purchase property, or be an employee, etc.

After an insolvent is 'discharged' from insolvency, he is like an ordinary person and is competent to make contracts.

(5) Corporations - Corporations are the artificial persons who come into existence by virtue of their incorporation (i.e., registration) under certain legislation, like a company incorporated under the Companies Act, 1956, or L.I.C. incorporated under the LIC Act of India, etc. Their charter of incorporation contains their powers, objects and limitations. These corporations are not entitled to enter into any contract which is beyond the power conferred to them by their respective charter of incorporation. If they enter into such a contract, it is void and hence not enforceable.

Moreover, these corporations cannot enter into personal contracts like contracts of marriage.

Part - 5

Free Consent

STRUCTURE OF PART - 5

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5.1 OBJECTIVES

After reading this Unit, you should be able to understand:

- The concept of consensus ad idem
- The factors which vitiate free consent of the parties
- Legal significance of these factors

In this Unit, we will be studying the elements vitiating free consent of the parties to contract, their effect upon validity of contract and the remedies available to the party whose consent is so caused.

5.2 COERCION

The term 'coercion' means forcibly compelling a person to enter into a contract.

Section 15 of the Indian Contract Act defines it as follows - "'coercion' is the committing or threatening to commit, any act forbidden by the Indian Penal Code or the unlawful detaining or threatening to detain, any property, to the prejudice of any person whatever, with the intention of causing any person to enter into an agreement."

5.2.1 Acts amounting to coercion

The definition of coercion says that when one party acts in a certain way to make the other party enters into contract the contract is said to be caused by coercion. Following is the list of those acts which amounts to coercion –

(1) 'Committing of any act forbidden by the Indian Penal Code'.

Examples-

1. A took B into unlawful confinement and asked B that he would not be released until he executed a gift deed of his property in A's favour. Unlawful confinement is forbidden by the Indian Penal Code. The gift deed is voidable as it is caused by coercion.
2. A died leaving a young widow. The relative of the deceased threatened the widow to adopt a boy otherwise they would not allow her to remove the dead

body of her husband. The widow adopted the boy and subsequently, applied for cancellation of the adoption. An act of restraining a dead body from being removed for cremation is forbidden by the IPC. Here, the adoption was not valid being caused by coercion.

(2) 'Threatening to commit' any act forbidden by the Indian Penal Code

Example - A threatens to kill B if he does not lend him Rs. 2,000. B lends the amount. This threat amounts to coercion. Under IPC threat to commit suicide is not punishable. However, an abetment of suicide is punishable under section 306 and an attempt to commit suicide is punishable under section 309 of IPC. Thus, threat to commit suicide amounts to coercion as it is forbidden by law.

Note: Students are not supposed to know the exhaustive list of what all is forbidden by the IPC. It can be seen from case to case basis whether a particular act is forbidden by IPC or not.

(3) The unlawful detaining of property

Example - An agent refused to hand over the account books of the business to the new agent sent in his place, unless the principal released him from all the liabilities. The principal had to give release deed as demanded. In this case, the consent was obtained by unlawfully detaining the property (i.e., account books) of the principal. Here, the release deed was voidable at the option of the principal as he was made to execute the release deed under coercion.

(4) Threatening to detain any property

Example – A bank gave a threat of attachment against the property of P for the recovery of fine due from T, the son of P. P paid the fine. It was induced by coercion.

5.2.2 Features of Coercion

Now we understand that certain acts committed would amount to coercion. However, a doubt may arise whether such an act committed in given circumstances would amount to coercion. Law has given some clarifications on that.

(1) It is immaterial whether Indian Penal Code (IPC) is or is not in force in the place where the coercion is employed [Explanation to section 15]

Example - A, on board an English ship on the high seas causes B to enter into an agreement by committing an act forbidden by the IPC. B does not perform the contract so entered. A sues him for breach of contract in Mumbai. Here A's act would amount to coercion although it may not be considered as an offence by the law of England. A will not succeed.

(2) It is not required that coercion must proceed from the party to the contract. It may proceed from a third person also.

Example - A, threatens to kill B if he will not sell his house to C at the terms decided by C. The contract of sale of house by B to C is induced by coercion.

(3) It is not necessary that coercion be directed against the party whom it is intended to induce to enter into a contract, it may be directed against any third person whatever'

Example - A threatens to shoot R, son of B, if he does not let out his house to C. B agrees to let out his house to C. B's consent is caused by coercion.

(4) Coercion must be done to induce the other party to enter into a contract

Example - A gave a threat to B that he would take possession of all the land belonging to B, and will not vacate it at any cost. B may do whatever he wants. Here A's threat to unlawfully detain B's property is not coercion as it is not done with an intention of inducing B to enter into a contract.

5.2.3 Special Points to be noted

Coercion considered in context of specific acts.

(A) Threat to commit suicide - The law point involved here is that whether 'a threat to commit suicide' is to be considered as an act forbidden by the Indian Penal Code. The controversy occurs because it is not punishable under the Indian Penal Code. Majority of judges have viewed that although 'threat to commit suicide' is not punishable under the Indian Penal Code, it must be deemed to be forbidden by

that code. And hence, should amount to coercion.

Following observation of the Calcutta High Court is worth noting in this regard:

"One committing suicide places himself or herself beyond the reach of the law, and necessarily beyond the reach of any punishment too. But it does not follow that suicide is not forbidden by the Indian Penal Code. Section 306 of the IPC punishes abetment of suicide. Section 309 punishes an attempt to commit suicide. Thus, suicide as such is no crime, as indeed it cannot be. But its attempt is; its abetment too is. So, it may very well be said that the Indian Penal Code does forbid suicide"

Example - A person held out a threat to commit suicide to his son and wife if they refuse to execute a release deed in his favour. The son and the wife executed the release deed in consequence of the threat. The release deed was obtained by coercion.

(B) Threat to prosecution - A threat to file a civil or criminal suit is not forbidden by the Indian Penal Code. Therefore, it does not amount to coercion. However, threat to file a suit on false charge is forbidden by the Indian Penal Code, and hence, amount to coercion.

Example - A, a landlord gave a threat to B, his tenant, to file a suit against him to get his premises vacated. B vacated the house. The threat by A is not coercive.

5.2.4 Effect of coercion

The effect of coercion is emphasised in sections 19, 72, and section 64 of the Indian Contract Act, 1872. It can be summarised as follows:

1. The contract is voidable at the option of the party whose consent was obtained by coercion.
2. When the aggrieved party decides to set aside the contract, it must give back any benefit received from the other party under the contract. Moreover, the other party need not perform his part of the promise.
Also, the other party to whom money has been paid or anything delivered under coercion, must repay or return it.

Example - A transport company refused to deliver certain goods to the consignee unless he paid some illegal charges. The consignee paid illegal charges in order to obtain the goods. He is entitled to recover the charges which were illegal.

3. If the aggrieved party does not opt to set aside the contract, it works as a valid contract. '

5.2.5 Burden of proof – consent

In a court of law, the burden of proving that the consent was obtained by coercion shall lie upon the aggrieved party who wants to set aside the contract. Moreover, such a party has to prove that he would not have entered into a contract, had the coercion not been employed.

5.3 UNDUE INFLUENCE

When a party exercises undue influence over the other party to induce him to enter into a contract, the consent of such other person is not free.

5.3.1 What is undue influence?

Undue influence is an influence by which the exercise of free will and judgment of the other is prevented. The strong mind overpower the weak mind of a person and induces him to do which he would not have done if left to his own judgment. It is a kind of mental coercion.

Section 16(1) of the Indian Contract Act, 1872, defines the term 'undue influence' as follows:

“A contract is said to be induced by 'undue influence', where the relations subsisting between the parties are such that one of the parties is in a position to dominate the will of the other and uses that position to obtain an unfair advantage over the other”.

Thus, the '*undue influence*' is said to have been made when,

1. The relations between the parties are such that one of the parties is in a position to dominate the will of the other, and
2. The dominant party uses his position to obtain an unfair advantage over the other.

Generally, the test employed to see whether the consent was affected by undue influence is that 'would any reasonable man in full possession of his senses and not under unusual influence of some kind or the other do such a thing?'

Examples:

1. A, an illiterate elderly woman was possessing certain property. B, her nephew was managing her affairs. A gifted whole of her property to B. The court held that B, who managed the affairs of his aunt was in a position to dominate his aunt's will. Therefore, the gift deed was set aside on the grounds of undue influence.
2. A, a spiritual adviser (guru), induced B, his devotee, to gift him the whole of his property to secure benefit to his (devotee's) soul in the next world. Here, the gift was obtained by undue influence.

(1) When a person is in a position to dominate the will of the other

A person is deemed to be in position to dominate the will of another in the following cases:

1. where he holds a real or apparent authority over the other, or
2. where he stands in a fiduciary relation to the other, or
3. where he makes a contract with a person whose mental capacity is temporarily or permanently affected by reason of age, illness, or mental or bodily distress. [Section 16(2)]

(a) Real or apparent authority - A person in real authority is able to dominate the will of the person over whom the authority is held. The expression 'apparent authority' would include cases in which a person has no real authority, but is able to approach the person with a color that he really has such authority. Some examples are income-tax officer in relation to an assessee; a magistrate or police officer in

relation to an accused person, and the like.

Example - A, a police officer purchased a property worth Rs. 1 lakh .for Rs. 5,000 from B, an accused under his custody. Later on, B sought to cancel the sale on the ground of undue influence. Here, A, the police officer is in a position to dominate the will of B, the accused; therefore, undue influence can be presumed to be exerted.

(b) Fiduciary relation - It is a relationship of trust and confidence. This relationship provides a very good opportunity to the person in whom the confidence is reposed to exploit it to one's own use. There is no exhaustive list of such relationships. It has to be seen from case to case whether the parties to a contract were in a fiduciary relationship. However by common sense and on the basis of past decisions, some relationships are considered as fiduciary, like, the relationship of parent or guardian of a child, solicitor and client, trustee and beneficiary, spiritual adviser and his devotee, doctor and patient, woman and her confidential managing agent, and the like.

Example - A, a solicitor, sold certain properties to one of his clients B. B filed a suit upon A claiming that the property was considerably over-valued and that his consent was caused by undue influence. The court held that since the relationship of solicitor and client is a fiduciary, the existence of undue influence can be presumed.

(c) Persons with affected mental capacity- A person's mental capacity may be affected by extreme old age, or mental or bodily illness or any other cause. Such a person may easily be persuaded to give consent to a contract which may be un favourable to him.

(2) When a party is presumed to have used his position to dominate the will of the other

When a contract is made where one party is in a position to dominate the will of the other, and the transaction appears (whether on the face of it or by presenting an evidence) to be unconscionable, it is presumed that the stronger party has exercised undue influence over the weaker party.

What is an unconscionable transaction - It is a transaction with unfair terms which

no man in his senses would make on the one hand and no honest and fair man would accept on the other.

Example - A, heir of an estate borrowed Rs. 3,700 to enable him to prosecute his claim when he was without even with the means of subsistence, and gave the lender a bond for Rs. 25,000 to be paid after receiving possession of the property. The court held that the transaction was unconscionable and awarded a decree of only Rs. 3,700 plus interest to the lender.

5.3.2 Features of Undue Influence

Some points to be considered while ascertaining whether undue influence was exercised or not -

- (1) Undue influence may be exerted by a person who is not a party to the contract- It is not necessary that the person in a position to dominate the will of the other must himself benefited. It is sufficient that the third person in whom he is interested is benefited.
- (2) Lack of foresight is not a ground for establishing a case of undue influence - If a transaction is unconscionable because the concerned party did not make a good judgment, the existence of undue influence cannot be presumed.

5.3.3 Effect of undue influence

Section 19A of the Indian Contract Act deals with the effect of undue influence, provisions of which are summarized as follows:

1. The agreement is voidable at the option of the party whose consent was caused by undue influence.
2. The court may direct the aggrieved party to refund the benefit whether in whole or in part or set aside the contract without any direction for refund of benefit.

Example - A, a money lender advanced Rs. 100 to B, an agriculturist. A induced B by undue influence, to execute a bond for Rs. 200 with an interest at the rate

of 6% per month. The bond is voidable at the option of B. The court may set the bond aside ordering B to repay Rs. 100 with such interest as may seem just.

3. If the aggrieved party does not opt to set aside the contract, it works as any other valid contract.

Note: In case of rescission of contract caused by coercion, any benefit received by the aggrieved party has to be restored to the other party from whom he has received such benefit. But in the case of rescission of contract caused by undue influence, the court has discretion to direct the aggrieved party to restore the benefit received by him in full or in part, or not to restore at all.

5.3.4 When existence of undue influence is presumed by court

The burden of proof is on stronger party (i.e., the party is in a position to dominate the will of the other) that he has not exercised undue influence.

Court presumes the existence of undue influence when,

1. the contracting parties are not on equal footing when one party is in a position to dominate the will of the other, and
2. the transaction is unconscionable.

As between the parties on equal footing, mere unconscionable bargain does not create the presumption of undue influence. And merely because the parties are closely related to each other, no presumption of undue influence can arise.

When existence of undue influence is not presumed by the court - the weaker party who is seeking relief has to prove that his consent was obtained by undue influence.

5.4 FRAUD

Fraud can be defined as the intentional misleading of one person by another. When one party induces the other party to enter into a contract by fraud, the consent of such other party is not free. The most common type of fraud occurs when one person lies to another about a material fact, as a result of which a contract is made.

5.4.1 Definition of fraud

Section 17 of the Indian Contract Act, 1872 defines the term 'fraud' as follows:

'*Fraud*' means and includes any of the following acts committed by a party to a contract, or with his connivance, or by his agent, with intent to deceive another party thereto or his agent, or to induce him to enter into the contract:

1. the suggestion, as a fact, of that which is not true, by one who does not believe it to be true;
2. the active concealment of a fact by one having knowledge or belief of the fact;
3. a promise made without any intention of performing it;
4. any other act fitted to deceive; and
5. any such act or omission as the law specifically declares to be fraudulent

The above definition has three aspects:

A. That the fraud cannot be committed by a stranger to the contract - The act constituting fraud must have been committed by a party to the contract, or by his agent, or by a person in collusion with him. If the person by whose fraudulent misrepresentation, a transaction has been induced is not himself a party to the transaction, the transaction is not said to be effected by fraud.

Examples-

1. The directors of a company issued a misleading prospectus. A purchased some shares of the company on the faith of such prospectus. Here, fraud is committed by the contracting party itself. A can set aside the contract on the ground of fraud.
2. A was induced to buy shares of a company relying upon a false statement made by B. B was neither a 'Director' nor a 'representative' of the company. A is not in a position to set aside the 'purchase of shares' on account of fraud because it is committed by a stranger to the contract.

B. That fraud must have been committed upon the other party to the contractor his agent - If a fraud is committed on a stranger, it will not amount to fraud in context of the contract.

Example - A fraudulently informed B that he had a new 'YCR' in excellent condition and wanted to sell it. B passed on this information to C, who was in no way connected to A or B. Upon this information, C bought the 'YCR' from A. Later on, he discovered that 'VCR' was very old and in bad condition. C wanted to set aside the sale on the ground of fraud. Here, C could not do so because A defrauded B, who was a stranger to the contract between Band C.

C. Certain acts enumerated in section 17 constitute fraud which are discussed below.

5.4.2 Acts which constitute fraud

Definition of '*Fraud*' lists certain acts which are considered as fraud. Following is a discussion on these acts-

(1) A suggestion that a fact is true, by one, who does not believe it to be true - A statement which is made with knowledge of its falsehood or without belief in its truth by the person making it, is considered as an act to defraud the other. A false statement made recklessly without enquiring whether it is true or false would also amount to fraud.

Examples:

1. Where for securing the insurance policy, the insured gives willfully untrue answers, he commits a fraud.
2. When the seller of a used car has no idea about its mileage but nevertheless states that "it has not been driven more than 50,000 miles", his statement constitutes fraud, if later it is proven that the true mileage materially exceeded that figure. .

Note: A mere opinion, commendatory expression, or exaggerated statement does not amount to a statement of fact. Thus in a case, where a representation was made that the land was very fertile and improvable, such expression was considered as mere exaggerated or puffery statement regarding the property to be sold.

(2) An active concealment of fact, by one, having knowledge of the act - Concealment is as bad as a direct lie. If a person conceals a fact which is material to the contract and it is his duty to disclose it, it is considered as an act to defraud the other.

Example - A, a horse dealer sold a mare to B. A knew that the mare had a cracked hoof, which he filled up in such a way as to defy detection. After the sale, the defect was discovered by B. Here, that B's consent was obtained by fraud.

Mere silence where there is no duty to speak is not active concealment of fraud- It is worth noting here that in the transactions of sale of goods the principle of 'Caveat Emptor' is employed. Its literal meaning is 'let the buyer beware'. Under this principle, the seller is under no duty to disclose every defect in the goods, it is duty of the buyer to be diligent while purchasing.

Example - A sold to B some pigs which were, to his knowledge, suffering from fever. The pigs were sold with all faults, but A never disclosed the fever to B. The court held there was no fraud on the part of A.

(3) A promise made without any intention of performing it - When a person while making a contract has no intention to perform his part of promise, it is considered as an act to defraud the other. However, it is difficult to prove what the state of a person's mind was at a particular time.

Example - A man and woman went through a ceremony of marriage, the husband having no intention to regard it as his real marriage. The court held that the consent of the wife was obtained by fraud and that the marriage was just pretense.

Note: The fraud that is contemplated by the sub-section is a fraud which is at the very inception a fraud vitiating the transaction itself and not any subsequent conduct or representation by the party or his representative.

(4) Any other act fitted to deceive- The expression 'act fitted to deceive' means any act which is done with an obvious intention of committing fraud. Man has got a very fertile mind. He may invent any kind of trick to cheat others. Since an exhaustive list of the acts which can be employed to deceive a person cannot be made, this clause seems to have been inserted for the sake of caution.

Example - Fictitious issue of huge quantities of food grains by quoting release orders meant for other storing agents can be considered fraud under section 17(4).

(5) Any such act or omission which law specifically declares to be fraudulent- In some cases, the disclosure of certain kinds of facts is expressly required by the law and

non-compliance with the law is expressly declared to be fraudulent. For example, the Insolvency Act, and the Companies Act, declares certain transfers to be fraudulent. Thus, where section 55 of the Transfer of Property Act requires seller of an immovable property to disclose to the buyer any material defect in the property, which the buyer could not discover by ordinary care; an omission to make such disclosure amounts to fraud.

5.4.3 Mere Silence is not Fraud

The essence of fraud is an affirmative misleading of one person by another. Thus, mere silence does not constitute fraud. As regards nondisclosure of material facts, the general rule is Caveat Emptor, i.e., let the buyer beware. This implies that a person before entering into an agreement need not disclose to the other party all material facts which he knows.

Examples -

1. A sells by auction, to B a horse, which he knows to be unsound. A says nothing to B about the horse's unsoundness. This is not 'fraud'. Here A is under no duty to disclose the fact to be under the principle of 'Caveat Emptor'.
2. A candidate, who had full knowledge of the fact that he was short of attendance, did not mention this fact in his examination form. The court held that it was not a fraud. It was duty of the University to scrutinize forms or to call for verification or information in case of doubts. The University, having failed to do so, was stopped from canceling the examination of the candidate.

Instances where silence amounts to fraud

Explanation to section 17 reads as, "Mere silence is not fraud, unless the circumstances of the case are such that, regard being had to them, it is the duty of the person keeping silence to speak, unless his silence, is in itself, equivalent to speech".

The above explanation talks about some exceptional situations in which law imposes a duty to speak, here silence would amount to fraud:

(1) When silence in itself is equivalent to speech - A person who keeps silent, knowing that his silence is going to be deceptive is guilty of fraud.

Example - A says to B, "If you don't deny it, I shall assume the horse to be sound." B says nothing. Here, B's silence is equivalent to speech.

(2) When it is duty of the person keeping silence to speak- Since the courts decide cases involving a wide variety of fact patterns, they often do not agree completely on the precise circumstances in which, silence constitutes fraud. However, for certain situations of special importance, they usually do hold that a legal duty to speak exists.

For instance, where one of the parties occupies a position of trust and confidence in relation to the other, or where one of the parties is utterly without any means of discovering the truth and has to depend on the good sense of the other party, a duty to speak arises on the part of the party on whom such confidence is reposed. These are known as contracts *uberrimae fidei*, i.e., contracts of utmost good faith. Some examples of such contracts are as follows:

1. Contract between the parties having fiduciary relationship - Fiduciary relationship is a relationship of trust and confidence. Law imposes a duty of disclosure to the parties to such contracts.

Example - A sold a car to B, his son, knowing that the engine of the car was defective. A said nothing to B regarding engine. B purchased the car. This amounts to fraud on A's part. Here A was under a legal duty to divulge all material facts about the car because of his fiduciary relationship with his son.

2. Contracts of insurance - A person wishing to take out a policy of insurance is usually required to complete a proposal form and a duty is imposed to answer each question with the utmost good faith. Like in the case of life insurance, the assured must divulge all material facts regarding his or her past and present physical condition.

Note: The question in each case is not that whether the assured believed any particular circumstance to be material but whether it was in fact material.

3. Contracts of sale of immovable property - The Transfer of Properties Act requires the defects in the title of the property (i.e., free from encumbrance etc.) to be disclosed by the seller.
4. Contracts of Share allotment - When a company registered under the Companies Act, 1956, invites the public to subscribe to its shares by issuing a prospectus, it is under a statutory obligation to disclose all information regarding the company with accuracy. Any non-disclosure would amount to fraud.
5. Contracts of Partnership - Contracts of partnership are not contracts *uberrimae fide* at the time of formation of partnership but during subsistence of partnership utmost good faith is required amongst all the partners.

Example - When a partnership firm is considering a land purchase, a partner who is a part owner of the land in consideration must divulge his interest to the other partners before the purchase is made.

6. Contracts of family arrangements - Contracts relating to the arrangement or settlement of the family property also require full disclosure of all material facts within the knowledge of the parties to each other.

In addition to the abovementioned circumstances, there may be some other situations. When silence is considered as fraud:

(3) When it is duty of the seller to disclose latent or hidden defect in a contract of sale

- A latent defect which cannot be disclosed by a simple and casual inspection by purchaser should be disclosed by the seller. If he does not do so, it may amount to fraud.

(4) When change in circumstances requires disclosure-

Sometimes a statement is true when made. But the facts change before the contract is entered into. In such a case, the one who made the representation has a duty to notify the other of the changed condition before contracting. If he does not do so, it may amount to fraud.

5.4.4 Effect of fraud

Section 19 of the Indian Contract Act, 1872 deals with the remedies available to the party defrauded. Its provisions can be summarized as under:

1. The contract is voidable at the option of the defrauded party.
2. When a party opts to rescind (i.e., set aside) the contract, it may claim restitution in its entirety, i.e., to be placed in the same position as if there was no contract at all.

He is entitled to compensation for any damage he has sustained through the non-fulfillment of the contract; further the person rescinding a voidable contract shall restore to the other party any benefit received from him under the contract.

Example - Where A fraudulently induced B to buy his house, B was allowed to recover the expense involved in moving into house as 'damages'.

3. The defrauded party may affirm the contract, i.e., may insist that the contract shall be performed and that he should be put in the position in which he would have been if the representation made was true.

Example - A fraudulently informs B that A's estate is free from encumbrance. B, thereupon, buys the estate. The estate turned out to be subject to a mortgage. B may avoid the contract or may insist on its being carried out and the mortgage debt repaid by A.

Notes:

1. *The defrauded party can exercise his option either to rescind the contract or to affirm it, only once. Once this option is exercised, both the parties are bound by it. Later on, he has no option to change his stand for the same fraud.*
2. *In certain circumstances right to recession is lost by the aggrieved party. These are discussed later in the Unit.*

Section 19, further mentions the circumstances when the remedy to avoid the contract is not available to the defrauded party:

1. When the consent is caused by fraudulent silence where the defrauded party could have discovered the truth by ordinary diligence.

2. The party defrauded did not rely upon the fraudulent statement of the other party for entering into the contract.

5.4.5 Burden of proof - In the cases of fraud

Burden of proving the fraud lies upon the party who seek relief in the court of law.

5.5 MISREPRESENTATION

When a party to contract misrepresents a fact to the other party, based on which, other party enters into a contract, consent of such other party is not free.

5.5.1 What is misrepresentation?

'Misrepresentation' is a false representation of a statement of fact made innocently, i.e., without any intention to deceive the other party. The term is broadly interpreted to include any word or conduct that causes an innocent person to reach an erroneous conclusion of fact.

Section 18 of the Indian Contract Act, 1872 defines misrepresentation as follows:

"Misrepresentation" means and includes-

1. the positive assertion in a manner not warranted by the information of the person making it, of that which is not true, though he believes it to be true;
2. any breach of duty which without an intent to deceive, gains an advantage to the person committing it, or anyone claiming under him, by misleading another to his prejudice or to the prejudice of anyone claiming under him;
3. causing, however, innocently a party to an agreement to make a mistake as to the substance of the thing which is the subject of the agreement."

Note that the above definition simply lists certain acts which amount to misrepresentation. These are discussed below:

(1) Positive assertion of the statements not warranted by the information -

A statement is said to be warranted by information of the person making it when he receives the information from a trustworthy source. An innocent false statement of material fact not warranted by information is considered as misrepresentation.

Example- A on the strength of hearsay information (without having reasonable grounds to believe it) positively asserted to B that certain third party is going to be Director of the company to be incorporated. B bought the shares on faith of such a statement. This is a case of misrepresentation by A.

(2) Breach of duty resulting in advantage to the representor and prejudice to the representee - Any breach of duty which brings an advantage to the person committing it by misleading the other to his prejudice is a misrepresentation.

In such a case, may be the intention of the party is not to deceive but the fact he or she has derived benefits from the transaction makes him equally answerable in effect as if he had been actuated by motives of fraud or deceit.

The expression '*breach of duty*' carries within it contracts involving a duty on the part of the contracting party to disclose all material facts. Thus, all cases where silence becomes fraudulent will fall under this category.

Note: The legal effect of 'fraudulent silence' and 'misrepresentation' is same. Therefore, there is no contradiction if contracts of uberrimae fidei fall under both the categories.

(3) Inducing mistake about subject matter - The subject matter of every agreement forms the very basis of it and possess certain value and quality. When one party misleads the other, however innocently, as to the nature and quality of the subject matter, a misrepresentation is said to be made.

Example - The Government auctioned certain 'Forest coups'. A part of the land was occupied by tenants. The Forest Department knew this fact but did not disclosed it to the purchaser. Here, the contract was caused by misrepresentation. The purchaser was allowed to recover the damages for loss.

Misrepresentation may also arise from suppression of vital facts. Cases of concealment or suppression will fall either under *sub-section (2)*, when it amounts

to breach of duty, or under *sub-section (3)* when it leads the other party to make a mistake about the subject matter of the agreement.

Example - A spent a sum of money to mark the engagement of his son. He then discovered that the girl suffered from the epileptic fits and so broke off the engagement. He sued the other party to recover from them compensation for the loss which he has suffered on account of their deliberate suppression of a vital fact which amounted to fraud. Here, non-disclosure of the facts about the girl amounted to misrepresentation.

5.5.2 When a consent is said to be caused by misrepresentation

The definition of 'misrepresentation' gives a list of the acts which are capable of causing misrepresentation. But it may happen at times that despite of misrepresentation made by one party to the other, law refuses to recognize the fact that the contract is caused by misrepresentation. There are certain essentials required to establish that a consent was caused by misrepresentation:

1. *There was a misrepresentation of fact* - Misrepresentation must relate to a fact and not to mere opinion. There is a lot of difference when a seller states that his property is, Worth Rs. 1 lakh, and when he states that he paid Rs. 1 lakh for the property. The first is the opinion which the buyer may accept if he wishes, but the second is a statement of fact, which if false, makes the contract voidable.
2. *The fact was material* - A misrepresented fact is considered material when it would be likely to affect the conduct of a reasonable person. In other words, would a reasonable person who knew the truth have entered into the contract under the same terms? If the answer is 'no', there is good reason to believe that the fact is material.
3. *There was justifiable reliance on misrepresentation* - If someone agrees to contract, based on his own investigation and knowledge of the facts rather than on a misrepresentation of the facts by the other party, there has been no reliance on it and the contract cannot be avoided.

Example - A, by misrepresentation, leads B to believe that 500 kg of indigo were made annually at A's factory. B examines the accounts of the factory, which show that only 400 kg of indigo have been made. After this, B buys the factory. The contract is not said

to be caused by misrepresentation.

Note: A false statement whether innocent or fraudulent, does not in itself give rise to a cause of action. It must have produced misunderstanding and that misunderstanding must have caused the party to enter into the contract.

5.5.3 Effect of misrepresentation

When the consent of a party is caused by misrepresentation-

1. The agreement is voidable by the party whose consent is obtained by misrepresentation.
2. The aggrieved party may affirm the contract, i.e., may insist that the contract shall be performed and that he should be put in the position in which he would have been if the representation made was true. However, misrepresentation does not entitle the aggrieved party to claim damages by way of interest or otherwise for expenses incurred.

Further, law does not provide a remedy to the aggrieved party when the reality of misrepresented fact could have been discovered by ordinary diligence.

5.5.4 Burden of proof - In the case of misrepresentation

Burden of proving the fact of misrepresentation lies upon the party who seek relief in the court of law.

5.6 Limitations to the Right of Rescission

When a party enters into a contract because of exercise of coercion, undue influence or fraud, or misrepresentation made by the other party, it has a right to rescind (set aside) the contract. However, this right can be exercised with certain limitations discussed below -

(1) By lapse of time - When a party comes to know about the wrong done to him, rescission must be claimed within reasonable time of such knowledge, otherwise the party is supposed to have affirmed the contract.

Example - A person purchased certain shares in a company on the basis of

misleading prospectus. The shares were allotted in July. In December, he wanted to set aside the sale. The court held that the unexplained delay of five months was unreasonable for obtaining the relief.

(2) By affirmation - When a party comes to know about the wrong done to him, and thereafter, affirms the contract expressly or by some conduct, the party loses its right to rescind the contract.

Example - A person purchased certain shares in a Company on the basis of misleading prospectus. The shares were allotted in July. In August, the company declared some dividend which he accepted. It is affirmation of contract by conduct.

(3) Restitution not possible - Rescission is always subject to the condition that the party seeking rescission must be in a position to restore the benefits he may have obtained under the contract. When the party seeking rescission is not in a position to restore the benefits, the right to rescind the contract cannot be exercised.

Example - A sold a painting to B misrepresenting that it is 'antique' while it was an ordinary painting. B came to know about it but it slipped from his hand and got smashed. Now, B is not in a position to restore the 'painting' to A. He cannot exercise his right of rescission.

(4) Right of third parties - As soon as, a third party acting in good faith, acquires rights in the subject matter of the contract, the right to rescind the contract is lost by the aggrieved party.

Example - A, by misrepresentation, obtained a watch from B and sold the same to C. C paid due consideration to A, and purchased it in good faith. In this case, B's right to rescind the contract with A is lost since a third party (i.e. C) has acquired interest in the subject matter in good faith.

5.7 MISTAKE

Mistake may be defined as '*an erroneous belief about something*'. Two parties cannot believe same thing in the same sense when they are under a mistake. A mistake by one or both of the parties assume significance because it may make the contract void (i.e., prevent its formation) or voidable (i.e., allow it to be avoided by one of the parties). Mistake in contract transactions occur in various ways. It can be discussed under

following heads:

1. Mistake of law - Indian law
- Foreign law

2. Mistake of fact - Bilateral mistake
- Unilateral mistake

5.7.1 Mistake of law

No man can excuse himself from doing his duty by saying that he did not know the law on the matter. A person is presumed to know the ordinary law of the land and he cannot plead its ignorance. But he is not supposed to have knowledge of the laws applicable in the whole world. If he commits a mistake because of ignorance of foreign law, it is treated as a mistake of fact.

Section 21 of the Indian Contract Act, 1872 provides that, "A contract is not voidable because it was caused by a mistake as to any law in force in India; but a mistake as to a law not in force in India has the same effect as a mistake of fact.

1. Mistake of Indian law - A mistake of Indian law does not affect validity of a contract.

Example - A, a widow was entitled to certain occupancy rights. She remarried and believed that she had lost her occupancy rights by reason of her second marriage. Under this mistake, she agreed to take the lease of the same land from Z, the Zamindar. Later on, she came to know that legally she had not lost her occupancy rights. Now, A wanted to revoke the lease agreement with Z. Here, A could not revoke the lease agreement because there was a mistake of law.

2. Mistake of foreign law - A mistake of foreign law is treated as a mistake of fact which is discussed below in detail.

5.7.2 Mistake of fact

A mistake of fact occurs when a party believes something to be true, but his or her belief is not in accord with the real facts. If both parties are mistaken in their beliefs, there is a mutual mistake. If only one of the parties is mistaken in his or her belief, there is a unilateral mistake.

A. Bilateral mistake - It is a mistake committed by both the parties. When both parties are confused about some fundamental fact, no contract can be presumed to exist.

Example - A agreed with B to sell his 'Tata Sierra' while B thought that he is agreeing to buy his 'Tata Estate'. Here both the parties are under a mistake of fact. No contract has concluded.

Section 20 of the Indian Contract Act, 1872 provides that, "*Where both the parties to an agreement are under a mistake as to a matter of fact essential to the agreement, the agreement is void.*"

Explanation - An erroneous opinion as to the value of the thing which forms the subject matter of the agreement is not to be deemed a mistake as to a matter of fact.

In order to bring this section into **operation**, it is essential that a bilateral mistake:

- must relate to a fact, not a judgment or opinion.
- the fact must be essential to the agreement.
- the fact must be existing at the time of making contract.

(1) Mistake must relate to a fact, not opinion - When parties make a mistake about a fact relating to contract, it is void. But when mistake is in making an opinion only, it does not affect validity of the Contract.

Example- A buys a house from B for Rs. 2 lakh. Later on, he discovers that its actual worth was Rs. 50,000 only. It is a mistake of opinion for which he has to blame his ignorance only. The contract cannot be avoided on this ground.

(2) Fact must be essential to the agreement - Mistake regarding a fact essential to agreement makes it void. Mistake relating to a minor aspect of agreement does not affect its validity. What facts are essential to an agreement depend upon the nature of promise in each case. Generally, it can be said that a fact pertaining to a minor aspect of the agreement is not considered as essential.

Examples -

1. A was wholesale dealer under a Rationing order. He was paid transport charges from Government godowns to his shop for a distance less than 25 km. Both the

parties were unaware that the distance exceeded 25 km. When it was discovered, future payments were made accordingly. A filed a suit to recover past arrears. The court dismissed the suit saying that the mistake did not relate to an essential fact.

2. A agreed to sell a piece of land to B. Neither of the parties were aware that this land was already acquired by the Government. In this case, the fact that the Government has already acquired the land is material to the agreement. The agreement is void.

(3) The fact must exist at the time of contract - A mistake as to existing fact will render the contract void ab initio. If the mistake is as to some future event, a binding contract is entered into between the parties. The contract may be avoided at some future date if the expected event does or does not happen.

Example - Considering the above example, suppose that the Government acquire the land subsequent to the agreement between A and B. In such a case, the agreement is not void on the ground of mistake. Initially, it will be a valid agreement which will become void, subsequently, on the ground of 'impossibility of performance.'

Some Instances of bilateral mistakes - The mistakes which can be covered under section 20 are discussed below:

1. Mistake as to the existence of subject matter - Here, both parties enter into an agreement under a mistaken belief that there is something to agree about whereas in fact there is not, i.e., where the subject matter of the agreement has ceased to exist.
2. Mistake as to identity of subject matter- Where one party has one thing in the mind and the other party has some other thing while making an agreement about it, a mistake as to the identity of subject matter occurs.
3. Mistake as to title or rights - When a person, in ignorance to his right to a property, enters into an agreement for its purchase, rental. or lease, etc.; it is considered as a mistake of fact and the contract is void.

4. *Mistake as to the quantity of subject matter* - When both the parties are under a mistake as to the quantity of subject matter, the contract is void.
5. *Mistake as to the price of the subject matter* - When both the parties are under a mistake as to the price of the subject matter, the agreement is void.
6. *Mistake as to the quality of subject matter* - A mistake as to the quality of subject matter as distinguished from its substance may not render the agreement void. But if the mistake as to quality is such which makes the subject matter different from what it was believed to be, the contract is void.
7. *Mistake as to the substance of subject matter* - The term 'substance of subject matter' means an integral and essential element of the subject matter. A mistake as to 'substance of subject matter' render an agreement void.
8. *Mistake as to assumption* - When a mistake is committed as to fundamental assumption to an agreement, it is void.

B. Unilateral mistake - When only one party to an agreement is mistaken as to contents of the agreement, it is termed as unilateral mistake. Generally, a unilateral mistake does not affect the validity of an agreement. However, in case of unilateral mistake a contract can be avoided, if it can be proved that it was caused by fraud or misrepresentation on the part of the other party.

Section 22 of the Indian Contract Act, 1872 provides that, "*A contract is not voidable merely because it was caused by one of the parties to it being under a mistake as to a matter of fact.*"

It may be noted that there are certain cases in which a unilateral mistake has the effect of defeating the true consent of the parties. Such unilateral mistake renders an agreement void.

Example - A lady named A, was convicted for allowing disorderly conduct in her restaurant. Subsequently, she assumed a false name B, and hired a house of C. On becoming aware of the true identity of B, C wanted to set aside the lease of the house. Here, the true consent of C was defeated. Here, the agreement was void

Some instances of unilateral mistake

Unilateral mistakes which can render a contract void are discussed below:

1. Mistake as to the identity of person- A mistake of identity of contracting party occurs where a party enters into an agreement with some person believing him to be some other person. This mistake will render the agreement void only when, the identity of the party is of material importance to the agreement, and the fraudulent party knows that he is not intended to be a party to the agreement. A mistake about the identity of contracting party will render the contract void where the identity of the party is of vital importance.

Example - B the owner of a theatre gave strict instructions that no ticket for first performance should be issued to A, a critic of some members of theatre. However, A obtained the ticket through some friend. But at the gate, A was refused admission. A filed a suit on B for breach of contract (i.e. by selling ticket B is bound to give entry to the ticket holder). Here, the identity of A was material element in formation of contract. Hence, the contract was void.

When the parties are present face to face, the presumption is that the contract is made with the person actually present, even though there is a fraudulent impersonation by the buyer as a different man than he is.

Note: Where a contract is rendered void for mistake as to identity, no title in any property transferred will pass under the original contract, therefore no title can pass to a third party. However, where the contract is merely voidable for fraud, a valid contract exists until avoided. Therefore, if a third party acquires an interest in the property transferred before such time as the contract is avoided, his title will defeat that of the original owner.

2. Mistake as to the character of document - Sometimes a deed of one nature is executed under the mistaken expression that it is of different nature. In such cases it is wholly void.

Example - An illiterate lady, on finding that some strangers were occupying her lands approached her brother for advice. He advised that a complaint should be made to the 'Collector', and took her to the Collector's office. There he obtained her thumb impressions on some blank papers; these were, subsequently,

registered as sales deed in the name of certain persons. She challenged the transaction in the court of law. Transaction to be void.

Note: Although generally the fraud renders a transaction voidable, but where the fraudulent misrepresentation is as to the character of document, the transaction is wholly void.

5.7.3 Effect of mistake

A mistake of Indian Law does not affect the validity of a contract, and a mistake of foreign law is treated as a mistake of fact.

When there is a bilateral mistake of fact, no contract exists at all, i.e., the contract is void. In case of unilateral mistake the validity of the contract is not affected generally. However, if the mistake was caused by fraud or misrepresentation, the party who was induced to make such a mistake can treat the contract voidable at his option.

Part - 6

Void Agreements

STRUCTURE OF PART - 6

- 6.1** Objectives
- 6.2** Agreements in Restraint of Marriage
- 6.3** Agreements in Restraint of Trade
 - 6.3.1** What is an agreement in restraint of trade?
 - 6.3.2** Only void portion of an agreement is unenforceable
- 6.4** Uncertain Agreements
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6.1 OBJECTIVES

After reading this Chapter, you should be able to understand:

- Why the Indian Contract Act, 1872 has declared certain agreements void.
- Which agreements have been declared void by the Act?
- How to distinguish these agreements from the valid agreements of similar nature.

6.2 AGREEMENTS IN RESTRAINT OF MARRIAGE

Law regards marriage and married status as the right of every individual. Section 26 of the Indian Contract Act, 1872, provides that, "Every agreement in restraint of marriage of any person, other than a minor, is void."

Thus an agreement, which prevents a major person from marrying (i.e. complete restraint), is void. Also, an agreement which puts any restrictions on the freedom of marriage (i.e., partial restraint), like preventing somebody from marrying a particular person, or a particular class of persons, or during a fixed period, etc., is void.

Examples-

1. A promised his religious guru G that he will not marry throughout his life if G would teach him art of reading the other's mind. The agreement is in complete restraint of marriage. It is void.
2. A agreed with B that he will not marry until he repay the loan of Rs. 10,000 taken by his father from B. The agreement is in partial restraint of marriage. It is void.
3. S promised his father F, in consideration of the latter bestowing his entire property to him, not to marry R. The agreement is in restraint of marriage and cannot be enforced.

A promise to marry a particular person does not imply any restraint of marriage, and therefore is a valid contract.

Example - S agreed with his father F that he will marry G if F would give him his entire property. Though, by implication S cannot marry any other person, but the agreement

does not contain such a clause and hence the agreement is not in restraint of marriage and is a valid agreement.

A penalty upon remarriage may not be construed as restraint of marriage.

Example - Two co-widows made an agreement that if any of them remarried, she should forfeit her right to her share in the deceased husband's property. Here, in this agreement no restraint was imposed upon either of the two widows for remarriage. All was that, if a widow elected to remarry, she would be deprived of her rights. The agreement is valid.

6.3 AGREEMENTS IN RESTRAINT OF TRADE

Section 27 of the Indian Contract Act, 1872, provides that, "Every agreement by which anyone is restrained from exercising a lawful profession, trade or business of any kind, is to that extent void:

6.3.1 What is an agreement in restraint of trade?

An agreement in restraint of trade is one whereby one party seeks to prevent the other from carrying out a particular trade, business, or profession. In other words it interferes with the liberty of a person to engage himself in any lawful trade, occupation or profession of any kind.

The restraint may be complete or partial - A complete restraint is one which prevents any person from carrying on any kind of business at all. The partial restraint prevents a person from carrying on a particular kind of business within a particular locality, or for a particular time, etc. But whether restraint is complete or partial, whether it is qualified or unqualified, it renders an agreement void.

Examples:

1. A purchased the business of B with the condition that B will not carry on any business activity throughout his life. This is a complete restraint on trade. The agreement is void.
2. M and R were carrying on the business of similar goods in Calcutta. R suffered a loss from M's competition. R entered into an agreement with M that if M would

close his business in a particular quarter, he would pay him all the advances M had made to his workmen. M closed his business for that quarter but R did not pay anything to him. M sued R to recover advances. Here, the agreement was in partial restraint (i.e. for a quarter only) of trade, and hence void. M could not recover anything from R.

6.3.2 Only void portion of an agreement is unenforceable

The words 'to the extent void' in section 27 means that only void portion of an agreement is unenforceable. Where the agreement in restraint of trade is divisible, the valid portion is enforceable. However, where it is not divisible, the whole agreement is void.

Example - A, a businessman sold the 'goodwill' of his business to B. Both of them agreed that A will not practice the same trade for 3 years, and also that A will not carry any business competing in anyway with the business of B. Here the agreement being divisible, the first part is valid because it is necessary to protect the interest of the purchaser of goodwill. The second part is void because it prevents A from carrying on any business which is unreasonable restraint upon him.

6.4 UNCERTAIN AGREEMENTS

Section 29 of the Indian Contract Act, 1872 provides that "agreements, the meaning of which is not certain, or capable of being made certain, are void."

The terms of an agreement must be clear, complete and certain. If an agreement is vague, or illusory, or its meaning is not clear, it cannot be enforced by a court of law. In other words, to constitute a valid agreement, it is essential that the proposal must be so certain, that the rights and obligations of the parties arising out of the contract can be exactly fixed.

Examples-

1. A agreed to sell 100 tons of oil to B. Here it is not clear what kind of oil they are talking about. It is not complete agreement and hence void.

2. A agreed to sell his house to B for Rs. 90,000 or Rs. 1,00,000. There is nothing to show which of the two prices are final. This is an uncertain agreement and hence void.
3. A promised to buy the horse from B if it proved lucky. This is a vague and loose agreement. Thus it cannot give rise to any contract.
4. An option to renew a lease at 'such rental as may be agreed upon between the parties' was held void (i.e. not enforceable at law)
5. An agreement to acquire goods on 'hire-purchase' was too vague since there were many kinds of hire purchase agreements having widely different terms, so it was impossible to specify the terms on which the parties had agreed.

6.5 AGREEMENTS IN RESTRAINT OF LEGAL PROCEEDINGS

Every person has freedom to enforce his legal rights. An agreement which interferes with the course of justice is void. It follows that the individuals by agreement cannot alter the provisions of any law.

Section 28 of the Indian Contract Act, 1872, provides that, "Every agreement, by which any party thereto is restricted absolutely from enforcing his rights under or in respect of any contract, by the usual legal proceedings in the ordinary tribunals, or which limits the time within which he may enforce his rights, is void to that extent."

6.5.1 Restrictions must be absolute

Partial restriction does not render an agreement void.

Examples:

1. A agrees to sell 200 kilo of sugar to B for Rs. 500 and the parties further agree that in case of a breach by any party, none of them would have recourse to a court of law. The agreement is void.
2. K and S entered into an agreement whereby they agreed that neither of them would appeal against the trial court's decision. Here the restriction is partial as the parties can go to the court of law at the first instance. The only restriction is

that that the losing party cannot file an appeal. Here, this agreement valid as section 28 applies only to absolute restrictions on recourse to legal proceedings

6.5.2 Curtailing the period of limitation

The Indian Limitation Act provides that an action for the breach of contract may be brought within three years from the date of breach. Such period of limitation cannot be curtailed by the parties to the contract.

Examples:

1. A sold his car to B. B agreed to pay the price within 6 months of the sale. It was further agreed that if B failed to pay the price, A must take action for the recovery of the price within two years from the expiry of six months after the date of sale (i.e. the date of breach), otherwise B would not be liable. This agreement is cutting short the period of limitation provided by the Limitation Act (i.e., 3 years). Thus it is a void agreement.
2. In a case of fire insurance policy there was a clause 'if the claim is made and rejected and the action or suit is not commenced within three months after such rejection, all the benefits under this policy shall be forfeited: Here, in this case, this clause was valid and did not reduce the period of limitation.

Note: A clause providing for the forfeiture of rights if no suit is brought within a stipulated period should be distinguished from the limiting of time within which a party may bring upon a suit to enforce his rights.

6.5.3 Exceptions in the agreements against legal proceedings

In the following cases, even absolute restraint to legal proceedings does not render the agreement void:

1. **Referring disputes to arbitration** - Sometimes the concerned parties agree that any existing or future dispute which may arise between them shall be referred to arbitration. Such an agreement is not void.

Example - A trader entered into an agreement with B, a manufacturer of clocks, to purchase 500 clocks at the rate of Rs. 150 each. The parties also agreed that any

dispute which may arise about the payment of the price or quantity of clocks shall be referred to arbitration and not to the *court* of law. This is a valid agreement.

Note: It may be noted that if parties are not satisfied with the arbitration award, they cannot be restricted to go to the court against it. This right cannot be excluded by the agreement.

2. Exclusion of jurisdiction of a particular court- At times, it may happen that a particular transaction falls under the jurisdiction of more than one court. In such cases, the parties have an option to select the court where they would refer their dispute.

Example - A was a tradesman in Calcutta. B carried on a business in Delhi. They entered into a business transaction. In the normal course, they have an option to file a suit in the Court of Delhi or the Court of Calcutta in case of any dispute. However, they entered into an agreement that they can enforce their respective rights in Delhi only, and not in Calcutta. The agreement is valid.

6.6 WAGERING AGREEMENTS

Section 30 of the Indian Contract Act, 1872 says that 'an agreement by way of wager is void.'

6.6.1 What is a wager?

A wager occurs when the parties agree that a payment will take place between them depending upon the outcome of an uncertain event in which they have no interest other than their agreement. For instance, a bet on a sporting event would be a wager.

A wagering contract is one by which two persons professing to hold opposite views touching the issue of a future uncertain event, mutually agree that, dependent on the determination of that event, one shall pay or hand over to him, a sum of money, or other stake; neither of the contracting parties having any other interest in that contract than the consideration for the making of such contract by either of the parties. It is essential to a wagering contract that each party may win or lose, whether he will win or lose being dependent on the issue of the event, and, therefore remaining uncertain until that issue is known. If either of the party may win but cannot lose, it is not a wagering contract.

6.6.2 Essentials of a wager

To constitute a wager, following elements must be present in the contract:

(1) Uncertain event - It is either a future event the outcome of which is uncertain, or it may be a past event with an ascertained outcome about which the parties to the agreement have no knowledge.

Example - A cricket match between India and Pakistan is scheduled to start next month. A and B enter into an agreement that if India wins, A will pay Rs. 5000 to B, and if Pakistan wins, B will pay Rs. 5000 to A. This is a wagering agreement.

Alternatively it may happen that the match has already been concluded but A and B are not aware of the result of the match. They enter into an agreement that A will pay Rs. 5000 to B if India had won the match and B will pay Rs. 5000 to A if Pakistan had won the match. It is also a wagering agreement.

(2) Win or lose situation - Each party must be in a situation where it may win or lose depending upon the issue of the event. If either of the parties may win but cannot lose, or may lose but cannot win, it is not a wagering agreement.

Examples:

1. S and R deposited 200 pounds to abide the results of a tennis match and the loser was to forfeit this amount and the gainer was to recover it. In this case each party has the chances to win or lose. And the gain of one party will be the loss of the other. This is a wagering agreement.
2. Two wrestlers R and B agreed to play a wrestling match on the condition that if any of them would fail to appear for the match, he would have to pay Rs. 500 to the other party. The winner was to receive Rs. 1000 out of the gate money (i.e., sale proceeds of the tickets). R failed to appear in the match and B sued him for Rs. 500. Here, was not a wagering agreement, and was enforceable

Note: In this case, R and B were not going to win or lose in terms of money as a result of wrestling match (i.e., uncertain event). The winning amount had not to be given out of their pockets, but had to be paid from the gate money which was provided by the public. As for the condition of payment for non-appearance, no uncertain event provided the equal chances of winning or losing.

- (3) No other interest - Neither party should have any interest in the happening of the event other than the sum or stake he will win or lose. That is what marks the difference between a wagering agreement and a contract of insurance.

Example - A takes a fire insurance policy for his house. It is not a wagering contract as he has an insurable interest in the house property. Alternatively if A takes a life insurance policy for the wife of his clerk, it will amount to a wagering agreement as he does not have any interest in-the life of the insured.

- (4) No control over the event- Neither party should have any control over the event in one way or the other.

Example - A and B agree with each other that if it rains tomorrow, A will pay Rs. 100 to B and if does not rain tomorrow, B will pay Rs. 100 to A. Here 'raining' or 'not raining' is the event over which neither party has any control. This is a wagering agreement.

- (5) To constitute a wager, there should be a promise to pay money or money's worth only - There must be a proof that the agreement was entered into upon the terms that the performance of the agreement should not be demanded; but only difference in prices should be paid.
- (6) The stake money should come out of the pockets of the parties themselves and not outsiders otherwise the agreement does not constitute a wager.
- (7) Finally, to make a wagering agreement there must be a common intention to bet. The essence of wager is that only one party stands to win or lose to the other party according to an uncertain event or to the fluctuation of the price.

6.6.3 Effect of wagering agreements

The effect of wagering agreement can be viewed in context of the main transaction and collateral transaction.

- (1) Main transaction** - Section 30 of the Indian Contract Act, 1872 provides that, "Agreements by way of wager are void, and no suit shall be brought for recovering anything alleged to be won on any wager, or entrusted to any person to abide by

the results of any game or other uncertain event on which any wager is made."

Thus the agreements by way of wager are void. The winner in wager cannot recover the stake money from the other party.

Example - A agreed to pay Rs. 1,000 to B if 'X' won the election. B agreed to pay Rs. 1,000 to A if 'X' did not win the election. Subsequently 'X' won the election but A refused to pay Rs. 1,000 to B. B cannot recover this money from A.

Even if the stake money is deposited with a third person, it cannot be recovered by, the winner from him.

Example - Considering above example, say A and B both deposit their respective stake of Rs. 1,000 with C, to enable him to pay the winner. 'X' won the election but C refused to pay money to B. B cannot recover the winning money from C. However, both A and B can recover their respective money from C which they had deposited with him.

Note: It may be noted that, though wagering agreements are void, they are not illegal. However, in Gujarat and Maharashtra, the wagering agreements have been declared illegal by the respective States.

(2) Collateral transaction - It is a transaction which is incidental or parallel to the main transaction. For example, A bets with B and loses; and obtains a loan from C in order to pay B. Here the transaction between A and B is main transaction, and the transaction between A and C is a collateral transaction. Since the wagering agreement are void, but not unlawful (except in the States of Gujarat and Maharashtra), the transactions collateral to them are valid and enforceable.

Example - Considering the above referred example, B borrowed Rs. 1,000 from C to pay his bet money to A. Later on he refused to pay back the money to C. Here C can go to the court of law to recover his money from B, as his contract with B was a valid and enforceable contract.

6.6.4 Exception in the Wagering Agreements

Horse racing competition - Section 30 of the Indian Contract Act, 1872, provides that, "a subscription or contribution, or agreement to subscribe or contribute, made or en-

tered into for or towards any plate, prize or sum of money, of the value or amount of five hundred rupees or upwards, to be awarded to the winner or winners of any horse race, shall not render an agreement void."

Thus a bet on the horse race carrying a prize of Rs. 500 or more will not constitute a wagering contract, and is enforceable. However, a bet on a horse race carrying a prize of less than Rs. 500 remains a wager. Here the intention of the Law is to protect the poor people from gambling.

6.6.5 Special Transactions Resembling To Wagering

(1) Commercial transactions - Sometimes it is difficult to find it out whether an agreement is by way of wager or a genuine commercial transaction. It has now been settled that where delivery of the goods is intended to be given and taken, it is a valid contract but where only the difference in prices is intended to be paid, it is a wagering transaction.

Example - A agrees to buy 100 grams of gold from B at Rs. 300 per gram after two months. On the due date the price of gold is Rs. 290 per gram. This transaction may be settled in two ways:

- (i) A may purchase 100 grams of gold at Rs. 300 per gram, or
- (ii) he may give Rs. 1,000 to B, being the difference between the contract price and the market price on the date of performance.

In the first case, it is a valid contract of sale and purchase. In the second case there was no intention of sale or purchase of gold. Both the parties were interested in gambling on the fluctuations of gold prices. It is a wagering transaction.

(2) Lotteries - A lottery is a game of chance, in which the event, either of gain or loss giving the absolute right to prize, is wholly dependent on the drawing of lots. It is a wagering agreement. Thus the winning in the lottery is not possible to be recoverable through court of law. Moreover an agreement to buy a lottery ticket is also a wagering agreement, and is void.

Example - A bought a lottery ticket. According to the draw, he won the prize of Rs. 50,000, but the organizers of the lottery refused to pay him this money. He cannot recover this money through the court of law as lottery is considered as a wagering

contract.

Note: It may be noted that the Government may give sanction for conducting lotteries. But the sanction of the Government does not change the nature of the lotteries, i.e., it will remain a wager. The only effect of the sanction is that the persons conducting the lotteries will not be liable to the punishment by law.

(3) Chit fund - A chit fund transaction is simply a loan of the common fund to each subscriber in turn. In such cases, the transaction is not a lottery though there is an element of chance in it.

Example - Twenty-two persons were conducting a transaction. Each person was to contribute Rs. 10 for the first week. At the end of the week, the prizes were drawn and the winner gets gramophone and drops out of transaction. The remaining members contribute for the next week. Again the prizes were drawn at the weekend. The new winner gets the gramophone and drops out of transaction. The similar contributions and drawings continued for next 20 weeks (22 weeks in total).

In this case, each person got his money's worth though some got less and some more by lot. Moreover the transaction was conducted between definite number of persons and there was no invitation to public to join. The transaction not a lottery and did not amount to wager.

(4) Crossword puzzles - Crossword Puzzles are of two types:

- (i) One in which any person solving the puzzle would be awarded, therefore it is a game of skill and not of chance and is not a wagering agreement. Even in such competitions the amount of prize should not exceed Rs. 1,000. If the prize money exceeds Rs. 1,000, then it amounts to wager and void according to the Prize Competition Act, 1955.
- (ii) The other type of crossword puzzle is one in which the prize would be awarded to that competitor whose solution corresponds to the solution kept with the editor of the newspaper. It is a game of chance and not of skill and hence is a wagering agreement.

(5) Insurance contracts - It is a contract where a person in consideration of certain sum of money agrees to bear the risk regarding the property or life of another person in

which such other person has insurable interest. The main object is mitigation of losses.

'Insurable interest' is an interest in the subject matter of insurance which the insured person wants to protect against some uncertain event.

Certain points regarding insurance contracts:

- (i) It is only the person possessing an insurable interest who is allowed to insure life or property, and not any other person.
- (ii) In the insurance contracts, with the exception of the Life Insurance, the insured does not stand to gain. He is only compensated against the loss if some uncertain event happens. Like in the case of fire insurance, only the actual loss suffered by the insured is paid by the insurance company, and not the full amount for which the property is ensured.
- (iii) Insurance contracts are regarded beneficial to the public whereas wagering agreements do not serve any such purpose.

Example - A insured the life of M, the wife of a clerk in his employment, for a term of 10 years for Rs. 25,000. The policy was assigned to A. M died a year later. A sued the insurance company to recover Rs. 25,000. Here A had no insurable interest in the life of M. Thus it is a wagering agreement. Hence A could not recover anything from the insurance company.

6.7 AGREEMENTS CONTINGENT ON IMPOSSIBLE EVENTS

Section 36 of the Indian Contract Act, 1872 provides that, "contingent agreements to do or not to do anything if an impossible event happens, are void, whether the impossibility of the event is known or not to the parties to the agreement at the time when it is made:

Examples:

1. A agrees to pay B Rs. 1,000 if two straight lines should enclose a space. The agreement is void.

2. A agrees to pay B Rs. 1,000 if B will marry A's daughter C. C was dead at the time of the agreement. The agreement is void.

6.8 AGREEMENTS TO DO IMPOSSIBLE ACTS

Section 56 of the Indian Contract Act, 1872 provides that "an agreement to do an act impossible in itself is void."

Example - A agrees with B to discover treasure by magic. The agreement is void.

It may happen that an event becomes impossible after the contract is made. In such a case, the contract becomes void from such time when the event on which the contract is based becomes impossible.

Example - A and B contract to marry each other. Before the time fixed for the marriage, A goes mad. The contract becomes void.

Part - 7

Contingent Contracts

STRUCTURE OF PART - 7

- 7.1 Objective
- 7.2 What is a Contingent Contract?
- 7.3 Rules Regarding a Contingent Contract
- 7.4 Effect of Contingent Contracts
- 7.5 An Important Comparison

7.1 OBJECTIVE

After reading this Unit, you should be able to understand:

- What is a contingent contract?
- How it is different from an ordinary contract?
- What are the rules as to its enforceability?

7.2 WHAT IS A CONTINGENT CONTRACT?

The word 'contingent' is used in the Indian Contract Act, 1872, to mean 'conditional' as we use ordinarily. Thus a contingent contract is a conditional contract.

Section 31 of the Indian Contract Act, 1872, provides that, "*A contingent contract is a contract to do or not to do something, if some event, collateral to such contract, does or does not happen.*"

It may be inferred from the above that the performance of a contingent contract is dependent on a future uncertain event, and such event should be collateral to the contract.

Performance dependent on a future uncertain event - In an ordinary contract, as soon as the contract is made, its performance becomes due by the respective parties. When a contract is contingent, i.e. dependent upon the happening or non-happening of a future event, its performance will become due only on the happening or non-happening of such event.

Examples:

1. A promise to sell his house to B for Rs. 1 Lac. Here A owes an obligation to transfer the possession of his house to B, and B owes an obligation to pay Rs. 1 Lac to A. It is an absolute contract.
2. A agrees to sell his house to B provided C, to whom he offered in the first instance does not purchase it; here A's promise to sell his house to B is conditional depending upon C's refusal to purchase it. If C refuses, both A and B will become bound to perform their respective obligations, but if C accepts to

purchase A's house, no contract will exist between A and B. This is a contingent contract.

The future uncertain event must be collateral to contract - The collateral event on which the performance of a contract is dependent must be independent or ancillary to the contract. It should not be a part of contract itself. i.e. *"a collateral event is an event which is neither a performance directly promised as part of the contract, nor the whole of the consideration for promise."*

Examples:

1. A enters into a contract to pay B for a piece of work on the terms that he will be paid only when the work is done. Here the 'completion of the work', being the very thing contracted for, is not collateral to the contract. This contract is not a contingent contract though the performance of the work may be a condition precedent to the payment of wages.
2. A offer a reward for the recovery of lost goods. There is no contract at all unless someone find the goods and bring them to A. Here 'finding the goods' is constituting whole of the consideration for promise, it cannot be considered a collateral event. Thus it is not a contingent contract.
3. A, an insurance company promise to pay B Rs. 50,000, in case his house is burnt. Here 'burning of the house' is an independent event which is neither a performance required from B under the contract, nor it is forming consideration of the contract. This is a contingent contract.

7.3 RULES REGARDING A CONTINGENT CONTRACT

Above discussion makes it clear that the performance of a contingent contract is dependent upon a contingency which is uncertain. This contingency may take different forms and different effects. Legal rules regarding the same are discussed below:

(1) Act of a party - The word event include 'act of the party', the 'act' may be either of a party to the contract, or a third party.

Examples:

1. A agreed to pay Rs. 1 Lakh to B, if B marries C. In this case B's act of marrying C is an uncertain collateral event because he may or may not marry C. This is a contingent contract.
2. A agreed with B that he will get his house constructed by B provided C, an architect certifies the layout plan of the house made by B. Here the contract is contingent upon the 'certification by C, an act of third party. This is a contingent contract.

It may be noted that contingency in a contract cannot be 'mere will' of a party.

Thus a promise by A to sell his house to B for Rs. 1 Lac if he will consider it proper after a month is no promise. Here contingency is mere will of A, hence the contract is not valid.

(2) Happening of an event - Section 32 of the Indian Contract Act, 1872, provides that, "Contingent contracts to do or not to do anything if an uncertain future event happens cannot be enforced by law unless and until that event has happened:

Thus when the contingency in a contract is 'happening of certain event', it can be enforced only when that event happens. If such event becomes impossible, it renders the contract void.

Examples:

1. A contracts to pay B a sum of money if B marries C. A will become liable to pay the money to B only when he marries C.
2. A contracts to pay B a sum of money if B marries C. C dies without being married to B. Now the event on which the contract was contingent has become impossible. The contract is void.
3. Non-happening of an event - Section 33 of the Indian Contract Act, 1872, provides that, "Contingent contracts to do or not to do anything if an uncertain future event does not happen can be enforced when the happening of the event becomes impossible, and not before".

Thus when the contingency in a contract is 'non-happening of certain event', it can be enforced only when such event becomes impossible. However, the happening of such event renders the agreement void.

Examples:

1. A agrees to pay a sum of money to B if a certain ship does not return. The ship sinks. Now there is no possibility that ship will ever return. The contract can be enforced.
2. A agrees to pay a sum of money to B if a certain ship does not return. The ship returns back. The contract has become void.

When future conduct of a person is considered impossible - Section 34 of the Indian Contract Act, 1872, lays down that, "If the future event on which a contract is contingent is the way in which a person will act at an unspecified time, the event shall be considered to become impossible when such person does anything which renders it impossible that he should so act within any definite time, or otherwise than under future contingencies:

Thus the future conduct of any person is considered impossible, if it becomes impossible to perform it in the given circumstances.

Example - A agrees to pay a sum of money if he marries C. C marries D. Here the possibility that D may die and C may marry B at some future date cannot be denied. But in the given circumstances, the marriage of B and C would be considered impossible.

(3) Happening of an event within a fixed time - Section 35 of the Indian Contract Act, 1872, provides that, "Contingent contracts to do or not to do anything if a specified uncertain event happens within a fixed time become void if, at the expiration of the time fixed, such event has not happened, or if, before the time fixed, such event becomes impossible."

Thus when the contingency is happening of certain event within a fixed time, the contract can be enforced only when such event happens within the time fixed.

Example - A promise to pay a sum of money to B if a certain ship returns within a year.

The ship returns within a year. The contract is enforceable.

Such contract will become void in the following circumstances:

1. *Fixed time expires without happening of such event.*

Example - " A promise to pay a sum of money to B if a certain ship returns within a year. One year expires and ship does not return. The contract has become void.

2. *Before the expiry of fixed time, such event becomes impossible.*

Example - A promise to pay a sum of money to B if a certain ship returns within a year. The ship sinks after 6 months. Returning of ship is impossible. The contract has become void.

(5) Non-happening of an event within a fixed time - Section 35 of the Indian Contract Act, 1872, provides that, "Contingent contracts to do or not to do anything if a specified uncertain event does not happen within a fixed time may be enforced by law when the time fixed has expired and such event has not happened, or before the time fixed has expired, if it becomes certain that such event will not happen."

Thus when the contingency is non-happening of certain event within a fixed time, the contract can be enforced in the following two circumstances:

1. *When fixed time expires without happening of such event.*

Example - A promises to pay a sum of money to B if a certain ship does not return within a year. One year expires and ship does not return. The contract becomes enforceable.

2. *Before the expiry of fixed time, such event becomes impossible.*

Example - A promise to pay a sum of money to B if a certain ship does not return within a year. The ship sinks after 6 months. Returning of ship is impossible. The contract becomes enforceable.

(6) Happening of an impossible event - Section 36 of the Indian Contract Act, 1872,

provides that, "Contingent agreements to do or not to do anything if an impossible event happens, are void, whether the impossibility of the event is known or not to the parties to the agreement at the time when it is made."

Thus, if the contingency relates to the happening of an impossible event, it will render an agreement void. It does not make a difference whether the fact of impossibility was known to the parties or not.

Examples:

1. A agrees with B to discover treasure by magic. The agreement is void.
2. A agree to sell 1,000 Kg. of sugar to B, which was to reach A through a certain ship. The ship sunk on the way. The performance of the contract is impossible. The agreement is void.

7.4 EFFECT OF CONTINGENT CONTRACTS

The contingent contracts are perfectly valid, though they can be enforced in a court of law only upon the happening or non-happening of a future uncertain event. When the event has occurred, the contract for all purposes rests on the same footing as if it had been made positively and without reference to any contingency.

7.5 AN IMPORTANT COMPARISON

Wagering agreement and Contingent contract

<i>Wagering agreement</i>	<i>Contingent contract</i>
<i>Similarities</i>	
Performance of the agreement depends on the happening or non-happening of some event.	Performance of the contract depends on the happening or non-happening of some event.
<i>Differences</i>	
In a wagering contract, the uncertain event is the sole determining factor.	In a contingent contract, the uncertain event is collateral to the main contract.
The parties have no interest in the subject matter of the agreement other than their betting take.	The parties have interest in the subject matter of the contract.

A wagering agreement is void.	A contingent contract is valid.
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Part - 8

Quasi Contracts

STRUCTURE OF PART - 8

- 8.1** Objective
- 8.2** Various Forms a Quasi Contract
 - 8.2.1** Supply of necessaries
 - 8.2.2** Payment of lawful dues by interested person
 - 8.2.3** Obligation of a Person Enjoying Benefit of a Gratuitous Act
 - 8.2.4** Responsibility of Finder of Goods
 - 8.2.5** Liability of a Recipient of Goods Delivered by Mistake or Under Coercion
- 8.3** Failure to Discharge Obligations Created by Quasi Contracts

8.1 OBJECTIVES

After reading this Unit, you should be able to understand:

- What is a Quasi Contract
- What are various kinds of quasi contracts
- How law treats such contracts

8.2 VARIOUS FORMS OF QUASI CONTRACTS

Sections 68 to 72 of the Indian Contract Act provides for five kinds of quasi contractual obligations. These are discussed below.

8.2.1 Supply of necessaries

Section 68 of the Indian Contract Act, 1872, provides that, "If a person incapable of entering into a contract, or anyone whom he is legally bound to support, is supplied by another person with necessaries suited to his condition in life, the person who has furnished such supplies is entitled to be reimbursed from the property of such incapable person."

The above provision applies when:

1. The person to whom the necessaries are supplied is incapable of entering into a contract, i.e., he may be a minor, or a person of unsound mind.
2. The other person has supplied him or anyone whom he is legally bound to support with the necessaries suited to his condition of life.

The effect of the provision is that:

1. The price of the goods or services so supplied can be recovered only out of property of the incompetent person, if he has any. In any case, personal liability is not created.

Examples:

- (i) A supplied B, a lunatic, with necessaries suitable to his condition in life.

A is entitled to be reimbursed from B's property.

(ii) A supplies the wife and children of B, a lunatic, with necessaries suitable to their condition in life. A is entitled to be reimbursed from B's property.

2. Incompetent person's property is liable to pay only a reasonable price for such goods or services supplied and not the price which the incompetent person might have agreed to (legally speaking an incompetent person cannot agree to anything).

Example - A supplied a jacket to the minor for which he agreed to pay Rs. 1,000 although its reasonable market price was Rs. 500 only. A can recover only Rs. 500 out of minor's property.

Note: This topic has been dealt with in detail in the Unit 'Capacity of Parties'.

8.2.2 Payment of lawful dues by interested person

Section 69 of the Indian Contract Act, 1872, provides that, "A person who is interested in the payment of money which another is bound by law to pay, and who therefore pays it, is entitled to be reimbursed by the other."

The above provision applies when:

(1) The person who made the payment had an interest in such payment.

Examples:

1. A pays arrears of rent of his neighbor B, just to avoid a struggle between B and his landlord. Here A cannot recover this rent from B as he acted voluntarily without having any recognizable interest in such payment.
2. A party had agreed to purchase certain mills. A large amount of municipal taxes was overdue on the property of the mills. The purchaser paid these taxes in order to save the mills from being sold in execution. Here, by agreeing to purchase the property, the purchaser acquired sufficient interest which it would want to safeguard. Thus this money could be recovered from the seller of the mills.

(2) The payment must be such as the other party was bound by law to pay. The words 'bound by law' do not mean that the liability should only be statutory. The person may be bound to make the payment by 'law' or by 'contract'.

Examples -

1. A was the owner of a warehouse. B imported certain goods and kept them in A's warehouse without paying the custom duty. The custom authorities made a demand on A, and he had to pay the duty on those goods. Here B was bound by law to pay the customs duty. A is entitled to recover the amount from B.
2. E left his carriage at P's premises. P's landlord seized the carriage as distress for rent. Here P is bound by contract to pay the rent to his landlord. E paid the rent to obtain the release of his carriage. Here E could recover the amount of rent paid by him.

Note: It may be noted that if a person is only morally bound to pay, then he will not liable to the person who discharges his moral obligation.

(3) The person who made the payment was not himself legally bound to pay the amount.

Example - A held some land on a lease granted by B, a Zamindar. Under the Revenue Law, the tenant is liable to pay the revenue charges on the land. Land revenue fell in arrears, and in order to prevent the termination of the lease, A paid the arrears of revenue charges. In this case, A cannot recover the revenue charges from B as the payment of the same was his own duty.

Moreover, the suit under this section is maintainable only for reimbursement and not for contribution. Thus, where there is a joint liability on joint wrong doers and only one of them discharges the liability, that person cannot claim the contribution from the other person.

Example - A and B were fined jointly Rs. 5,000 for selling adulterated ghee. A alone paid the amount of fine. He cannot recover the contribution from B under this section as he himself is also bound for the dues.

Note: It may be noted that a suit for contribution from a joint promisor can be made under section 43.

(4) The payment must not be made to self

Example - A, a Zamindar gave his land on lease to the Forest Department of Gujarat Government. A failed to pay the land revenue to the Government. In order to save the property from being sold, the Forest Department made payment of the land revenues. Here, the payment of money by one Government department to another constitute a payment to self. Thus the Forest Department could not recover this money from A.

The effect of the provision is that;

1. The person who has made the payment of lawful dues of the other, in which he had an interest, is entitled to get the reimbursement from that other person.
2. In a suit under this section, even a personal decree can be passed.

8.2.3 Obligation of a Person Enjoying Benefit of a Gratuitous Act

Section 70 of the Indian Contract Act, 1872, provides that, "Where a person lawfully does anything for another person, or delivers anything, to him not intending to do so gratuitously, and such other person enjoys the benefit thereof, the latter is bound to make the compensation to the former in respect of, or to restore, the thing so done or delivered."

The above provision applies when;

1. A person has lawfully done something for, or delivered something to the other. Here 'lawfully done' denotes that the act or service done for somebody is not imposed upon him or her. He or she should have the option to accept or reject the services rendered or goods delivered by the other person.

Example - A ploughed a field of B, with a tractor. B's son was present at the time of ploughing. After the ploughing, B sent intimation to the District Development Officer stating that the field has been ploughed satisfactorily. Now A demanded payment for ploughing the field. Here, the act done was not a

voluntary act, it was done in pursuance of the wishes of the owner in the presence of his son. Thus it must clearly be regarded as something 'lawfully' done for which B was liable to reimburse A.

2. It has been done by a person not intending to act gratuitously. The person providing goods or services must contemplate payment from the very beginning. If his intention is not to charge any money for goods or services, then he cannot recover for his work or goods.

Examples -

1. A was managing the 'estate' of his uncle B expecting remuneration for his services. In this case, A is entitled to receive compensation for his services.
2. A purchased a TV set for giving it as a gift to B, his nephew. He went to his house and left the TV set without saying anything. B installed the TV set in his house. Later on A changed his mind and demanded payment from B for the TV set. In this case, he may not recover the price of TV set as his original intention was not to charge for it.
3. The other person has enjoyed the benefits of goods or services so provided. The benefit must be a direct benefit which is accepted voluntarily by the person to whom it is provided.

Examples-

1. Certain villages were irrigated by a tank. Some of the villages were under State tenancy whereas others under Zamindars. Government repaired the tank for its preservation. the Zamindars also enjoyed the benefit thereof. Since the Government had no intention to do so gratuitously for Zamindars, Here, the Zamindars were liable to contribute for the repair
2. A Railway company carried out some land development for its own purpose. Consequently, the adjoining land also got developed and the Municipality started receiving more taxes from the developed area. Railway company filed a suit upon Municipality to contribute to the development charges. Here, the benefit derived by the Municipality was not direct. Thus the Railway company was not entitled to recover contribution from Municipality

The effect of the provision is that:

1. The person who has enjoyed the benefit of the act of some other person, done with the expectation of return for it, is bound to make compensation for it. However, he is not bound to pay for the same, if he had no option of refusing the goods or services offered by that other person.
2. The person who does something for the other (without being asked to do so) with the expectation of getting a compensation for it, can claim his rightful compensation from him. However, he can neither sue for 'specific performance' of the contract, nor ask for damages for breach of the contract.
3. The section does not apply where goods or services are provided to a person incompetent to contract.

8.2.4 Responsibility of Finder of Goods

Section 71 of the Indian Contract Act, 1872, provides that, "A person who finds goods belonging to another and takes them into his custody, is subject to the same responsibility as a bailee."

The above provision applies when -

A person finds certain goods belonging to some other person, and take them in his custody.

The effect of the provision is that -

In such a case, law implies an agreement between the owner and finder of goods. This agreement confers certain rights and duties on the part of the finder of goods which are discussed below.

A. Duties of the finder

1. *A finder of lost goods is under no obligation to take charge of them, no matter how valuable the goods are. If however, he takes charge of the lost goods, he is liable to:*

- try and find out the true owner,
- not to appropriate the property to his own use, and
- when the real owner is traced, he must restore the property to him.

Note: If the finder does not take these measures, he will be guilty of criminal misappropriation of the property under section 403 of the Indian Penal Code.

2. *The finder is bound to take as much care of the goods as a man of ordinary prudence would have under similar circumstances, taken care of his own goods of the similar nature [Section 151].*

Note: Section 71 enumerates that responsibilities of a finder of goods are akin to that of a bailee. These shall be discussed in detail in the Chapter 12 on 'Bailment and Pledge'.

B. Rights of the finder

1. *The property in goods shall vest in the finder and he is entitled to retain it against the whole world, except the true owner.*

Example - A picked up a diamond from the floor of B's shop and handed it over to B to keep it till the owner is found. Even after making best efforts, the true owner could not be found. After sometime, A tendered to B, all lawful expenses incurred in finding the true owner and asked him to return the diamond. B refused to do so. Here, A was finder of diamond, and if the true owner is not traceable, he is entitled to keep the diamond against the whole world. Thus B had to return the diamond to A.

Comment - *When we say that the finder has custody of goods, it means that he has taken charge of the goods, it does not mean physical custody only. Thus in the above case, by keeping diamond with the shopkeeper, A has not parted with its custody in terms of section 71.*

2. *The finder has a lien on goods for expenses incurred by him in preserving the goods and finding the true owner.*

Example - A finds certain goods and advertises to find out the true owner. The owner claims the goods but refuses to pay the cost of advertisement and other expenditure incurred by A. Here A can exercise lien over the goods and can sell

them to reimburse himself for the lawful charges incurred by him.

Note: It may be noted that the finder can retain the goods until he receives such compensation but he cannot file a suit for recovery of this money.

3. *Where the owner has offered a reward for recovery of lost goods, the finder may claim such reward, and may retain the goods until he gets it.*

Example - A offered a reward of Rs. 1,000 to the finder of his lost dog. B found the dog. B can claim Rs. 1,000 from A for returning the dog, and may retain the dog with him till he gets the money.

Note: It may be noted here that the finder should have knowledge of the offer for reward to claim it.

4. *Where the owner of goods refuse to pay the lawful charges to the finder, he can sell the goods in either of the following cases:*

- when the goods are in danger of being perished.
- when the lawful charges of the finder, in respect of the thing found, amount to two-thirds of its value or more.

8.2.5 Liability of a Recipient of Goods Delivered by Mistake or Under Coercion

Section 72 of the Indian Contract Act, 1872, provides that, "A person to whom money has been paid, or anything delivered, by mistake or under coercion, must repay or return it." The above provision applies when:

1. *A payment has been made or goods have been delivered by mistake to some person. The mistake may be a mistake of law, or a mistake of fact.*

Example - A, a lessee in a mining lease paid the royalties at a higher rate though he was supposed to pay at a lower rate. Here, the money paid under mistake of law can be recovered under section 72.

2. *A payment has been made or goods have been delivered under coercion to some person. The word 'coercion' is used in section 72 in its general sense i.e., under pressure, and not as defined in section 15 of the Contract Act:*

Example - Certain goods belonging to A, a consignee, were lying with a railway company. The railway company refused to deliver the goods to the consignee unless some illegal charges for carriage are paid. The consignee paid the charges in order to obtain the goods. Here A was forced (it will be considered coercion) to pay the charges to the railway company which were illegally excessive. A is entitled to recover the same from the railway company.

The effect of the provision is that:

When a person pays certain money or delivers certain goods under mistake or coercion, to the other, the person to whom it has been so paid or delivered is bound to return the same.

Example - A and B jointly owed Rs. 100 to C. A paid Rs. 100 back to C. B, not knowing this fact also paid Rs. 100 to C. In this case, C is bound to pay back Rs. 100 to B paid to him by mistake.

Similarly, the money paid to a wrong person due to abona fide mistake can be recovered back.

Example - A paid some money to B by mistake which was due to C. In this case, A is entitled to recover his money from B.

8.3 Failure to Discharge Obligations Created by Quasi Contracts

Section 73 of the Indian Contract Act, 1872, provides that, "When an obligation resembling those created by contract has been incurred and has not been discharged, any person injured by the failure to discharge it, is entitled to receive the same compensation from the party in default, as if such person had contracted to discharge it and broken his contract."

An obligation created by a quasi contract is on the same footing as an obligation created by a valid contract actually entered into by the parties concerned. If a person fails to discharge these obligations, then it is treated as a breach of contract and he shall be liable to pay the compensation for the breach of contract.

Example - A supplied certain goods to B by mistake. B used the goods as his own. In this case, A is entitled to recover the compensation from B.

Part - 9

Performance Of Contracts

STRUCTURE OF PART - 9

- 9.1** Objective
- 9.2** Actual or Attempted Performance
 - 9.2.1** Actual Performance
 - 9.2.2** Attempted performance
 - 9.2.3** Essentials of a Valid Tender of Performance
 - 9.2.4** Effect of Refusal to 'Tender of Performance'
- 9.3** When Law Excuses Non-Performance of Contract
- 9.4** Who Should Perform the Contract
- 9.5** Who Can Demand Performance
- 9.6.** Time and Place for Performance
 - 9.6.1 Effect of Failure to Perform in Time
- 9.7** Joint Promises
 - 9.7.1** Who can demand performance of joint promises
 - 9.7.2** Who should perform a joint promise?
 - 9.7.3** Rights and Liabilities Amongst Joint Promisors
- 9.8** Reciprocal Promises
 - 9.8.1** Rules regarding performance of reciprocal promises
- 9.9** Appropriation of Payments
- 9.10** Assignment of a Contract

9.1 OBJECTIVES

After reading this Unit, you should be able to understand:

- When a contract is said to be performed
- What are the rules regarding performance of a joint promise and a reciprocal promise
- What is meant by 'appropriation of payments'
- What is 'assignment' and what is its legal impact

9.2 Actual or Attempted Performance

The primary duty of contracting parties is to perform their respective contractual obligations.

Section 37 of the Indian Contract Act, 1872, provides that, "The parties to a contract must either perform, or offer to perform, their respective promises, unless such performance is dispensed with or excused under the provisions of this Act, or of any other law."

Thus a contract is said to be performed, when parties make:

1. Actual performance, or
2. Attempted performance (i.e., 'offer to perform' or 'tender to perform').

Law requires this performance to be made, unless it is excused under the provisions of Indian Contract Act, 1872, or any other law in force.

9.2.1 Actual Performance

A party to a contract is said to have actually performed his promise when he has fulfilled all his obligations under the contract. Actual performance brings the contract to an end.

Example- A enters into a contract to sell his car to B. A delivers his car to B and B pays promised money to A. Here actual performance has taken place.

9.2.2 Attempted performance

Sometimes it happens that the promisor is ready and willing to perform his promise, and offers to perform the same, but promisee refuses to accept it. The motive of the party 'offering to perform' or 'tendering to perform' is to perform the promise. Thus a valid tender of performance is equivalent to the performance of promise, and it discharges a party from his obligations under a contract.

Example - A enters into a contract to sell his car to B. A offers to deliver his car to B but B refuses to accept it. It is a tender of performance made by A. By offering the car, A has completed his part of promise.

9.2.3 Essentials of a Valid Tender of Performance

A tender of performance is valid if it satisfies the following conditions:

(1) It should be unconditional [Section 38] - The tender of performance must be unconditional. If a tender is accompanied by a condition, which prevents it being a perfect and complete tender, the other party is entitled to reject it.

Example - A owed Rs. 5000 to B. He offered to pay Rs. 5000 to B, provided B was ready to rent his house to C. here A's offer of performance is conditional. It is not a valid tender, and B is entitled to reject it.

(2) It must be entire and not of a part only - The offer of performance must be of a whole payment or performance that is due. Thus by rejecting a part payment, the offeree does not lose his right to demand performance. However, he has an option to accept part payment without prejudice to claim his remaining balance.

Example- A owed Rs. 5000 to B. He offered Rs. 3000 to B to set off a part of the debt. This is not a valid tender of performance. By refusing to receive this, B does not lose his right to claim Rs. 5000 from A.

(3) It must be made at proper time and place [Section 38] - An offer to perform at time or place which is not proper cannot constitute a valid tender of performance.

Examples:

1. A owes B Rs. 1000 payable on 1st of December with interest. On 1st June A offers to pay the amount with interest up to 1st of June. It is not a valid tender because it is made before the due date.
2. A of Delhi contracts with B to deliver 500 bales of cotton at his mill in Faridabad. After 5 days, A sends requisite quantity and quality to B's office in Connaught Place. This is not a valid tender of performance.

Note: What is proper time and place for performance of a contract is either decided by the terms of contract, or by the rules settled by law in this context. These are discussed in detail in this chapter under the heading 'Time and Place for performance'.

(4) The person making the tender must be able and willing to perform it - A party making a tender to perform must be in a position and must have a will to perform it.

Examples:

1. A offered, by letter to pay the amount due to B. It is not a valid tender. A valid tender of money in payment must be made with actual production of money.
2. A offered to deliver 100 pair of shoe to B under a contract, while he had only 50 pair of shoe in his possession. Here A is not in a position to perform what he is offering. It is not a valid tender.

(5) The tender must provide reasonable opportunity to the other party - The party to whom the tender of performance is offered must have an opportunity to ascertain:

(i) that the party making the tender is able and willing to perform it, and

(ii) that the things offered are same as agreed.

Example - Under an agreement to supply goods, A offered goods to B at such a late hour of the appointed day that B had no time to inspect them. The court held that it was not a valid tender.

(6) The tender must be made to the proper person - It must be made to the promisee or his duly authorized agent. Tender made to a stranger is invalid.

Example - A owed Rs. 5,000 to B. He offered Rs. 5,000 to C, a close friend of B. Here the tender is not valid, because although C is a friend of B, but B has not authorized him to collect his payment from A.

(7) Tender in case of joint promises - If there are several joint promises, an offer to perform made to anyone of them is valid tender.

Example- A owed Rs. 6,000 to X and Y. A offered to pay Rs. 6,000 to Y. It is a valid tender. Note that although an offer of performance made to one of the joint promisees work as a valid tender of performance, when it comes to the actual performance, it must be made with respect to all the promisees jointly. Thus, in the above example, if Y refuses to take Rs. 6,000 - A stands discharged. But if Y accepts it, A is not discharged as against X.

(8) Tender in terms of money - A tender of money must be in legal tender money, and not in any foreign currency, or exchange or cheque. However, a payment by cheque is valid if the person to whom it is made is ready and willing to accept it. Also, tendering a smaller or larger amount is an invalid tender, e.g., offering 100 rupee note to conductor of bus for payment of Re. 1 is not valid tender.

Example - A agreed to purchase B's scooter for Rs. 10,000. A offered some jewelry worth Rs. 10,000 and asked him to deliver the scooter. It is not a valid tender of performance. B can very well refuse to deliver the scooter to A.

9.2.4 Effect of Refusal to 'Tender of Performance'

Section 38 of the Indian Contract Act, 1872, provides that, "Where a promisor has made an offer of performance to the promisee, and the offer has not been accepted, the promisor is not responsible for nonperformance, nor does he thereby lose his rights under the contract."

When one party tender the performance of his promise, and the other party refuse to accept it, the former party is discharged from his liability. He is excused from performance and becomes entitled to sue the latter for breach of contract.

Example - P promised to deliver 50 quintals of rice to R within a week at R's place of business. R promised to pay Rs. 25,000 for the same. After 3 days P send a truck containing 50 quintals of rice to R's place of business. R refused to take the delivery of goods. Here P is relieved from performance of the contract, because he has made an offer of performance which was rejected by R. Now P can sue R for breach of contract.

It may be noted that in case of payment of a debt, the rejection of a valid tender of money by the creditor will not discharge the debtor from the liability for repayment of the debt. But he is not liable for the interest on the same from the date of valid tender.

Example - A bought goods from B, and promised to pay Rs. 1000 to B on 10th January. A went to B on 10th January to give Rs. 1000 to him but B did not accept it. Here, though A may not be discharged from payment of Rs. 1000 but he would not be liable to pay any interest thereon from 10th January onwards.

9.3 WHEN LAW EXCUSES NON-PERFORMANCE OF CONTRACT

Non-performance of a contract is excused by law in the following cases:

1. When contract is discharged by any mode (other than performance) - We will study various modes of discharging a contract in the next chapter.
2. When promisee neglects to afford reasonable facilities for performance to the promisor.

Section 67 of the Indian Contract Act, 1872, provides that, "If any promisee neglects or refuses to afford the promisor reasonable facilities for the performance of his promise, the promisor is excused by such neglect or refusal as to any non-performance caused thereby."

Example - A contracts with B to repair B's house. B neglects or refuses to point out to A the places in which his house requires repair. A is excused for the non- performance of the contract, if it is caused by such neglect or refusal.

9.4 WHO SHOULD PERFORM THE CONTRACT

A contract may be performed by -

- (1) the promisor himself, or
- (2) his legal representative, or
- (3) his agent, or
- (4) a third person, subject to its acceptance by promisee.

(1) Promisor himself - Section 40 of the Indian Contract Act, 1872, provides that, "If it appears from the nature of the case that it was the intention of the parties to any contract that any promise contained in it should be 'performed by the promisor himself, such promise must be performed by the promisor. In other cases, the promisor or his representatives may employ a competent person to perform it."
Thus a contract has to be performed by the promisor himself, and none else, when:

- there is something in the contract to show that personal performance was intended, or
- by its very nature it requires personal performance by the promisor, like a contract to marry, or a contract to paint, or sing, etc.

In such cases, death of the promisor puts an end to the contract. It cannot be enforced against or by his legal representatives.

Examples:

1. A promised to buy 100 Kg. of rice from B @Rs. 25 per Kg. A specifically made it clear that he want to deal with B only, and none else. B dies before delivering rice. Contract comes to an end although the agreement does not involve any personal skill. Here the 'intention of the parties' is supreme.
2. A promised to paint a picture for B for Rs. 2000. A died before completing the painting. No contract exists after his death. His legal representative cannot complete the picture and demand payment.

(2) Legal Representatives of the promisor - The rule laid down in section 37 is that, "promises binds the representatives of the promisors in case of death of such promisors before performance."

Where personal skill or volition (i.e. choice) is not involved in a contract, the legal representatives of a deceased promisor are bound to perform the contract entered

into by him. However, their liability is confined to the extent of the **assets** obtained from the deceased. In any case, they cannot be held liable personally.

Examples:

1. A promised to buy 100 Kg. of rice from B for Rs. 25 per Kg. B dies before delivering rice. In this case, B's representatives are bound to deliver 100 Kg. of rice to A at the decided time and rate.
2. A borrowed Rs. 1 lakh from B, and promised to repay the same within two months. After a month he died. A left assets worth Rs. 50,000 only. His legal representatives are bound to repay his debt to B. But the repayment can be to the extent of Rs. 50,000 only, because this is all A has left.

(3) Agent - Para 2 of section 40 provides that, "the promisor or his representatives may employ a competent person to perform it."

Where personal skill or volition (i.e. choice) is not involved in a contract, and the promisor, opt to perform the contract through an agent, he can make a valid performance by doing so.

Example - A promise to sell 100 Kg. of rice to B. A can appoint an agent to buy 100 Kg. of rice from the market and deliver it to B's place on his behalf. This will constitute a valid performance by A.

(4) Third person - Section 41 of the Indian Contract Act, 1872, provides that, "When a promisee accepts performance of a promise from a third person, he cannot afterwards enforce it against the promisor."

This section applies when a contract is performed by a stranger to the contract. In such a case, promisee has an option to reject it. But once the performance made by third person is accepted by the promisee, the contract comes to an end, and the promisor is discharged from further liability.

Example - A borrows Rs. 10,000 from B and promises to repay the same within a month. After 15 days C, the father of A, pays Rs. 10,000 to B against A's borrowed. B accepts the money. Here A is discharged from his liability to repay Rs. 10,000 to B.

For applicability of section 41, it is essential that the performance under the contract should be in full, and not in part.

Example - When A received Rs. 5,500 out of total price of Rs. 7,600 for the timber supplied to B, from a third person towards the price of timber, it being not a full payment or performance, the court held that section 41 is not applicable here. Therefore A is allowed to sue B for Rs. 7,600, and not for the balance (i.e., $7600 - 5500 = 2100$).

However, if a promisee accepts from a third person a lesser sum in full satisfaction of a claim against the promisor, thereafter the promisee cannot recover the balance from the promisor.

9.5 WHO CAN DEMAND PERFORMANCE

The performance of a contract can be demanded by :

- (1) promisee, or
- (2) his legal representative.

(1) Promisee - Promisee is the only person who can demand performance of a promise under a contract. A third person cannot demand the performance even if a promise is made for his benefit.

Example - A promised B that he will give Rs. 1000 to C. If A does not give this money to C, only B can demand the performance, C cannot do so inspite of being beneficiary under the contract.

(2) Legal representative(s) of the promisee - When a promisee dies, his legal representative(s) steps in to his shoes. And where personal skill or volition (i.e. choice) is not involved in a contract, the legal representatives of the deceased promisee can demand performance of the contract.

Example - A promised to buy 100 Kg. of rice from B for Rs. 25 per Kg. B died before the contract could be performed. In this case, legal representatives of B can demand performance from A.

9.6 TIME AND PLACE FOR PERFORMANCE

Rules as to time and place for performance - The rules regarding time and place of performance of a promise are contained in sections 46 to 50, and section 55 of the Indian Contract Act, 1872. These are discussed below:

(1) Where no time is specified and no application is to be made - Section 46 of the Act provides that, "Where, by the contract, a promisor is to perform his promise without application by the promisee, and no time for performance is specified, the engagement must be performed within a reasonable time."

'Application by the promisee' means that a promisee has to apply to or call upon the promisor to perform the promise.

Thus where a contract does not specify any time for its performance, and the promisee is not supposed to ask for performance, the contract must be performed within a reasonable time. What is '*reasonable time*' is a question of fact in each case.

Example - M agreed to discharge a debt of S towards a third party, failing which he was to pay such damages as S might have sustained. No time was fixed for performance. Three years lapsed and M did not perform since then. Here, three years was sufficient and reasonable time for performance of this contract, and M is liable to pay damages to S.

(2) Where time is specified but no application has to be made- Section 47 of the Indian Contract Act, 1872, provides that, "When a promise is to be performed on a certain day, and the promisor has undertaken to perform it without application by the promisee, the promisor may perform it at any time during the usual hours of the business on such day and at the place at which the promise ought to be performed."

When the day for performance is specified in the contract, and the promisor himself has to perform the promise without being asked by the promisee, the promise may be performed during the usual hours of business on the specified day.

Example - A promised to deliver goods at B's warehouse on 1st February. On that day A brings the goods to B's warehouse after usual hours of closing it. Thus goods

could not be received by B. Here A has not performed his promise as the goods were not delivered during the usual hours of business.

(3) Where the time is specified and application is to be made - Section 48 of the Indian Contract Act, 1872, provides that, "When a promise is to be performed on a certain day, and promisor has not undertaken to perform it without application by the promisee, it is the duty of the promisee to apply for the performance at a proper place and within the usual hours of business."

Sometimes, the day for performance is specified in the contract and the promisor has to perform it only on being asked by the promisee. In such cases, the promisee must make a demand for the performance to the promisor at proper time and place, and within usual hours of business.

The term '*proper time and place*' is a question of fact in each particular case. Example - A promised to deliver 100 tins of ghee on a fixed date. B agreed to specify later on the place and time for delivery of tins. In this case, it is duty of B to inform A about the time and place of delivery.

(4) Where no place is specified and no application is to be made - Section 49 of the Act provides that, "When a promise is to be performed without application by the promisee, and no place is fixed for the performance of it, it is the duty of the promisor to apply to the promisee to appoint a reasonable place for the performance of the promise, and to perform it at such place."

When no place is fixed for the performance and the promisor himself has to perform the contract without being asked to do so, he must first apply to the promisee to appoint a reasonable place for performance. Thereafter he should perform at the place so appointed.

Example- A agreed to supply 100 bags of rice to B on a certain day, but no place was fixed for the delivery. In this case, A must ask B for the place of delivery, and supply the rice at the place so decided.

The rule given in section 49 applies only when no place is fixed for the performance. Where the place is fixed either expressly or by implication, the rule mentioned in Section 49 has no application.

(5) Where manner and time for performance is prescribed by the promisee - Section 50 of the Indian Contract Act, 1872, provides that, "The performance of any promise may be made in any manner, or at any time which the promisee prescribes or sanctions."

Examples:

1. B owed A Rs. 2000. A told B that he should deposit this money directly to his bank account in 'X' bank. B deposited money to this account of A. Before A came to know about the transfer, the bank failed. In this case, the payment made by B is a good payment, and A cannot demand the payment again.
2. A owed B Rs. 5000. B desired A to send him a cheque for Rs. 5000 by post. Accordingly A drew a cheque in favour of B and posted the same to his address. In this case the debt is discharged as soon as the envelope containing the cheque is posted by A.

9.6.1 Effect of Failure to Perform in Time

The parties to a contract may stipulate that the contract is to be performed within a certain period or time. If one party fails to perform his obligation within such stipulated time, the question may arise - can the other party to the contract rescind the contract on this ground? The answer to this question will depend upon whether 'the time was the essence of the contract'. If time is essence of the contract, the other party can avoid it for its non-performance within that time, otherwise the contract cannot be avoided on this ground.

How to determine whether time is essence of contract - When it is stipulated expressly that time is essence of the contract, there remains no ambiguity about it. But, mere fact that a certain time is stipulated in the contract for its performance does not necessarily make time an essence of the contract. Whether time, in fact, is of essence of a contract or not depends upon:

- (i) The terms of the contract
- (ii) The intention of the parties, which can be gathered from:
 - (a) surrounding circumstances,
 - (b) nature of the subject matter of contract,
 - (c) construction of the contract.
- (iii) The object which the parties had in mind while entering into the contract.

Some well settled presumptions as to the importance of time according to the nature of a contract are discussed below.

In mercantile transactions, stipulations as to time of giving or taking delivery of goods are presumed to be of essence, but stipulations as to time of paying the price of the goods is not deemed to be of essence of a contract.

In contracts of sale of immovable property time is not generally of the essence of a contract. But where circumstances show that time was essence of the contract, e.g., where the sale of immovable property specifically was for the purpose 'of a marriage to take place on a certain date, time is of essence to the contract.

Renewal of lease is something different from the sale of immovable property. Here time is considered as of essence to the contract.

Example - C, the lessee of a petrol pump had to apply for the renewal of the lease within a time fixed by the contract. He was late by 10 days in his application for renewal. The landlord refused to renew. The court held that the renewal of lease is a privilege and it must be obtained strictly within the time limited for the purpose. Thus the lessor was not bound to renew the lease.

(1) Effect of failure to perform in a fixed time when time is essence of contract - In such cases, the contract becomes voidable at the option of the promisee. If he choose to rescind the contract, the contract comes to an end, and he can sue for the damages. If he choose to accept the performance at any time other than agreed time, there may be two possible circumstances:

- (i) He accepts the performance without any objection. Here he cannot claim compensation for any loss caused to him by such non-performance in time.
- (ii) He accepts the performance but at the time of such acceptance, he gives a notice to the promisor that he is going to claim compensation for the damages he has sustained because of his non-performance in time.

Example - C, who carried on import business contracted with B to supply certain quantity of Italian cotton. The shipment was to take place in October or November, where date of shipment was subject to import license, and hence was not

guaranteed. Subsequently, a part of goods could not be supplied within time mentioned. The buyer wanted to avoid the contract on this ground. The court held that 'in spite of the remark that shipment date was not guaranteed, time was of the essence and the buyer was entitled to avoid the contract'.

(2) Effect of failure to perform when time is not essence of the contract- In such cases, the contract does not become voidable at the option of the promisee. However, he has a right to receive compensation from the other defaulting party for any loss caused to him by the delayed performance.

Example - A singer agreed to perform at a theatre for a certain reason and to be present at least six days before the commencement of this engagement. But he reported only two days before. The theatre owner sought to put an end to the contract. Here, this delay was not affecting the substance of the contract. Hence the contract could not be put to an end. However, the theatre owner was allowed to recover compensation for any loss suffered by him due to such delay.

Note: It may be noted that the promisor should not delay the performance beyond a reasonable time even when the time is not of essence to the contract, otherwise the contract will become voidable at the option of the promisee.

9.7 JOINT PROMISES

What is a joint promise - Where more than one person constitutes a single party to a contract, the promise under the contract is considered as a joint promise. It may take any of the following forms:

- (i) Several joint promisors make a promise with a single promisee, e.g., A, B and C jointly promise to pay Rs. 9,000 to D.
- (ii) A single promisor make a promise with several joint promisee, e.g., A promises to pay Rs. 9,000 to Band C jointly.
- (iii) Several joint promisors make a promise with several joint promisee, e.g., A, B and C jointly promise to pay Rs. 9,000 to D and E.

9.7.1 Who can demand performance of joint promises

Section 45 of the Indian Contract Act, 1872, provides that, "when a person has made a promise to two or more persons jointly, then unless a contrary intention appears from the contract, the right to claim performance rests, as between him and them, with them during their joint lives, and after the death of any of them, with the representative of such deceased person jointly with the survivor or survivors, and, after the death of last survivor, with the representatives of all jointly."

Thus the right to demand performance lies with the promises jointly. In case a promisee dies, his legal representative will step into his shoes.

Example - A in consideration of Rs. 5,000 lent to him by Band C, promises to repay them within a certain time. In this case, following alternate circumstances may be considered:

- (i) When Band C both are alive, they can demand the performance jointly.
- (ii) When B dies, his legal representative Q can demand the performance with C jointly.
- (iii) When C also dies, his legal representative and B's representative Q both can demand the performance jointly.

It may be inferred from the above that in case of joint promises, even a single promisee should not be left out while demanding performance. There is an exception to this rule.

In the case of a debt due to a partnership firm, if a partner dies, the surviving partners can sue to recover it without joining the heirs of the deceased partner.

9.7.2 Who should perform a joint promise?

When one person makes a promise, it is his responsibility to perform it. But when two or more persons jointly make a promise, a question arise as to who is responsible to perform it.

(1) All promisors must jointly fulfill the promise- Section 42 of the Indian Contract Act, 1872, provides that, .When two or more persons have made a joint promise, then, unless a contrary intention appears by the contract, all such persons, during their

joint lives, and after the death of any of them, his representative jointly with the survivor or survivors, and after the death of the last survivor, the representatives of all jointly, must fulfil the promise."

Thus joint promisors, during their lives must fulfill the promise jointly. If any of them dies, his representative must jointly with the surviving promisors, fulfil the promise and soon.

Example - A, B and C jointly promise to pay Rs. 6,000 to D. Here A, B and C must jointly perform the promise. If A, dies before performance, his legal representative must jointly with B and C perform the promise, and so on. In case all three (A, B and C) die before performance, the legal representatives of all of them must perform it jointly.

However, if the parties expressly or impliedly prescribe a different rule in the agreement, then the above rule will not apply.

Example- A, B and C jointly promise to pay Rs. 6,000 to D. They agree that in case of death of any of the joint promisors, only the survivor would be liable for the performance. In this case, if A dies, only B and C would be liable for the performance.

(2) Anyone of the joint promisors may be compelled to perform - Para one of section 43 of the Indian Contract Act, 1872, provides that, "When two or more persons make a joint promise, the promisee may, in the absence of express agreement to the contrary, compel anyone or more of such joint promisors to perform the whole of the promise:

Thus the liability of joint promisors is joint and several as against the promisee, unless there is a contract to the contrary.

Example - A, B and C jointly promise to pay Rs. 9,000 to D. Here D may compel either A or B or C or all of any two of them to pay the agreed sum.

Notes:

1. When a promisor has a number of heirs, the liability necessarily falls collectively on them. For example, suppose A dies and P and Q inherit his property. In this case, performance can be demanded from both of them (in place of A) jointly, as none of them is individually

liable. They are not joint promisors, they are co-heirs.

- 2. If a promisee choose anyone promisor to claim performance of the contract, and gets a decree against him but even after that fails to realise the full amount, he can bring a second suit against the other co-promisors for the balance, say in the above example, if D gets a decree against B but could realise only Rs. 5,000, he can bring a suit on A or C or A and C, for rest of Rs. 4,000.*

9.7.3 Rights and Liabilities Amongst Joint Promisors

Joint promisors are liable to perform their promise jointly. In case any of them performs more than his share of obligation, he has right over the others and others are liable to him according to their respective obligations.

(1) Joint promisors are liable to contribute equally - Para two of section 43 of the Indian Contract Act, 1872, provides that, "Each of two or more joint promisors may compel every other joint promisor to contribute equally with himself to the performance of the promise, unless a contrary intention appears from the contract."

Thus, if one joint promisor is made liable to perform the whole promise, he may recover equal contribution from the others, provided they have not agreed differently on this issue.

Example - A, B and C jointly promised pay Rs. 9,000 to D. D filed a suit against A, and recovered Rs. 9,000 from him. Now A can claim Rs. 3,000 each from B and C.

(2) Joint promisors liable to share losses equally - Para three of section 43 of the Indian Contract Act, 1872, provides that, "If anyone of the two or more joint promisors makes default in such contribution, the remaining joint promisors must bear the loss arising from such default in equal shares."

Thus if any of the joint promisors make a default in his contribution to the joint liability, the remaining joint promisors must bear the deficiency in equal shares.

Example - Considering the above example, C is liable to pay Rs. 3,000 as his contribution. If his estate is not able to pay more than Rs. 1,500, in this case the deficiency of Rs. 1,500 (3000 - 1500) will be shared by A and B equally. Thus the contribution of A, B and C will be Rs. 3,750, Rs. 3,750 and Rs. 1,500 respectively.

(3) The contribution rule does not apply to principal debtor and surety - Explanation to section 43 of the Indian Contract Act, 1872, provides that, "Nothing in this section shall prevent a surety from recovering from his principal, payments made by the surety on behalf of the principal, or entitle the principal to recover anything from the surety on account of payments made by the principal."

When a creditor ask the principal debtor to furnish a surety for repayment of the loan, the principal debtor and surety are considered as joint promisors to the creditor. But the above rule of contribution does not apply to a surety and principal debtor even though they are joint promisors.

In such a case, legal position is that the creditor can recover entire amount of loan either from principal debtor or surety:

- *when he recovers the loan from surety, surety can in turn recover the whole amount from the principal debtor, and*
- *when he recovers the loan from the principal debtor, he cannot claim anything from the surety.*

Example - A takes a loan of Rs. 1 lakh from 'X' Bank where B stands as a surety to the bank for repayment of loan by A. A fails to repay the loan. 'X' sue B and recovers the money from him. Here B in turn can recover Rs. 1 lakh from A because principal liability falls upon A only.

(4) Effect of release of one of the joint promisors by the promisee - Section 44 of the Indian Contract Act, 1872, provides that, "Where two or more persons have made joint promise, a release of one such joint promisors by the promisee does not discharge the other joint promisor or joint promisors; neither does it free the joint promisor so released from responsibility to the other joint promisor or joint promisors."

Thus when a promisee release one of the joint promisors from the liability, it does not release the other joint promisors from their responsibility to perform. And the released joint promisor remains liable to the other joint promisors.

Example - A, B and C promised to pay Rs. 9,000 to D. D released A from liability. Here Band C remain liable to pay the entire amount of Rs. 9,000 to D. However, A is

liable to make his contribution (Rs. 3,000) to B and C.

9.8 RECIPROCAL PROMISES

What is reciprocal promise - When one party gives a promise in consideration of other party's promise, both the promises are called reciprocal promises.

Section 2(t) of the Indian Contract Act, 1872, provides that, "Promises which form the consideration or part of consideration for each other are called reciprocal promises."

Reciprocal promises may take any of the following forms:

- (i) Mutual and concurrent promises - Where parties have to perform their promises simultaneously at the same time.

Example - A agrees to sell a car of Rs. 1 lakh, price to be paid on delivery. The promise is mutual and concurrent.

- (ii) Conditional and dependent promises- Where the performance of a promise by one party depends upon the prior performance by the other party.

Example - A agrees to construct a bungalow for B. B agrees to supply cement required for building the bungalow. Here performance of A needs prior performance by B. The promises are conditional and dependent.

- (iii) Mutual and independent promises - Where one party has to perform his promise independently without waiting for the performance or willingness to perform at the end of other party.

Example - A agrees to sell a car and delivers it to B on 1st June, 1998, while B agrees to pay Rs. 1 lakh for it on 15th June, 1998. The promises are mutual and independent.

9.8.1 Rules regarding performance of reciprocal promises

(1) Performance of 'Mutual and concurrent' promises - Section 51 of the Indian Contract Act, 1872, provides that, "When a contract consist of reciprocal promises to be simultaneously performed. no promisor needs to perform his promise unless the promisee is ready and willing to perform his reciprocal promise."

Thus a promisor is not bound to perform unless the promisee is ready and willing to perform.

Example - A and B entered into a contract that A shall deliver goods to B at a price to be paid by instalments, the first instalment to be paid on delivery.

A need not deliver the goods unless B is ready and willing to pay first installment on delivery.

B need not pay the first installment unless A is ready and willing to deliver the goods on payment of first installment.

Note: What constitutes 'readiness and willingness to perform' depends upon the nature of transaction and facts of each case.

(2) Performance of 'conditional and dependent' promises - Section 54 of the Indian Contract Act, 1872, provides that, "When a contract consists of reciprocal promises, such that one of them cannot be performed or that its performance cannot be claimed till the other has performed, and the promisor of the promise last mentioned fails to perform it, such promisor cannot claim the performance of the reciprocal promise and must make compensation to the other party to the contract for any loss which such other party may sustain by the non-performance of the contract."

Thus when a party who is to perform first, fails to perform his part of promise, not only the other party is discharged from the obligation of his respective performance, he is also entitled to claim damages for such non-performance.

Example - A hires B's ship to convey, from Calcutta to Mauritius, a cargo to be provided by A, in consideration, B receiving a certain freight for his conveyance. A does not provide any cargo for the ship. A cannot claim the performance of B's promise, and must make compensation to B for the loss which B sustains by the non-performance of the contract.

(3) Performance of 'mutual and independent promises' - These are to be performed by each party without waiting for the other to perform his promise. In case of default by any party, the other party can recover damages from the defaulting party, but any party cannot excuse himself from his performance.

Example - A and B contracted for sale of a desert cooler. A was to pay price on 1st June, 1998, and B was to deliver cooler on 15th June, 1998. A failed to pay price on 1st June. In this case, B cannot refuse to deliver the cooler on 15th June. However, he can file a suit against A for recovery of the price and damages.

(4) Liability of the party preventing the other to perform his obligation - Section 53 of the Indian Contract Act, 1872, provides that, "When a contract contains reciprocal promises, and one party to the contract prevents the other from performing his promise, the contract becomes voidable at the option of the party so prevented; and he is entitled to compensation from the other party for any loss which he may sustain in consequence of the non- performance of the contract."

Thus if a party is prevented from performance by the other party to the contract, the prevented party has an option to avoid the contract and claim compensation from the latter. The rule is that - no man can complain of other's failure to do something which he has himself prevented the other from doing or performing. The principle is not confined to the acts of direct or forcible prevention, but extends to default or neglect in doing or providing anything without which the other party cannot perform his part.

Example - B contracted A to clear waste rock from B's mine within two years. The crusher for the purpose was to be supplied by B. The crusher supplied was so inadequate that the work had to be stopped. A recovered damages from B for the expenses which he incurred in preparing for the work, and for the loss of profit he would have otherwise made by supplying crushed stone to the third party.

Notes:

- 1. Under this provision, the prevented party has an option to avoid the contract. If the party does not choose to avoid the contract, all the parties are left with their rights and liabilities as before.*
- 2. Prevention in performance by third party does not confer any right to prevented party under this provision.*

(5) Order of performance of reciprocal promises - Section 52 of the Indian Contract Act, 1872, provides that, "Where the order in which reciprocal promises are to be performed is expressly fixed by the contract, they shall be performed in that order;

and, where the order is not expressly fixed by the contract, they shall be performed in that order which the nature of the transaction requires:

If a contract expressly states the order of performance, that would govern the matter; if a contract is silent, one has to look to the nature of transaction in order to decide the order of performance. In the latter event, the court may look to the usual practice in the market also.

Subsequent conduct of the parties may not throw any light on the order in which the promises are to be performed.

Examples:

1. A and B contract that A shall build a house for B at a fixed price. Here the nature of contract is such that A's promise to build the house must be performed before B pays for it.
2. A and B contract that A shall sell his stock in trade to B at a fixed price, and B promises to give security for the payment of money. A need not perform it until the security is given, for the nature of transaction requires that A should have security for the price before he delivers the stock.

(6) Legal and illegal reciprocal promises- Section 57 of the Indian Contract Act, 1872, provides that, "Where persons reciprocally promise, firstly, to do certain things which are legal. and, secondly, to do certain other things which are illegal. the first set of promises is a contract, but the second is void agreement.

Example - A and B agrees that A shall sell B a house for Rs. 10,000, but that, if B uses it as a gambling house, he shall pay A Rs. 50,000 for it. The first set of reciprocal promises, namely, to sell the house and to pay Rs. 10,000 for it, is a contract. The second set is for an unlawful object, namely that B may use the house as a gambling house, and is a void agreement.

This section applies only where there are two distinct severable set of promises, one legal and other illegal. If the parties treat both the kind of transactions as an indivisible whole, the court will regard them as not severable and so avoid the whole.

9.9 APPROPRIATION OF PAYMENTS

When a debtor owing several distinct debts to one person, makes a payment, which is not sufficient to discharge all the debts, the question arises to which particular debt the payment is to be applied. The Act in sections 59 to 61 lays down the underlying principles.

(1) Where debtor expressly indicates the debts to be discharged - Section 59 of the Indian Contract Act, 1872, provides that, "Where a debtor owing several distinct debts to one person, makes a payment to him, either with express intimation, or under circumstances implying that the payment is to be applied to the discharge of some particular debt, the payment, if accepted must be applied accordingly."

Appropriation is the right given to the debtor for his benefit. Thus where debtor states that his payment should be applied towards a particular debt, it has to be appropriated to that debt only. If there is no express intimation, the law will gather his intention from the circumstances.

Examples:

1. A owed to B Rs. 10,000 borrowed on 1st January, and Rs. 5,000 borrowed on 1st March. He paid Rs. 5,000 to B expressly intimating that he is repaying the second debt. Thus this payment can be appropriated towards the debt made on 1st March. Note: The express intimation must be at the time of payment, and not subsequently.
2. A owes B, among other debts, 1,000 rupees upon a promissory note, which falls due on the 1st June. On the 1st June A pays to B Rs. 1,000. The circumstances make it clear that the payment should be applied to discharge the promissory note.

(2) Where the debt to be discharged is not indicated - Section 60 of the Indian Contract Act, 1872, provides that, "Where the debtor has omitted to intimate and there are no other circumstances indicating to which debt the payment is to be applied, the creditor may apply it at his discretion to any lawful debt actually due and payable to him from the debtor, whether its recovery is or is not barred by the law in force for the time being as to the limitation of suits."

When debtor does not specify the debt to be appropriated, the right of appropriation devolves upon creditor. The creditor would like to adjust the payment, which is not likely to be recovered. The law has given a privilege to him to appropriate the payments towards the debts, which have become time barred.

Example - A owed several debts to B. Among them, there was a debt amounting to Rs. 5,000 which became time barred (i.e., time limit to sue for recovery of debt was expired). A paid Rs. 10,000 to B without specifying anything. B has a right to appropriate Rs. 5,000 towards the time barred debt, and rest Rs. 5,000 towards other debts as per his discretion.

(3) Where neither party makes an appropriation - Section 61 of the Indian Contract Act, 1872, provides that, "Where neither party makes any appropriation, the payment shall be applied in discharge of the debts in order of time, whether they are or are not barred by the law in force for the time being as to the limitation of suits. If the debts are of equal standing, the payments shall be applied in discharge of each proportionately." When debtor and creditor do not use their discretion to specify appropriation, law requires the payment to be adjusted in discharge of the earlier debts first. If there are several debts on the same date, the payment shall be adjusted against each proportionately.

Example- A owed three debts to B of Rs. 1,000, Rs. 2,000 and Rs. 3,000 taken on 1st March, 1st April and 1st May, respectively. On 1st July A paid Rs. 2,000 to B. In the absence of any specification, this payment will be adjusted as Rs. 1,000 towards 1st debt of Rs. 1,000, and Rs. 1,000 towards second debt of Rs. 2,000.

Principal and interest - Where there is a debt carrying interest, money paid and received without any definite appropriation is to be first applied in payment of interest. If a debtor specifies that the money should be appropriated towards principal first, the creditor need not accept the payment on such terms. But once he accepts the payment, he will have to appropriate according to debtor's direction, whatever they are.

Conclusions - From the above discussion, following conclusions may be drawn :

1. The debtor has, at the time of payment, first right of appropriating the payment.

2. If he fails, then, the option is now given to the creditor to elect the appropriation.
3. But when both the parties fail to appropriate, the law will appropriate in order of time.

9.10 ASSIGNMENT OF A CONTRACT

Assignment means transfer of contractual rights and liability by a party to the contract to some other person who is not a party.

R, a manufacturer and seller of 'Metal Sheets', enters into a contract with S. Under their agreement, R delivers 10,000 tons of Metal Sheets, and S is yet to make payment of contract price worth Rs. 10 lakh.

Suppose R discovers that he needs money right away in order to pay for some raw materials. He may consider either selling his 'contract right to collect Rs. 10 lakh' from S or using the right as security for a loan. In either case, R's transfer of his right is called 'assignment', R himself is called the 'assignor', and the person to whom the right is sold is called the 'assignee'. S is referred to as a 'promisor'.

Rules regarding assignment:

Indian Contract Act, 1872, does not contain any specific section dealing with the 'assignment of contracts'. However an inference can be made from some provisions, like section 37 which enables the parties to dispense with performance should also enable them to assign their contractual obligations, and section 40 which requires the performance of contract involving personal performance to be made by the promisor himself, by implication, excludes the right of 'assignment' of such contracts. The rules settled in this regard, on the basis of English Law, and the past judicial decisions are discussed below:

1. Contracts involving personal skill, ability, credit or other personal qualifications cannot be assigned, like a contract to marry, or a contract to paint a picture, or a contract to sing.
2. The rights and benefits under a contract (not involving personal skill etc.) can be assigned.

3. An obligation or burden under a contract cannot be transferred to a third party. The promisor may have contracted with a particular person by reason of personal confidence which he reposed in him, and, therefore, he can object to the contract being performed by some other person. But when the promisor gives consent to such assignment by the other, it binds him to accept the performance from the assignee.

Examples:

- (i) A owed Rs. 5,000 to B. Here A cannot assign his liability to C, and enforce B to recover his debt from C. However, if B agrees to accept C as his debtor in place of A, the liability shall stand transferred from A to C.

- (ii) D agreed to take from S, a carriage for 5 years. At the end of 3 years, S assigned his business together with the D's contract to R. On learning of the assignment, D refused to abide his contract and returned the carriage. Here, D was entitled to do so because S could not compel D to look to R for the further performance of the contract.

4. An '*actionable claim*' can be assigned, provided it is made in writing. In such a case, it is advisable for assignee to give notice of such assignment to the debtor. Such a notice is useful from several points of view:

- (i) It binds the debtor.
(ii) In the absence of notice, the debtor can make payment to the assignor himself which shall amount to a good discharge to him.
(iii) When assignor makes more than one assignment of the same claim, the assignee giving notice first, shall have priority over the others.

What is an actionable claim - It is a personal right of property which can only be claimed or enforced by action and not by taking physical possession. A money debt, shares in a company, right of action arising out of a contract, book debts, and an option to repurchase property sold are all examples of actionable claims. It is also known as '*choses in action*'. It can be differentiated from a right to physical possession which is known as '*choses in possession*'.

'Choses in action' and 'Choses in possession' differentiated - Sir John Salmond has given an illustration to differentiate the two, which is as follows. Supposing A has Rs. 10 note

in his pocket and a person forcibly removes it, A has a right to immediately catch the thief and to recover the note from that individual. This is 'choses in possession'. If, on the other hand, A has lent Rs. 10 to B, who has been evading the payment for a long time and A finds B with a note of Rs. 10 in his pocket. Can A forcibly take one of these notes? The answer is 'No'. The only right which A has is to go to a court of law, obtain a decree, arrest the person, or attach the property of B and try to recover the money. Here also A has right to Rs. 10 note, but it is 'choses in action' and not 'choses in possession'.

5. An assignment requires some consideration between the assignor and the assignee. In the absence of any consideration between them, the assignment will be revocable by the assignor. But when an assignment made as a gift has been completed by fulfilling essential formalities, it cannot be revoked.
6. Assignment of contracts may occur: (a) by act of parties, or (b) by operation of law. When it occurs by operation of law, it may be by insolvency of a person, where his rights and liabilities pass to an official assignee or official receiver as the case may be.

Part - 10

Discharge Of Contract

STRUCTURE OF PART - 10

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10.1 OBJECTIVE

After reading this Chapter you should be able to understand:

- What are the various modes in which a contract can be discharged.
- Concept of doctrine of supervening impossibility
- Concept of anticipatory breach

10.2 DISCHARGE BY PERFORMANCE

A contract is discharged when parties to it perform their respective obligations under it. The performance may be actual or attempted. This has already been discussed in detail in the previous Unit.

10.3 DISCHARGE BY IMPOSSIBILITY OF PERFORMANCE

When performance of a contract becomes impossible due to factors beyond the control of parties, the contract stands discharged. Section 56 of the Indian Contract Act, 1872, deals with the contracts which are impossible to perform, under two different circumstances:

1. Where impossibility is existent at the time of making contract.
2. Where impossibility arises subsequently after the formation of contract.

10.3.1 Where Impossibility is Existent at the Time of Making Contract

When an agreement is made which is impossible to perform, it is void from its very inception. Such agreement does not come into existence as a contract. Thus there is no question of discharge of a contract, which never existed. Following are various alternative situations in this context.

1. Fact of impossibility known to parties - When a contract is entered into for performance of an act impossible in itself, like a contract to discover a treasure by magic, such contract is void.
2. Fact of impossibility known to one party - When a contract is entered into by a person to perform an act knowing that it is impossible, and the other party is not

aware of such fact, the contract is void. However, in such a case, if the latter party sustains any loss because of non-performance of the contract, former party would be liable to make compensation to him.

Example - A contracts to marry B while he is already married to C, and being forbidden by law from second marriage. Here although the contract does not give rise to any contractual obligation because it was not possible to be performed when it was made, but A is liable to make compensation to B for non-performance of the promise.

3. Fact of impossibility unknown to the parties - When both the parties are ignorant of the impossibility of performance at the time of contract, the contract is void for mutual mistake. For example, A, not knowing that his horse is dead, contracts to sell it to B. The contract is void.

10.3.2 Where impossibility arises subsequently after the formation of contract

Sometimes the performance of a contract is possible when it is made by parties. But some event subsequently happens which renders its performance impossible or unlawful. In either case the contract becomes void. A contract gets discharged from the moment it becomes void.

Para 2 of section 56 of the Indian Contract Act, 1872, provides that, "A contract to do an act which, after the contract is made, becomes impossible, or, by reason of some event which the promisor could not prevent, becomes void when the act becomes impossible, or unlawful"

Thus a contract becomes void on the ground of subsequent impossibility only if the following conditions are satisfied:

1. The act should have become impossible, or unlawful.
2. The impossibility should have been caused by the circumstances beyond the control of the parties.
3. The impossibility should not be self-induced.

10.3.3 Factors causing impossibility to performance

Various factors that can render performance impossible are discussed below:

(1) Destruction of the subject matter - A common instance of impossibility occurs when something that is necessary to the promisor's performance is destroyed and cannot be replaced. For example, if a farmer promises to deliver tomatoes that are to be grown on a particular farm, destruction of the crop though no fault of the farmer will excuse its performance.

Example - C agreed to let out a music hall to T for a series of concerts. The hall was destroyed by fire before the date of first concert. Now T could not perform his concerts and sued C for breach of contract. Here, both parties were freed from their contractual obligations because the contract became void due to impossibility of performance.

Where only a part of subject matter of contract is destroyed, it does not absolve the promisor from performance of the contract, in respect of the subject matter, which has not been destroyed.

Example - A, a farmer promises to deliver B, 1 Lac Kg. of tomatoes that are to be grown on his farm. Part of the crop gets destroyed, and he could get only 10,000 Kg. of tomatoes from his farm. He sells these tomatoes to C at a higher price. Here A was bound to deliver 10,000 Kg. of tomatoes to B at contract price. B is entitled to sue A to claim damages for not selling him whatever tomato crop A had.

(2) Failure of the ultimate purpose- Where the ultimate purpose for which the contract is entered into fails, the contract becomes void.

(3) Death or personal incapacity of the promisor- If personal performance is required under the contract, it is excused by the serious illness or death of the promisor.

Examples:

1. A and B contract to marry each other. Before the time fixed for marriage, A goes mad. The contract becomes void.

2. An artist undertook to sing at a theatre on a particular day. But the artist being too ill could not sing on the day fixed for performance. Here, the contract was discharged due to personal incapacity of the artist, thus he was not liable to pay damages for non-performance.

(4) A change in law, or government policy rendering further performance illegal -

Another common situation in which performance becomes impossible occurs when, after a contract is formed, a law or regulation is adopted that makes performance illegal.

Examples:

1. An agreement was entered into between D and J relating to the sale and purchase of timber, which involved its import also. Subsequently the State declared import of timber illegal. Here, the whole contract had been discharged by the subsequent change in the law rendering the import of timber illegal.
2. A agreed to sell his land to B. Subsequently, that land was acquired by the Government, and A ceased to be owner of the land. Here, the contract was discharged because it was no more possible for A to sell that land.

(5) Outbreak of war - A contract entered into with an alien enemy during war is void ab initio. A contract entered into before the outbreak of war, gets suspended during the war, and can be revived after the war, provided it does not become time barred. Creation of contract with an alien enemy during the war does not give rise to any contractual rights at all.

Example - An Indian firm entered into a contract with a Chinese firm to export 1 Lac Kg. of groundnuts. Before its execution could take place, China declared a war on India. The agreement became void and could not be executed. The parties are discharged from their respective obligations under the contract.

Some points to be noted:

1. If war is declared between the country of one of the parties to the contract and a third country, the contract remains binding.

2. Sometimes a party is guilty of delay in performing the contract, and the war is declared in the meantime, on such cases, the guilty party cannot avoid his liability under the contract on the ground of doctrine of supervening impossibility.

10.3.4 Effect of doctrine of supervening impossibility

When an untoward event occurs making performance of a contract impossible or unlawful-

1. The contract becomes void and stands discharged.
2. Where one contracting party has obtained a valuable benefit before the time of discharge by reason of anything done in performance of the contract by the other party, there shall be recoverable from the party so benefited such sum as the court considers just. Section 65 of the Indian Contract Act supports this view.

10.3.5 Non-Applicability of the Doctrine of Supervening Impossibility-

We have discussed above various factors, which makes performance of a contract impossible or unlawful, and discharge the parties from their contractual obligations. At times it happens that although the performance of a contract does not become absolutely impossible, it becomes more risky, burdensome, unprofitable or difficult. The contracting parties often try to take excuse of supervening impossibility to avoid performance of such contracts, but law denies the same. The circumstances where excuse of impossibility of performance is not acceded by law are discussed below.

(1) Difficulty in performance - The events that make the contract extremely more difficult but not impossible, are not accepted as an excuse for non-performance.

Example - A agreed to sell B 300 tons of Sudan groundnuts at Hamburg. The usual sea route at the time of contract was via Suez Canal. Subsequently the State closed Suez Canal to traffic. The other reasonable route was Cape Town, which was comparatively very expensive. A refused to sell the groundnuts on the ground that the performance has become impossible due to closure of Suez Canal. Here, A was bound to ship the groundnuts because the availability of an alternative route makes the performance possible. The only difference is that it is more expensive.

(2) Commercial hardships - A party is not discharged from the performance of the contract simply because some non-contemplated event has made the performance burdensome or non-profitable to him. For example, abnormal rise or fall in prices, a sudden depreciation of currency, an unexpected obstacle to the performance, etc.

Example - A agreed to supply certain goods to B. Due to the outbreak of war, there was a sharp increase in the price of the goods. In this case, A is not discharged from his liability to supply the goods at the price decided in the contract.

(3) Impossibility due to conduct of a third person - Impossibility created by the failure of a third person on whose work the promisor relied cannot become a ground to excuse performance.

Example - A agreed to sell B, 61 bales of cloth to be manufactured by 'X Mills' as soon as they are supplied to him by the 'X Mills'. Goods were not supplied by X Mills, and A did not supply the same to B. Here, the performance of A is not excused because of failure of supply by X Mills. The clause as soon as they are supplied to him in the contract simply indicate the process of delivery, it does not show the intention to make the contract contingent upon such supply B can recover damages from A for nonperformance.

(4) Strikes and lock-outs - All such events do not discharge the contracts unless specifically provided by the parties. A strike by workmen is manageable (labour is available otherwise), and a lock out is self-induced.

Example - A agreed to repair certain machinery of B at a certain price. A failed to repair the machinery due to strike of the workmen. Here, the strike of workmen is not sufficient reason to excuse performance.

(5) Failure of one of the objects - We have discussed above that failure of ultimate purpose of a contract discharge the contract. But if a contract has several objects, failure of one of them does not discharge the contract.

Example - H agreed to hire from the B Co. a boat for the purpose of taking passengers from Herne Bay to watch the Royal Naval Review, and to cruise round the fleet. Owing to the King's illness, the review was cancelled, and H

decided not to continue with the proposed trip. Here, the contract was not discharged, the review was not the sole purpose of the contract, the fleet has remained in port and the cruise was still possible. The B Co., was, therefore entitled to the hiring fee.

10.4 DISCHARGE BY MUTUAL AGREEMENT

A contract is created by the parties to it. Therefore, it can also come to an end by their mutual agreement. The parties may make a new agreement that will discharge or modify the obligations of one or both parties under the original contract.

Section 62 of the Indian Contract Act, 1872, provides that, "If the parties to a contract agree to substitute a new contract for it, or to rescind or alter it, the original contract need not be performed."

This section provides three different modes of discharging original contract:

(i) Novation (ii) Alteration, and (iii) Recession.

Section 63 of Indian Contract Act, 1872, provides that, "Every promisee may dispense with or remit, wholly or in part of the performance of the promise made to him, or may extend the time for such performance, or may accept instead any satisfaction which he thinks fit."

This section provides for another two modes: ***(i) Remission, and (ii) Waiver.*** These modes of discharge of contract by mutual consent are discussed below.

10.4.1 Novation

Novation takes place when a new contract is substituted for an existing one. This new contract may be between same parties with new terms, or between new parties with old or new terms. The consideration for new contract is discharge of old contract. A valid novation discharges the old contract.

Examples -

1. A owes B Rs. 1,000. B owes C Rs. 1000. B asks A to credit C with Rs. 1000 in his books of account. Both A and C agree to it. A new contract between A and C is substituted in place of old contract between A and B. This is a novation contract between new parties on old terms.

2. A owes Rs. 10,000 to B. Subsequently A and B enters into an agreement where A gives a mortgage of his estate to B for Rs. 5,000 in place of debt of Rs. 10,000. This is a novation contract between old parties on new terms.

Consent of all parties is necessary for novation.

Example - A owes B Rs. 1000. B owes C Rs. 1000. B asks A to credit C with Rs. 1,000 in his books of account. A agrees but C does not give assent. Result is that no new contract is entered into.

Novation should take place before the breach or expiry of old contract.

Example - A agrees to supply rice to B on a particular day; A does not supply rice on that date and commits a breach. B goes to the court to claim damages. A offers B for novation of contract by replacing rice by wheat. Here the old contract is already over, there is no question of novating it. A fresh contract can be made but the old contract cannot be renewed.

To effect novation, new agreement must be valid and binding. If the new contract is not enforceable for any reasons, the old contract remains binding.

Example - A agrees to supply rice to B on a particular day. Before that date, A agreed to sell opium instead. Here new contract to sell opium is illegal and not enforceable. Thus novation will not be effected, and old contract to sell rice would be valid and subsisting.

10.4.2 Alteration

Alteration means change in one or more of the terms of a contract. When a contract is altered by the mutual consent of the parties to the contract, parties to the contract remaining same, a contract stands altered. A valid alteration discharges the original contract, and the parties become bound by the new contract (i.e., contract with altered terms).

Example - A enters into a contract with B to supply 100 bales of cotton on 9th August, 1998. Later on they mutually agree to postpone the date of supply to 17th August, 1998. This change amount to alteration of contract.

When a material alteration is made in a contract by one party without obtaining consent of the other, the parties are discharged from the original as well as altered contract. It is discussed further under the heading 'Discharge by operation of law:

10.4.3 Rescission

Rescission means cancellation. When a contract is rescinded, the obligations of both the parties are thereby discharged. Rescission may be express or may be inferred by the circumstances or conduct of the parties. It may occur in any of the following manners:

(1) When contracting parties mutually agree to rescind the contract.

Example - A agreed to teach painting to B. Subsequently he had to shift to another city. A and B mutually agreed not to give effect to their contract of teaching painting. Both of them got discharged from the contract.

(2) When one party fails in the performance of his obligations, the other party may rescind the contract without prejudice to his right to claim compensation for breach of contract.

Example - A agreed to supply goods to B on 9th August, 1998, for which B after receipt of goods would pay the price on 17th August, 1998. A failed to supply the goods. B may opt to rescind the contract and need not pay the price. On such recession, both the parties are discharged from contract, where aggrieved party retains right to claim damages suffered due to non-performance of the contract.

Note: A person breaking the contract cannot rescind it.

(3) When a person at whose option a contract is voidable, like when his free consent is vitiated, rescinds it.

Example - A induces B to enter into a contract by undue influence. Here law gives an option to B to rescind the contract. If he chooses to rescind the contract, both parties are discharged.

Note: An oral res cession agreement is generally binding, even where the original contract was in writing. There is an exception - A rescission contract must be in

writing if it involves retransfer of real property.

10.4.4 Remission

Remission means acceptance of lesser amount, or lesser degree of performance than what was contracted for in full discharge of the contract. This refers to a state of things prior to the date of performance.

Example - A owned large sums of money to B. C offered to pay a lesser sum in satisfaction of B's claim on A. B accepted it. Subsequently B went to the court to claim balance payment from A. Here, the acceptance by B was in full satisfaction and he cannot claim balance from A.

A remission need not be supported by consideration.

Example- A owes Rs. 5,000 to B. B agree to accept Rs. 2,000 in full satisfaction of his claim against A. This promise is enforceable although it is without consideration, and B cannot demand Rs. 5,000 from A.

A remission once made is irrevocable.

Example- A owes B Rs. 5,000 payable on 1st June. A is not in a position to meet his liability on the due date, and makes a request to B to extend the time for payment by three months. B accedes to A's request. The promise is binding and no suit can be instituted before the expiry of the extended period of credit although the promise is not supported by consideration.

Remission may be conditional- In such a case, the promisor is effectually released only on fulfillment of the condition; if the condition is not fulfilled; the creditor may enforce all his rights.

Example - A owed Rs. 10,000 to B. B offered to remit liability of A by Rs. 5,000 if A gives his house to C on rent. Here if A rents his house to C, then only the remission would be effected. Otherwise, the liability of A to repay will remain as before.

10.4.5 Waiver

Section 63 says that a person can 'dispense with' the performance of the other, Le., he

has a right to waive or abandon his right to demand performance under a contract. On waiver, the other party is discharged from the liability accruing from such abandoned right. To constitute a waiver, neither an agreement nor consideration is necessary.

Example - A promised to paint a picture for B. Afterwards, B forbade him to do so. Here B has waived his right to claim the performance from A. A is no longer liable to perform.

10.5 DISCHARGE BY LAPSE OF TIME

Every contract must be performed within the stipulated period of time or within a reasonable time according to the nature of the contract. If such time is lapsed, the contract is discharged.

In civil litigation, the obligations are barred by the Limitation Act. The Indian Limitation Act provides that if the performance under a contract is not demanded for three years, the promisor is discharged from his obligations.

Example- A sells goods to B for a certain price. A does not demand payment for the same. After the lapse of three years from the date of sale, A loses remedy to go in court and demand payment for the goods sold to B.

In case of contracts where time is essence of contract, non-performance of such contract within the time fixed, discharge the party which is not at fault from his obligations under the contract and gives him a right to sue the defaulting party for damages.

10.6 DISCHARGE BY OPERATION OF LAW

A contract is discharged by operation of law in the following cases:

(1) Death - In the contracts of personal nature, death discharges the contract.

Example - A agrees to paint a picture for B. A dies. The contract is discharged.

(2) Insolvency - When a person is declared insolvent by law, he is discharged from all the liabilities incurred prior to his such adjudication. Thus, an insolvent is discharged from performing his part of contract by law. His rights and liabilities are

transferred to an 'official assignee' appointed by the court.

Example - A borrowed Rs. 5,000 from B. Subsequently court declared him 'insolvent'. Now A is relieved from repaying Rs. 5,000 to B.

(3) Merger - When an inferior right accruing to a party under a contract merges into a superior right accruing to the same person, inferior right vanishes into the superior right. This is known as merger. In such a case, the obligation constituted by inferior right is discharged.

Example- A man holds property under a lease. Subsequently he buys that property. Now his right as a lessee vanishes. It is merged into the right of ownership, which he has now acquired.

(4) Unauthorized material alteration - When an alteration of a material term of contract is made by a party to the contract without the consent of the other party, both the parties are discharged from the contract by operation of law. The effect of such alteration would be same as cancellation of document.

Example - A contracted to sell his plot of 500 sq. m. to B for Rs. 1 Lac. The sale deed was executed accordingly. Before registration, A altered the deed and made it a deed for 300 sq. m. in place of 500 sq. m.. In this case, the contract is discharged.

A material alteration is one which changes the legal effect of the instrument or is one which alters its legal character or identity. An alteration is immaterial if it is merely correction of clerical errors or making explicit what was already expressed though not completely in the document. Thus, an immaterial alteration does not make any difference to the status of a contract.

10.7 DISCHARGE BY BREACH OF CONTRACT

The '*breach of contract*' means failure of a party to perform his obligations. When one party commits a breach, the aggrieved party becomes entitled to rescind the contract. It, therefore, operates as a mode of discharging a contract.

10.7.1 Actual Breach

Where one party fails to perform his contractual obligations on the due date of the

performance, or during the performance, he is said to have committed a breach of the contract. Sometimes, a party performs his obligations, but not strictly according to the contract, it is also an actual breach of contract.

Examples -

1. A promised to supply B 200 refrigerators on 9th August, 1998. A does not supply the refrigerators on 9th August, 1998. Here A failed to perform on the due date. He is guilty of breach of contract and B is the aggrieved party.
2. S, a seller on May 1 contracts to deliver a thousand gallons of crude oil to buyer B on August 15, and on that date S delivers only 200 gallons with no indication that the balance will be delivered shortly thereafter. Here S has defaulted during the performance. He has committed an actual breach of contract.

Note: There can be no actual breach of contract by reason of non-performance, so long as the time for performance is not yet arrived.

Effect of actual breach - When a party commits breach of contract, the aggrieved party can rescind the contract and sue for the damages.

When the defaulter party performs or offer to perform his contract promise at a date later then the due date, whether the delayed performance will constitute a breach of contract or not will depend upon whether time is essence of contract or not. In such a case, when time is essence of contract, the aggrieved party can rescind the contract and claim damages, and when time is not essence of the contract, the aggrieved party cannot rescind the contract, but is entitled to claim damages caused, by delayed performance.

Examples:

1. In the first example given above, B can avoid the contract, and claim from A, damages suffered by him because of non-delivery of 200 refrigerators. However, if A supplies the refrigerators on 10th August instead of 9th August, B cannot refuse to accept the same (here time is not essence of the contract). But he can claim compensation from A, if he has suffered any loss because of this delayed delivery.

2. In the second example given above, B can cancel the entire contract returning the oil already delivered, and sue S for damages he suffers because of such non-delivery of oil.

10.7.2 Anticipatory Breach

Section 39 of the Indian Contract Act, 1872, provides that, "When a party to a contract has refused to perform, or disabled himself from performing, his promise in its entirety, the promisee may put an end to the contract, unless he has signified, by words or conduct, his acquiescence in its continuance."

Thus, if one contracting party indicates to the other, before the arrival of time for performance, that he or she is not going to perform his or her part of bargain, an anticipatory breach has occurred. It may happen in two ways:

(1) Express breach by words spoken or written - Where a party to the contract communicates to the other party before the due date of performance about his intention not to perform it.

Example - In March, X contracts to put a sewer line for a city, work to commence by June 1. On April 10, X tells the city management that he will not do the job. It is an express anticipatory breach.

(2) Implied breach - Where a party, by his own voluntary acts disables himself from performing the contract.

Example - A agrees to marry B, but before the due date of marriage, she marries C. This is an anticipatory breach brought by the conduct of the party.

Effect of anticipatory breach - Effect of anticipatory breach can be summarized as under:

1. The aggrieved party may treat the anticipatory breach as actual breach. In this case, he is discharged from performance of his promise under the contract, and is entitled to claim damages from the defaulter party for non-performance of the contract. The party can bring a suit for breach of contract without waiting for the due date of performance.

2. The aggrieved party may decide to ignore the anticipatory breach, and opt to wait for the due date of performance. If a contracting party keeps the promise alive by ignoring anticipatory breach, and regards the contract as continuing, he runs the risk of contract being discharged in some other way prior to the date of performance.
3. Doctrine of anticipatory breach does not apply to promises to pay money debts, such as those found in promissory notes and bonds.

Part - 11

Remedies For Breach Of Contract

STRUCTURE OF PART - 11

- 11.1** Objective
- 11.2** Rescission of a Contract
 - 11.2.1** What is Rescission?
 - 11.2.2** Consequences of rescission
 - 11.2.3** Different Options to Avail Relief in Case of Rescission
- 11.3** Suit for Damages
 - 11.3.1** Kinds of Damages and Rules to Assess Their Quantum
 - 11.3.2** Measuring interest damages
 - 11.3.3** Other relevant provisions
- 11.4** Suit for Specific Performance
- 11.5** Suit for an Injunction
- 11.6** Suit upon 'Quantum Meruit' and 'Restitution'
 - 11.6.1** 'Quantum Meruit'
 - 11.6.2** Restitution
 - 11.6.3** Generalisations Based upon the Doctrine of 'Quantum Meruit' and 'Restitution'

11.1 OBJECTIVE

After reading this Unit you should be able to understand:

- The various remedies available in case of breach of a contract
- Under different circumstances which remedy is to be invoked

11.2 RESCISSION OF A CONTRACT

11.2.1 What is Rescission?

Rescission means cancellation of contract. It may take place in any of the following manners:

(1) Mutual agreement - When the parties to a contract agree to rescind the contract - No legal consequences.

(2) Breach - When one party fails to perform his part of promise properly, other party can rescind the contract - parties are discharged, and aggrieved party can claim damages.

(3) Option given by law - When a party's consent is vitiated, or he lacks capacity to contract, the contract becomes voidable and law gives an option to the aggrieved party to rescind the contract - parties are discharged, restitution can be claimed and in certain cases damages can also be claimed.

11.2.2 Consequences of rescission

1. Both the parties are absolved from their respective contractual duties without prejudice to the right of the injured party to claim damages.
2. A person who rightly rescinds a contract is entitled to compensation for any damage which he has sustained through non-fulfillment of the contract.
[Section 75]

Example - A, a singer, contracts with B, the manager of a theatre, to sing at his theatre for two nights every week for next two months, and B engages to pay her Rs. 100 for each night's performance. On the sixth night, A willfully absents

herself from the theatre, and B, in consequence, rescinds the contract. B is entitled to claim compensation for the damage, which he has sustained through the non-fulfillment of the contract.

3. The party rescinding voidable contract shall, if he has received any benefit there under from another party to such contract restore such benefit, so far as may be, to the person from whom it was received. [Section 64]

Example - A induced B by undue influence, to buy his car at an exorbitant price, and delivered his car to B. However, B decided to rescind the contract. In this case, B is bound to return back A's car.

11.2.3 Different Options to Avail Relief in Case of Rescission

When one-party commits a breach, other party has two options -

1. He may rescind the contract and sit quietly at home without taking any legal action - in this case, he is discharged from his contractual obligations but remedy of damages is not available.
2. He may file a suit for rescission in the court of law -
 - (a) either for rescission only, or
 - (b) for rescission and damages both.

When suit is filed for rescission only - A suit for rescission may be filed even when no damages are to be claimed, for example, in case of pledge of movable goods, say gold ornaments, if the pledger does not repay the debt as per agreement, the pledgee may file a suit for rescission of the contract in order to free himself from his obligation to return the ornaments if payment is offered at a later date, and to become entitled to sell the ornaments in order to realise his debt.

In these cases, the court may order the rescinding party to return any benefit obtained from the other party in order to maintain the status in which they were when the contract was not entered into.

When suit is filed for rescission as well as damages - Damages can be claimed only when the aggrieved party brings a suit to claim damages, either along with the suit to claim rescission, or separately.

Note: It is important to note that although 'Rescission' is considered as a remedy available to a party in case of breach of contract by the other and in certain other circumstances, its ultimate derivative is claim for damages, which we will be discussing in the following paras.

11.3 SUIT FOR DAMAGES

Damages may be defined as monetary compensation in respect of loss suffered as a result of the breach. The object of awarding damages is to put the injured party, so far as the money is able to do so, in the same position as if the contract had been performed. The general principle applied is that the party who has been harmed by breach of contract is entitled to compensation for losses caused or gains prevented by breach. Law recognize various kinds of losses or damages. Once the court has determined which loss may be recovered, it is then faced with the problem of quantifying such loss, i.e. determining just how much the aggrieved party should receive.

11.3.1 Kinds of Damages and Rules to Assess Their Quantum

(1) Compensatory damages:

There are two categories of compensatory damages. The first category, general damages, includes all those damages that arise naturally from breach of contract. The second category, called special damages arise due to special circumstances foreseeable by the parties at the time of making contract.

(a) General damages (ordinary damages) - There are damages that arise naturally from the breach of the contract. They result directly from the fact that the transaction that is the subject of the contract does not occur because of the breach. For instance, if the subject of the contract is the sale of car and the contract is breached by the buyer, the seller has *obviously sustained damages* by not collecting the purchase price. If seller breaches, buyer has sustained damages by not getting the car. Thus general damages are restricted to the 'direct and proximate' consequences and not to the remote or indirect losses or consequences of the breach of a contract.

Example- A hires B's ship to go to Bombay, and there take on board, on the 1st January, a cargo which, A is to provide and to bring to Calcutta, *the freight be paid when earned*. B's ship does not go to Bombay. A procures another conveyance for

his job. Here A is entitled to receive compensation from B in respect of his trouble and expense in procuring the other conveyance.

(b) Special damages - These are the consequential damages caused by the breach of contract due to existence of special circumstances. Such damages are awarded by the court only when at the time of making contract, these special circumstances were foreseeable by the party committing the breach.

Example - A contracted with B to buy 1000 tons of Iron @ Rs. 80 per ton, and told him that he needs it by June 5 to deliver it to Z to make a profit out of it. B fails to deliver the same by June 5, and A claims loss of profits from B amounting to Rs. 20,000 (which he would have earned by selling 1000 tons of Iron @ Rs. 100 per ton to Z). Here B is liable to pay these damages to A.

(c) Measuring of compensatory damages - Section 73 of the Indian Contract Act, 1872, provides that, "When a contract has been broken, the party who suffers by such breach is entitled to receive, from the party who has broken the contract, compensation for any loss or damage caused to him thereby, which naturally arose in the usual course of things from such breach, or which the parties knew when they made the contract, to be likely to result from the breach of it. Such compensation is not to be given for any remote and indirect loss or damage sustained by reason of the breach."

This section warrants a need to assess damages, general or special, according to the facts of each case.

In the case of a contract for sale or purchase general rule as regards to measuring of the damages is that -

- (i) The damages would be assessed on the difference between the contract price and the market price on the date of breach.
- (ii) Under a contract of sale of goods, damages can be claimed for breach of condition, or warranty and such damages includes all damages flowing from the breach.
- (iii) If the seller is selling services rather than something tangible and the buyer breaches the contract, the calculation of general damages is somewhat different.

(d) Duty to mitigate damages suffered - The way in which liability for contract damages is limited by the courts is imposing a duty on the party who has been harmed by a breach of contract to mitigate (keep to minimum) the damages resulting from the breach. In other words, the party who has been harmed may not sit idly and watch the damages accumulate. Moreover the party is supposed to act prudently to minimize such damages.

Example- A took a shop from B on rent and paid one month's rent in advance. B could not give possession of shop to A. There were other shops available in the vicinity but A chose not to do business for eight months. After eight months, A sued B for breach of contract claiming damages including advance rent and loss of profits for eight months. Here, he was entitled to a refund of his advance and nothing more, as he failed in his duty to minimize the loss by not taking another shop in the neighborhood.

If a servant is wrongfully dismissed in a service contract, it is his duty to minimize the damages and for this purpose to seek and accept suitable employment.

(2) Vindictive or Exemplary damages:

At times breach of contract by one party not only results in monetary loss to the injured party but also subjects him to disappointment and mental agony. In such cases monetary compensation alone cannot provide an appropriate remedy to the sufferings of the injured party. Thus the need for vindictive damages arrives.

Vindictive damages are awarded as a punishment to the wrong doer. Such damages are unusual and quite heavy in amount. Vindictive damages do not form part of the law of contract. The concept is borrowed from the English Law. Generally speaking, these damages are not awarded in ordinary course of breach of contract.

However, there are two kinds of contracts where Indian courts consider awarding vindictive damages:

1. Breach of contract to marry. In this case the amount of the damages will depend upon the extent of injury to the party's feeling. One may be ruined, other may not mind so much.

2. Where a banker refuses to honor the cheque of a customer while having his money in his hands, and the customer thereby suffers loss of reputation.

Example - A banker after agreeing to advance money for W's trip to California, by crediting his Account, wrongfully failed to credit W's Account with the result that W's cheques were dishonored. The court held that W was entitled to damages for humiliation and mental suffering. It was held that the rule in this class of cases is - "The smaller the cheque, the greater the amount of damages".

(3) Nominal damages:

Sometimes, a person brings a legal action for breach of contract and proves that a breach actually occurred but fails to prove that any actual damage have been suffered. This may happen, for example, because of the rules for measuring damages and requirement that damages should be foreseeable and proved with certainty. In such a situation, injured party is awarded nominal damages.

Such damages are awarded simply to recognize the right of the injured party to claim damages, and are of very small amount.

Example - A contracted to purchase 'LML Scooter' from B, a dealer, for Rs. 25,000. But A failed to purchase the Scooter. However, the demand for the Scooter far exceeded the supply and B could sell the Scooter to Z for Rs. 25,000, i. e., without any loss of profit. Here if B makes a claim upon A for breach of contract, he will be entitled to nominal damages only.

(4) Liquidated damages and penalty:

The contracting parties may stipulate in the contract a sum of money to be paid in case the contract is broken by either party. It may be termed as 'liquidated damages' or 'penalty' depending upon the purpose to fix the sum.

The purpose of fixing a sum as 'liquidated damages' is to compensate the injured party for the loss to be incurred by the breach of the other. Thus it is a fair pre-estimation of the loss to be caused by non-performance of the contract.

The purpose of providing a 'penalty' in a contract is to discourage a party from breaching it and to provide a special punishment if the contract is breached

anyway. Thus it is a sum which has no relation to the probable loss, and generally is disproportionate to the damages likely to accrue as a result of the breach.

Section 74 of the Indian Contract Act, 1872, provides that, "When a contract has been broken, if a sum is named in the contract as the amount to be paid in case of such breach, or if the contract contains any other stipulation by way of penalty, the party complaining of the breach is entitled, whether or not actual damage or loss is proved to have been caused thereby, to receive from the party who has broken the contract reasonable compensation not exceeding the amount so named or, as the case may be the penalty stipulated for."

Thus in India, the sum named in the contract is not awarded as damages. It is left to the court to ascertain the actual loss or reasonable compensation and award the same, which will, however, not exceed the sum named in the contract.

Example - A agreed to sell B his house for Rs. 1,05,000, provided that on breach of contract, the defaulting party will pay Rs. 10,000 as damages to the other. B broke the contract and A resold the house for Rs. 1,04,000. A sued B and claimed Rs. 10,000. Here, A cannot recover Rs. 10,000 as liquidated damages or penalty, he could only get the actual loss suffered by him, i.e., Rs.1000.

Note: If in the above example, A would have resold the house for Rs. 90,000 resulting in actual damage of Rs. 15,000 (1,05,000-90,000), even then he would have been able to recover Rs. 10,000 only, this being treated as the maximum amount of damages payable under this contract.

Exception to the rule in the context of 'penalty' - Section 74 provides that when any person enters into a bail bond, recognizance or other instrument of the same nature, or, under the provisions of any law, or under the orders of the Central Government, gives any bond for the performance of any public duty or act in which the public are interested, he shall be liable, upon breach of condition of any instrument, to pay the whole sum mentioned therein.

Examples:

1. A undertakes to repay B a loan of Rs. 1000 by five monthly equal installments with a stipulation that, in default of payment of any installment, the whole amount shall become due. This stipulation is not considered a penalty clause and the contract may be enforced according to its terms.

2. A borrows Rs. 100 from B and gives him a bond of Rs. 200 payable by five yearly installments of Rs. 40 with a stipulation that, in default of payment of any installment, the whole shall become due. This is a stipulation by way of penalty.

11.3.2 Measuring interest damages

By and far the largest number of cases decided under section 74 relate to stipulations providing for interest. These stipulations are discussed below.

(1) Stipulations for enhanced rate of interest - Such a stipulation occurring in a contract may have twofold character:

1. Stipulation for increased interest from the date of bond. This is always considered as 'penalty'.
2. Stipulation for increased interest from the date of default. It may or may not be in the nature of penalty. It is a question of fact to be considered in each case. Generally if the rate of interest payable on default is unreasonable, the court considers it as a penalty.

Example - A borrows Rs. 1000 from B on 1st June, 2004. A gives a bond to B for repayment of loan on 1st June, 2005 with interest 12% per annum. The contract contains a stipulation that in case of default interest shall be payable 25% from the date of bond, i.e., 1st June 2004. It is a penalty and cannot be enforced through the court of law.

Alternatively, if the stipulation in the above contract says that in case of default interest shall be paid @25% from the date of default, i.e., 1st June, 2005, the question whether it will be considered a penalty or not will be decided by the court keeping in mind the circumstances of the contract.

Explanation to section 74 provides that - a stipulation for the increased interest from the date of default may be stipulation by way of penalty.

Example - A stipulation in the mortgage deed provided that the principal sum should carry simple interest 6% per annum. The interest should be paid annually. In case of default the whole of the principal and interest in arrears becomes

repayable 9% interest compounded per annum. Here, this stipulation amounted to penalty and will not be awarded. The injured party was awarded 6% simple interest from 'the date of mortgage till expiry of the period of redemption.

(2) Stipulations for compound interest - Following rules are deduced from various past judicial decisions in this regard:

1. A stipulation for payment of compound interest in place of simple interest at the same rate is not considered as penalty.
2. A stipulation for payment of compound interest in place of simple interest at a higher rate is considered as penalty.

Example - A borrows Rs. 1000 from B @ 10% simple interest to be repaid after two years, with a stipulation that on default, the interest will start compounding @ 10% from the date of default. This is not considered as a penal clause.

Alternatively if the stipulation provides for the payment of compound interest @20% from the date of default, it will amount to penalty.

(3) Stipulations for payment of interest at a lower rate, if interest is paid regularly on due dates - A stipulation to accept interest at reduced rate if it is paid punctually does not make the original rate of interest a penalty.

Example - A bond provides for payment of interest 24% per annum, with a provision that if debtor pays it punctually, the creditor would accept interest 18% annually. On failure of payment of interest on due date, charging of interest 24% will not amount to penalty.

11.3.3 Other relevant provisions

Two important aspects in the context of compensation by way of damages are:

1. Cost of bringing a suit in the court of law, and
2. Treatment of 'earnest money', or 'security deposit' in contracts.

Cost of suit - When a party brings upon a suit in the court of law, he incurs expenditure thereby. If his point is proved in the suit, he is entitled to recover the cost of suit in

addition to the damages from the defaulter party. However, it is under discretion of the court to award or not to award such costs.

'Earnest money' and 'Security deposit' - Sometimes a party to a contract is required to deposit some money with the other party. This is generally done with a view to ensure performance of the contract. The money so deposited may be either 'earnest money' or 'security deposit'.

The 'earnest money' is part of the purchase price paid in advance. When the transaction goes through it is adjusted against the bill. When transaction falls through by reason of default or failure of the buyer, the other party can rescind the contract and retain the earnest money. Thus, the earnest money is liable to be forfeited.

The 'security deposit' is deposited only as a security for performance of the contract. It is not a part of the purchase price. Thus when a contract is completed it is not adjusted against the purchase price. Law considers it as a 'penalty'. Thus it is not liable to be forfeited.

11.4 SUIT FOR SPECIFIC PERFORMANCE

The court may direct the party in breach to carry out the performance of the contract specifically according to the terms of the contract. This is termed as 'Specific Performance' of the contract. This remedy is granted under the Specific Relief Act, 1877. It gives the courts discretionary power to order specific performance instead of or in addition to damages.

The preferred remedy for breach of contract is the payment of money damages. Upon receiving damages, the injured party can buy substitute performance for the promise the other party failed to keep. Specific performance is therefore ordered by the court only if the remedy of money damages is inadequate. For example, things like valuable works of art, patents, and copyrights that are in fact unique are subject to the remedy of specific performance.

Section 14 of the Specific Relief Act, 1877, provides that in certain cases the specific performance of the contract shall not be allowed by the court.

1. Where compensation in terms of money is an adequate relief for the non-performance of the contract.

2. Where the contract is of personal nature e.g., a contract to sing a song, or a contract to marry, etc.
3. Where a contract can be determined (i.e., put to an end) by the parties to the contract.

Example - A contracted to sell certain goods to B. Terms of the contract provided that it could be put to an end at the option of the seller, within a specific period on repayment of the consideration. On the due date A refused to sell the goods. In this case B cannot obtain specific performance of the contract as it is determinable at the option of A. If specific performance is allowed, A might at once put an end to the contract by paying consideration to B.

4. Where the performance of the contract requires constant supervision, and courts cannot supervise the carrying out the contract.
5. Where the contract is inequitable (i.e., not fair and just) to either party.
6. Where one of the parties to the contract is not competent to contract like a minor.

11.5 SUIT FOR AN INJUNCTION

The term injunction may be defined as an order of the courts restraining a person from doing something which he promised not to do. In relation to the law of contract, the injunction is a useful weapon for the purpose of encouraging performance of a contract involving personal services. This remedy is available only where the contract contains a negative stipulation.

11.6 SUIT UPON 'QUANTUM MERUIT' AND 'RESTITUTION'

A contract comes to an end, when either,

- a party commits default, by way of breach, or
- a contract becomes void, or
- a contract becomes voidable and the aggrieved party opts to rescind it

Ending of a contract without performance may give rise to a situation where before the contract came to an end, one party has already rendered some services, or, has supplied some goods or other consideration to the other party. In such a case, proportionate payment can be demanded for these goods or services by bringing a suit upon '*Quantum Meruit*'.

It may also happen that no contract ever existed at all, but still one person do something non-gratuitously for the other, and that other person enjoys benefit thereon. In this case also, proportionate payment can be demanded for these goods or services by bringing a suit upon '*Quantum Meruit*'.

In both the cases mentioned above, when some goods or other consideration has already been passed without any reciprocation, a suit for 'Restitution' can be brought upon.

11.6.1 'Quantum Meruit'

Literal meaning of the expression '*Quantum Meruit*.' is 'as much as earned', which is legally considered as 'payment in proportion to the work done.'

'Quantum Meruit is a remedy which is supplementary to the damages, rather than a form of damages - This remedy has a different purpose than the remedies of money damages, specific performance and injunction.

According to Anson, "whereas the purpose of damages is to place the injured party, as nearly as possible, in the position which he would have been in, if the other party had not broken the contract, the purpose of '*Quantum Meruit*' is to restore him to the position which he would have been in, if the contract had not been made."

Rather than putting an injured party in as good a position as he or she would have been if the contract had been performed, when '*quantum meruit*' or '*restitution*' is awarded, the purpose is to prevent the unjust enrichment of one of the parties.

11.6.2 Restitution

Then term '*restitution*' may be defined as an act of restoring back to the rightful owner that which has been taken away or lost.

11.6.3 Generalizations Based upon the Doctrine of 'Quantum Meruit' and 'Restitution'

Considering the doctrine of 'Quantum Meruit' and 'Restitution' under different circumstances, following generalizations can be made:

(1) Breach of contract

When there is a breach of contract, not only the injured party, but the defaulting party is also entitled to claim reasonable compensation for what he has done under the contract.

It may be noted that compensation under Quantum Meruit is in addition to the compensation for damages.

Suit by a party who has not breached

Example - P was engaged by C to write a book to be published by installments in a weekly magazine owned by C. After a few installments were published, the magazine was abandoned. Here, P could recover on the Quantum Meruit for the instalments already published.

Suit by party who has breached

In the previous chapter we have discussed that a party who materially breaches a contract has no contract rights against the other party. Sometimes, however, the application of this principle can cause great deal of hardship to the person who breaches the contract. To save this, law supports the view that a guilty party can sue upon 'Quantum Meruit' provided,

- the contract is divisible, and
- the other party has enjoyed the benefit of his services, although he had an option of declining it.

Example - An employee B promised to work for an employer, T, for one year for a specified amount of money. Before the year was up, B left his job without good cause. T refused to pay B anything for the work he performed before quitting on

the ground that breach of contract committed by B has discharged him from all his contractual obligations. The court held that the T was liable to B for the reasonable value of the work performed by B.

Here, T's liability was not based on the contract because B's breach had discharged T's duties. Instead, it was based on Quasi-contract, meaning "as if it were a contract". However, T can claim damages from B for breach of contract committed by him.

If the contract is not divisible, the party in default cannot claim payments on the basis of 'Quantum Meruit':

Example - S agreed to erect two houses and stables for \$565 on H's land. S did part of the work and then abandoned the contract. H himself completed the building using some materials left on his land by S. S brought an action upon H for the value of work done and materials left at H's place. Here, S could recover the value of materials because H had the *option* to accept or reject these, but he could not recover the value of the work done because he was entitled to payments only on completion of the work, and H had no option with regard to the partly erected building but to accept that.

(2) Void Contract

Section 65 of the Indian Contract Act, 1872, provides that, "When an agreement is discovered to be void or when a contract becomes void, any person who has received any advantage under such agreement or contract is bound to restore it, or to make compensation for it, to the person from whom he received it."

Example- C was appointed as 'managing director' of a company at certain remuneration, by the board of directors. Subsequently it was discovered that the board was not qualified to make this appointment and hence it was void. C, in the meantime, rendered services to the company. He sued the company for remuneration for the period he provided services. Here, C could recover on 'Quantum Meruit'.

(3) No Contract

Section 70 of the Contract Act says that when services are rendered or goods are

supplied to a person without any intention to do so gratuitously, and benefit of the same is enjoyed by the other person, the latter must compensate the former. This compensation may be by way of 'Quantum Meruit' or 'Restitution', or both.

Example - A doctor provides emergency medical attention to someone who is unconscious. There is no express contract at all. But doctor would be able to recover in quasi-contract, a reasonable value of his services.

The essence of a legal action based on quasi contract and the remedy of 'Quantum Meruit' and 'Restitution' is to prevent the enrichment of one party at the cost of the other.

Part - 12

Law Of Contract Relating To The Indemnity And Guarantee

STRUCTURE OF PART - 12

- 12.1 Objectives
- 12.2 Contract of Indemnity
- 12.3 Contract of Guarantee
- 12.4 Discharge of Surety
- 12.5 Comparison of Contract of Indemnity and Contract of Guarantee

12.1 OBJECTIVES

After reading this Chapter you should be able to understand:

- What is a contract of indemnity?
- What is a contract of guarantee?
- How they are different?

12.2 CONTRACT OF INDEMNITY

Dictionary meaning of the word 'indemnify' is to 'compensate'. When a person assures the other to compensate against the probable cost or loss, a contract of indemnity occurs.

Section 124 of the Contract Act defines “*Contract of Indemnity*” as “*A contract by which one party promises to save the other from loss caused to him by the conduct of the promisor himself or by conduct of any other person is called a 'contract of indemnity.*”

From the bare perusal of the provision defining the “Indemnity” it emanates that Indemnity is the provision under which the *Promisee promises to save the other from loss causes to him (the other) by the promisor’s conduct or from the action of a third person.*

Thus to say the least and in the widest sense, it means to recompense for any loss or liability which a person has incurred, such duty arising out of and from an Agreement (*arising out of a contract of indemnity which may be express or implied*) or otherwise (*from an obligation resulting from the relation of the parties or by Statute e.g. obligations which create statutory rights of being indemnified like between a Principal & Agent, an employer & employee, trustee & the Trust, Partners inter-se & the partnership firm etc.*).

The term “Indemnity” is thus normally used to denote a contract by which the promisor undertakes an original and independent obligation to indemnify, as distinct from a collateral contract in the nature of guarantee by which the promisor undertakes to answer for the default of another person who is to be primarily liable to the promisee. It can thus clearly be understood to mean that the “Indemnity” is to recompense the loss, happening of which is only contingent as against the Indemnifier.

Example

A contracts to indemnify B against the consequences of any proceedings which C may take against B in respect of a certain sum of 200 rupees. This is contract of Indemnity.

Section 125 of the Contract Act reproduced below confers right upon the Indemnity-Holder to recover costs, expenses and amounts paid under the terms of the Contract.

An indemnity holder is entitled to recover all the losses incurred by him because of acting on behalf of, or according to the directions of the indemnifier (the promisor). However, the loss should have been incurred by him while acting within the scope of his authority. Section 125 of the Act elaborates on this point. It says that the promisee in a contract of indemnity, acting within the scope of his authority is entitled to recover from the promisor.

1. All damages which he may be compelled to pay in a suit relating to the matter to which the contract of indemnity applies.
2. All expenses paid by the promisee for bringing out or defending such suit, provided he follows instructions of the promisor while doing the same, and where no instructions are there, acts as a man of ordinary prudence would do in his own case.
3. All sums paid by the promisee for reaching to any compromise pertaining to the matter relating to the contract of indemnity, *provided it is as per the directions of the promisor, or is not against the orders of the promisor*, or is such as a man of ordinary prudence would have entered into in his own case.

Example - S agrees to sell toasters on behalf of N, and N agrees to indemnify S against any loss caused to him because of manufacturing defect in any toaster. A customer B buys a toaster from S, which burst out on plugging in socket and he sustains personal injuries there from. B sues S to get his loss compensated. S has to pay Rs. 10,000 to B as damage caused to him, and incurs Rs. 1000 in defending the suit. Here S is entitled to get indemnity worth Rs. 11,000 from N.

Alternatively if S reaches to a compromise with B, and pays cost of the toaster and expenses of B's medical treatment amounting to Rs. 10,000, he is entitled to get Rs. 10,000 indemnified from N.

12.3 CONTRACT OF GUARANTEE

The defining provision for Guarantee is Section 126 of the Contract Act which reads-

A contract of Guarantee is a contract to perform the promise, or discharge the liability, of a third person in case of his default.

It may be either oral or written.

The section thus defines the Guarantee as one in which the promisor promises to perform the promise of a third person, or to discharge the liability or obligation of a third person, in the case of the latter's default. It is of utmost importance to note that the defining section in itself provides that the Guarantee may be either Oral or Written.

The Guarantee defined thus implies that it is a promise to answer for the payment of some debt, or the performance of some duty, in the case of failure of another party, who is in the first instance, liable to such payment or performance. It is thus an accessory contract by which the promisor undertakes to be answerable to the promisee for the debt, default or miscarriage of another person, whose primary liability to the promisee must exist or be contemplated.

The person who gives the guarantee is called the 'surety', the person in respect of whose default the guarantee is given is called the 'principal debtor', and the person to whom the guarantee is given is called the 'creditor'.

Example - B takes a loan of Rs. 10,000 from L, where S assures L that in case B fails to pay, S will repay the loan to L. Here S is surety, B is the principal debtor, and L is the creditor.

There exist three separate and independent contracts (a) between the Principal Debtor and Surety (b) between the Principal Debtor and the Creditor (c) between the Creditor and Surety.

The liability of the Surety under the Contract Act is absolute and co-extensive with that of the Principal Debtor, unless limited and restricted under the terms of Contract. Thus a party who guarantees the payment of a bill, is liable for all that the principal debtor would be liable for, including costs, interest due under the contract.

12.4 DISCHARGE OF SURETY

A Surety is said to be discharge from the liability when his liability. Sections 133-141 of the Contract Act provide for discharge of surety under various circumstances.

Section 133 provides for discharge of Surety by variance in terms of Contract i.e. any variance made without the surety's consent in the terms of the contract between the principal debtor and the creditor, discharges the surety as to transactions subsequent to the variance.

Example – A becomes surety to C for B's conduct as a Manager in C's Bank. Afterwards, B and C contract, without A's consent, that B's salary shall be raised, and that he shall become liable for one-fourth of the losses on overdrafts. B allows a customer to overdraw, and the Bank loses a sum of money. A is discharged from his suretyship by the variance made without his consent, and is not liable to make good his loss.

Section 134 of the Act provides for discharge of surety by release or discharge of principal debtor i.e. the surety is discharged by any contract between the creditor and the principal debtor, by which the principal debtor is released or by any act or omission of the creditor, the legal consequences of which is the discharge of the principal debtor.

Example - A contracts with B for a fixed price to build a house for B within a stipulated time, provided B supplies the necessary timber. C guarantees A's performance of the contract. B omits to supply the timber. C is discharged from his suretyship.

Section 135 of the Act provides for discharge of surety when creditor compounds with, gives time to, or agrees not to sue, principal debtor i.e. any contract between the creditor and the principal debtor, by which the creditor makes a composition with, or promises to give time to, or not to sue, the principal debtor discharges the surety, unless the surety has assented to such contract.

The principle behind making this provision is that where the creditor does something behind the back of the surety, and does it to his prejudice, by advancing facilities to the principal debtor, which are likely to harm the surety, the surety is not bound by his undertaking.

Section 136 however provides that the surety is not discharged when agreement is made with third party to give time to the principal debtor and not with the principal debtor, the surety is not discharged.

Section 137 also similarly provides that mere forbearance on the part of the creditor to sue the principal debtor or to enforce any other remedy against him, does not, in the absence of any provision in the guarantee to the contrary, discharge the surety.

Example - B owes to C a debt guaranteed by A. The debt becomes payable. C does not sue B for a year after the debt has become payable. A is not discharged from his suretyship.

Section 138 provides that release of one of the co-surety does not discharge the others.

Section 139 is another provision which provides for discharge of surety and confer upon the surety a very important right.

The said provision provides that if a creditor does any act which is inconsistent with the rights of the surety, or omits to do any act which his duty to the surety requires him to do, and the eventual remedy of the surety himself against the principal debtor is thereby impaired, the surety is discharged. This is because an Equity intervenes to discharge the surety when the creditor has failed to deal with the security for the debt, as he ought, to reduce or extinguish liability to the extent to which the security would have satisfied the debt.

Where due to negligence of the creditor, the security given by the principal debtor is lost and the right of the surety against the principal debtor is impaired due to any action or inaction of the creditor, the surety is discharged to that extent, this is so when the security is in possession and custody of the creditor and not in the custody of the principal debtor.

This is so specifically in view of the provision of Section 141 of the Act, which confers upon surety right to benefit of creditor's securities which the principal debtor at the time when the contract of suretyship is entered into, and if the creditor loses, or without the consent of the surety, parts with such security, the surety is discharged to the extent of the value of the security.

Example - B contracts to build a ship for C for a given sum, to be paid by installments as the work reaches certain stages. A becomes surety to C for B's due performance of the contract. C, without the knowledge of A prepays to B the last two installments. A is discharged by this pre-payment.

The reasons for providing for the protection and taking care of protection of securities is precisely for the reasons and purpose, which is taken care of under Section 140 of the Act, which provides that when a guaranteed debt has become due, or default of the principal debtor to perform a guaranteed duty has taken place, the surety, upon payment or performance of all that is liable for, is invested with all the rights which the creditor had against the principal debtor.

This right which the surety derives is known as "Right of Subrogation". This in short means that once the guaranteed debt is paid, all the rights the creditor had against the principal debtor stands transferred and assigned to and in favor of the surety. This precisely is the reason why the care is also taken to protect the securities and to prevent the security in the hands of and available with the creditor to be preserved. It can thus be safely said that the surety paying off the debt is entitled to all the rights and securities of the creditor as against the principal debtor. The Subrogation is automatic.

Section 145 of the Act further provides for implied promise to indemnify the surety. It provides that in every contract of guarantee, there is an implied promise by the principal debtor to indemnify the surety, and the surety is entitled to recover from the principal debtor whatever sum he has rightfully paid under the guarantee.

Example - B is indebted to C and A is surety for the debt. C demands payment, and on refusal sues for the amount. A defends the claim, having reasonable grounds for doing so, however A is compelled to pay the amount of the debt with costs. A can recover from B the amount paid by A towards the principal debt as well as costs and all other incidental payments.

Section 146 of the Act provides that all the co-sureties are liable to contribute equally.

Example - A, B and C are sureties to D for a sum of Rs. 3000/- lent to E. E makes a default in payment. A, B and C are liable as between themselves, to pay Rs. 1000/- each.

12.5 COMPARISON OF CONTRACT OF INDEMNITY AND CONTRACT OF GUARANTEE

The motive of both the contract is to ensure a person against the probable loss out of the deal.

The distinguishing factors between the Indemnity and the Guarantee can be summarized as under:

INDEMNITY	GUARANTEE
Contract of Indemnity is bilateral i.e. between two parties	The Guarantee is a tripartite contract i.e. between three persons : the principal debtor, creditor and the surety
Indemnity does not have any privity of contract between the surety and the debtor	Guarantee on the other hands have mutual contracts amongst all three concerned
In Indemnity the promisor makes himself primarily liable and undertakes to discharge the liability in any event, without reference to obligation of the third person	In Guarantee there cannot be any Contract unless there is a principal-debtor.
The liability arises from loss caused to the promisee by the conduct of the promisor himself or by the conduct of another person	The obligation of the Surety depends substantially on the principal-debtor's default.
	Guarantee also involves amongst the three contract one contract which is between the Principal Debtor and the Surety which is in the nature of Indemnity

Part - 13

Agency

STRUCTURE OF PART - 13

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13.1 Objectives

After reading this Unit, you should be able to understand:

- What is a contract of agency?
- How the law governs rights, duties and liabilities of all the parties to the contract of agency?

13.2 Contract of Agency

The contract which creates the relationship of principal and agent is known as contract of agency. A contract of agency has all the essentials of a contract, with some special features of its own, which are discussed below:

(1) Who can be principal - Section 183 of the Indian Contract Act, 1872, provides that, "Any person who is of the age of majority according to the law to which he is subject, and who is of sound mind, may employ an agent."

Thus a person who is competent to enter into a contract may appoint an agent.

(2) Who can be an agent - Section 184 of the Indian Contract Act, 1872, provides that, "As between the principal and the third persons any person may become an agent, but no person who is not of the age of majority and of sound mind can become an agent, so as to be responsible to his principal according to the provisions in that behalf herein contained."

From the above, it may be inferred that -

- (i) As between the principal and third person, any person may become an agent, even if he is not competent to contract otherwise.
- (ii) If a minor, or a person of unsound mind is appointed as agent, principal is bound by his acts, although such agent cannot be held liable either by the principal or by the third party.

Thus it is for the principal to see his interests and to appoint such a person as agent who has contractual capacity.

(3) Consideration not necessary - Section 185 of the Indian Contract Act, 1872, provides that, "No consideration is necessary to create an agency."

Generally an agent is remunerated by way of commission for the services rendered by him. However, no consideration is necessary for the validity of appointment of the agent. The fact, that the principal has agreed to be represented by the agent is a 'detriment' to the principal and constitutes sufficient consideration for the contract of agency.

Example - A authorizes his friend B, who has knowledge of computer hardware, to buy a computer for him. B accepts the responsibility. Here a valid contract of agency is created between A and B although no consideration is involved in the contract.

It is worth noting that a gratuitous agent is not bound to do the work entrusted to him by his principal. But once he begins the work, he is bound to complete it.

(4) Relationship of a principal and agent is fiduciary - A contract of agency is one of good faith. The agent must disclose to his principal every fact in his knowledge which may influence the decision of the principal in making the contract. Further, the agent must not deal on his own account and also must not settle adverse title, nor should he use the information obtained in the course of the agency against the principal.

13.3 TEST OF AGENCY

The fact that parties call their relationship as an 'agency' does not itself establish that a contract of 'agency' exists in terms of Contract Law. Thus every person who acts for another is not an agent. For instance, a domestic servant renders to his master a personal service; a person may assist the other in performance of his contractual or other obligations to third parties. But he is not an agent in any of these situations.

In determining whether the agency relationship exists or not, the following questions need be answered:

1. Whether the person (acting as the representative of a principal) has the capacity to bind the principal and make him answerable to the third parties.

2. Whether he can create legal relations between the principal and such third parties and thus establish a privity of contract between the principal and the third parties.

If the answers to these questions are in affirmative, the relationship of agency exists.

13.4 CLASSIFICATION OF AGENTS

Agents Can Be Categorized According To The following groupings:

Classification based on the extent of their authority-

- (i) General agent
- (ii) Special agent
- (iii) Universal agent

Classification based on the nature of work performed by agents-

- (i) Mercantile agents
- (ii) Non-mercantile agents

13.4.1 Classification based on the extent of agent's authority

(1) General agent - A general agent is one who has authority to do all acts connected with a trade, business or employment. For instance, a managing director of a company may have an implied authority to bind the company by doing anything necessary for carrying out the business of the company in the ordinary course. Also an agent of a general class like solicitor, and broker, etc. is considered as a general agent. The authority of a general agent continues until it is terminated. A person dealing with such agent may assume that he has the power to do the all that is usual to do in the business for which he is the general agent.

(2) Special agent - A special agent is one who is appointed to do a particular act. He represents his principal in some particular transaction, e.g., an agent employed to sell a piece of land, or to bid at an auction. As soon as the particular act is performed, his authority comes to an end. A special agent has no apparent authority beyond the limits of his appointment and the principal is not bound by his acts exceeding those limits whether the aggrieved party has its knowledge or not. Thus a person dealing with such agent should make due enquiries from the principal as to the extent of his authority.

(3) Universal agent - A universal agent is an agent who is authorized to do all the acts which his principal can lawfully do under the provisions of the law of the land. Thus he enjoys extensive powers where his authority is unlimited.

13.4.2 Classification based on the nature of work performed by agents

(1) Mercantile agent - Section 2(9) of the Sale of Goods Act, defines the term 'Mercantile agent' as an agent who has the authority either to sell the goods, or to consign the goods for the purpose of sale, or to buy the goods, or to raise the money on the security of the goods on behalf of his principal. Thus, a mercantile agent deals with the buying or selling of goods. Following are some important classes of a mercantile agent:

Factor - The word 'factor' means an agent entrusted with the possession of goods for the purpose of selling them. He may sell the goods in his own name, give the goods on credit, receive payments and give valid receipt of discharge. A 'factor' has a general lien on the goods of his principal for all charges and expenses due from the principal.

Broker - A 'broker' is an agent employed for buying or selling the goods or other property of which he is not entrusted with possession and control. He simply acts as a connecting link and brings the two parties together to bargain, and if the transaction materialises, he becomes entitled to his commission called brokerage. He cannot act in his own name, nor does he have a right of lien.

Commission agent - A commission agent is an agent who buys or sells goods for his principal on the best possible terms on his own name and receives commission for his work. He may or may not have possession of goods.

Del credere agent - A del credere agent is one who for some extra commission (called del credere commission), guarantees to his principal that third party will perform its financial obligation under the contract. In such cases, if third party fails to pay to the principal any sum due under the contract, the agent pays instead. Thus he occupies the position of a surety as well as agent. However, he is not liable to the third party for any default on the part of the principal. Nor is he liable for any disputes between the principal and the third party relating to the contract or the sum due.

In ordinary cases the only function of an agent is to effect a contract between his principal and a third party, the agent then drops out. Thus a contract of agency with a del credere agent is a special kind of agency.

Banker - Generally the relationship between a banker and the customer is that of a creditor and a debtor. However, when the banker buys or sells securities, collects cheques, dividends etc. on behalf of his customer, he acts as an agent.

Auctioneer - An auctioneer is an agent who is appointed to sell the goods at a public auction. He has an authority to receive the auctioned price and sue for the same in his own name. He is like a 'factor' in all aspects except that he has only particular lien over the goods of his principal while a 'factor' has a general lien.

(2) Non-mercantile agent- A non-mercantile agent is an agent who does not usually deal in the buying or selling the goods. Some important categories of non-mercantile agents are advocates, attorneys, wife, etc.

13.5 CREATION OF AGENCY

Creation of an agency relationship means creation of a contract of agency between the principal and the agent. Such relationship can be created in any of the following manners:

1. by express agreement
2. by implied agreement
3. by operation of law
4. by subsequent ratification of an unauthorized act.

13.5.1 Agency by express agreement

When an agency is created by words spoken or written, it is said to be an express agency. However, no particular form or set of words is required for appointment of an agent. When it is in writing, it may take the form of power of attorney, or a board's resolution, or a statement in an employment contract saying that the agent is to "sell the goods of the employer", or in any other formal way.

Examples-

1. A told B to sell his truck for not below a particular amount and B accepted it, this is an express agency created by words of mouth.
2. A executed a 'power of attorney' in favor of B authorizing B to sell his truck not below a particular amount. This is a written express agency.

Note: A power of attorney is a sworn statement in writing that another is to act for and in the place of principal.

13.5.2 Agency by implied agreement

Where principal does not expressly give authority to the agent, but it is inferred from the conduct, situation, or relationship of the parties. In such cases courts recognize and impose an agency relationship. Such agency is said to be created by implied agreement.

Example - A, a resident of Delhi has a house in Bombay let out to some 'X'. His brother B resides in Bombay. B collects monthly rent from 'X' and remits the amount to A and A accepts it as a matter of routine. In this case, B is an implied agent of A, though he is not expressly appointed by A to collect the rent.

The agency by implied agreement may take any of the following forms:

1. Agency by estoppel
2. Agency by holding out
3. Agency by necessity.

(1) Agency by estoppel - '*Estoppel*' means that a person is stopped from denying the truth of a statement which he has made. Thus where a principal leads third party to believe that the agent does have authority to perform certain act, he is subsequently stopped from denying the fact of existence of agency.

Section 237 of the Indian Contract Act, 1872, provides that, "When an agent has, without authority, done acts or incurred obligations to third persons on behalf of his principal, the principal is bound by such acts or obligations if he has by his words or conduct induced such third persons to believe that such acts and

obligations were within the scope-"of the agent's authority."

Example - A tells B in the presence of P that he is p's agent. P does not contradict the statement. If later on B *enters* into a contract with A thinking him to be p's agent, P is bound by that contract. This is a case of agency by estoppel.

Generally two elements must be there to conclude that an agency is created by estoppel :

- (i) The principal, and not the agent must have created the circumstances leading the third party to believe that the agent is authorized to act.

Example - The services of A who was p's agent were terminated. No notice to this effect was given by P. Subsequently, A purchased some goods in the name of P from Mr. T. Here, P was liable to pay the price to T as P did not create circumstances leading the third party to believe that A is not authorized any more to work for P.

- (ii) The third party must have reasonably relied on the appearance of authority created by the principal.

Example - A principal wrote to a third person saying he has authorized his agent to see him, and, if possible, to come to an amicable arrangement. He gave the agent instruction not to settle for less than a certain amount about which the third person had no knowledge. The agent settled the transaction for less than that amount. Here, the principal was bound by the settlement made by his agent to the third party because he leads him to believe that the agent was authorized to make a settlement on his behalf.

(2) Agency by holding out - A principal is bound by the acts of the agent, if on an earlier occasion, he has made other persons to believe that such acts are done with his authority. But if an agent is held out to have a limited authority, the principal is not liable for his acts done beyond that authority.

Example- A gives authority to B, his servant, to buy goods from C, a shopkeeper. A pays to C for all goods purchased by B in routine. One day A gives cash to B for purchase of goods from C. B misappropriates the money and buy the goods on credit. A is liable to C for this purchase also as he held out before C that B is his

agent.

Alternatively, if A has authorized B to buy only grocery items C on all earlier occasions, and B buys a radio set from C representing himself to be an agent of A, A will not be liable to C for the price of the radio set because he never held out B to have an authority to buy the same.

Difference between estoppel and holding out –

In case of 'estoppel', the principal is passive, keeps quiet and allows another person to give himself out as an agent. In case of holding out, the principal himself holds out to the world that somebody is his agent. Here there is an active assertion or representation by the principal.

(3) Agency by necessity - In certain circumstances law confers upon a person the authority to act as an agent for the other without requiring the consent of that other person. It is called agency by necessity. It is created not by the parties, but by the exigencies of the circumstances.

Generally the agency by necessity is created in following circumstances:

(a) Where the agent exceeds his authority in emergency - In an emergency, the agent has authority to do all such acts that a person of ordinary prudence would do in his own case under similar circumstances (even though they are beyond his actual authority).

However, such an agency is assumed, provided following essentials exist.

- (i) There was an actual and definite necessity,
- (ii) The agent was not in a position to communicate with the principal,
- (iii) The agent acted bona fide in the interest of the principal, and
- (iv) The agent has taken all reasonable and necessary steps to protect the interests of the principal.

Example - A horse was sent by a train to a destination. There was no one to receive it. The railway company put the Horse with a stable keeper and paid the charges. Here, although the company had no express or implied authority to incur such charges, it has acted in emergency as an agent of necessity, and was, therefore, entitled to claim an indemnity from the owner of the horse.

(b) A person acts to save the other's property in emergency [Section 189] - Where no relationship of principal and agent exists, but a person, in the absence of the other, acts to save the property of that other person, an agency by necessity is created. The idea is that when because of the emergency, the property of interests of the other are in imminent danger, and it becomes necessary to act before the instructions of the owner can be obtained, law *assumes* the consent of the owner to the creation of the relationship of principal and agent, so that such property or interests can be preserved to the extent possible.

Example - A and members of his family are out of station. A's house catches fire. B as neighbour, may take all necessary steps to preserve A's house, e.g., summon the fire brigade, break open the doors and do all such things which may be necessary under the circumstances. In this case an agency by necessity is presumed to exist between A and B.

(c) Where carrier of goods acting as a bailee, does anything to protect or preserve the goods - In cases of accident and emergency, the carrier of goods having a legal status of bailee acquires a status of agent and can act prudently in order to protect the goods. For example, a master of ship can sell or pledge the goods in order to save their value and such pledge or sale would be binding on the owners of cargo.

Example - A consigned certain quantity of butter with Railways. Due to strike, the butter was delayed in transit. The Railways sold the butter because it was of perishable nature. Here, the sale was binding on the owner as the Railways has acted as an agent by necessity

(d) Where relationship of husband and wife subsists- The general rule is that the wife is not the agent of her husband and the husband is not the agent of his wife. But one of them may be the agent of the other either by express appointment, or by holding out, or by ratification, or because of necessity. Here we will be discussing the agency by necessity under two circumstances:

(1) Husband and wife living together- Where husband and wife are living together and the wife is entrusted with the duty of looking after the household, there is a presumption that the wife can pledge the credit of her husband for the necessities of life. But this presumption can be rebutted in the following cases:

- (i) Where purchases are not necessities, e.g., a T.V. set for a peon.
- (ii) Where the trader has been expressly told by husband not to give credit to his wife.
- (iii) Where the wife was provided with sufficient funds to purchase the necessities.
- (iv) Where the wife was already provided with the sufficiency of the articles in question.

It may be noted that a husband enjoys no corresponding right to pledge his wife's credit for necessities.

(2) Wife living separately from husband - Where the husband turns the wife out of the house without any justifiable cause, he is bound by any contract made by the wife for necessities because he is bound to maintain her. But if the wife is living separate from the husband, without any justifiable cause, she cannot make her husband liable even for necessities.

Note: This presumption of implied authority exists only between the husband and wife and does not extend to the case of parent and child. Where the child living with the father purchases necessities, the father of the child will not be liable therefor.

13.5.3 Agency by operation of law

In certain circumstances, the law treats one person as an agent of the other. For example, as per the Partnership Act, every partner of a firm is its agent for the purpose of business of the firm. Moreover, he is also an agent of the other partners of the firm.

13.5.4 Agency by ratification

Ratification is an approval of the previous act or contract. It implies the adoption by the principal of an act made by an agent on his behalf, but without his authority. It is also known as 'ex post facto agency', i.e., agency arising after the event.

Section 196 of the Indian Contract Act, 1872, says that, "Where acts are done by one person on behalf of another, but without his knowledge or authority, he may elect to ratify or disown such acts. If he ratifies them, the same effect will follow as if they had been performed by his authority."

Examples-

1. A insured B's goods without his authority. Subsequently B confirmed A's act of insuring the goods and accepted the insurance policy. In this case, the insurance policy is as valid as if A had been authorised by B to insure the goods.
2. A insured B's goods without his authority. B did not accept the insurance policy. No contract exists between B and the insurance company.

Ratification relates back to the time of contract - When a contract is ratified, the agency comes into existence from the moment the agent acted, and not from the time when the principal ratified. Thus the agency by ratification has the retrospective effect.

Ratification may be express or implied - Section 197 of the Indian Contract Act, 1872, provides that, "Ratification may be expressed or may be implied in the conduct of the person on whose behalf the acts are done."

Example - Where the manager of an insurance company affected an assurance where he had no authority to do so, but the company accepted the money which was received under the policy, It is sufficient ratification.

13.5. 5 *Essentials of a valid ratification*

A ratification to be valid must fulfil the following conditions:

(1) *The agent must expressly contract on behalf of an identifiable principal* - If an agent acts on behalf of an undisclosed principal, again the doctrine of ratification is not applicable. It is only when an agent profess to act on behalf of an identifiable principal, such transaction can be ratified at a later stage.

(2) *The act should be capable of ratification* - The act to be ratified must be valid in itself and not illegal. There can be no ratification of an illegal act or an act which is void. Thus, a person cannot ratify a wagering contract entered in his name.

(3) *Only named principal can ratify* - Only that principal who was named or was identifiable at the time of the contract, can ratify the contract.

(4) *The principal must be in existence* - Since ratification relates back to an earlier period, principal must be in existence at the time of original contract, otherwise it cannot be ratified at a later stage.

(5) The principal must be competent to contract - The principal must have contractual capacity both at the time of original contract and at the time of ratification. Thus a person cannot ratify a contract made during his minority.

(6) Ratification must be with full knowledge of facts [section 198] - No valid ratification can be made by a person whose knowledge of the facts of the case is materially defective.

Where a principal has adopted or ratified a contract made by an agent, without knowledge of the irregularity, he will not be bound by such contract. However, if the principal says, "I do not know what my agent has done; but I must support him in all he has done", he takes upon himself the risk of any irregularity and he will be bound.

(7) Ratification must be done within a reasonable time- If ratification is made after the expiry of the reasonable time, it will not be valid.

(8) The whole transaction must be ratified [Section 199] - A person ratifying any unauthorized act done on his behalf ratifies the whole of the transaction of which such act formed a part.

It is not open to the principal to ratify one part and refuse to accept other part of a transaction.

(9) Ratification must not injure a third person [Section 200] - An act done by one person on behalf of another without such other person's authority, which, if done with authority, would have the effect of subjecting a third person to damages, or of terminating any right or interest of a third person, cannot, by ratification, be made to have such effect.

Example- A holds a lease from B, terminable on three-month's notice. C, an unauthorized person gives a notice of termination to A. The notice cannot be ratified by B so as to be binding on A.

13.6 EXTENT OF AGENT'S AUTHORITY

When a person hires an agent, it does not mean that the agent can represent him in any way he deems fit. An agent can make the principal legally responsible for his acts only when he is authorized by the principal to act that way. To know the extent to

which a principal can be liable for the acts of an agent, it is necessary to know all dimensions of the agent's authority. The agent's authority to bind the principal may be discussed under the following heads:

1. Actual or real authority
2. Ostensible or apparent authority
3. Authority in emergency.

13.6.1 Actual or Real Authority

It is the authority which is conferred upon the agent by the principal. It may be express or implied.

Express authority - An authority is said to be express when it is given by words spoken or written. This is the most obvious and most common type of authority.

Implied authority - In a commercial transaction or any other complex transaction, it is impossible for the principal to express all of the authority that may be needed to carry out the job. It is reasonable for an agent to believe that he has authority to carry out incidental activities for performance of the given task. For example, an agent who is called 'manager' of a business usually has the implied authority to hire employees, and to buy inventory, even if such authority is not expressly given by the principal. An authority is said to be implied when it is to be inferred from the circumstances of the case; and things spoken or written or the ordinary course of dealing, may be accounted circumstances of the case. [Section 187]

13.6.2 Ostensible or apparent authority

There may be cases where principal does not give express or implied authority to the agent but courts recognize and impose an agency relationship. It happens when the principal leads third party to believe that the agent has an authority to act on his behalf (actually not being so) and the third party acts on the faith of such representation. The authority of an agent in such cases is termed as 'ostensible' or 'apparent' authority.

The concept of apparent authority was created to protect the reasonable expectations of those in commerce who do business with agents. If the principal is permitted to

dispute the authority of the agent in such cases, it would enable him to commit a fraud upon innocent persons.

13.6.3 Authority in emergency

An agent ,has authority, in an emergency, to do all such acts for the purpose of protecting his principal from loss as would be done by a person of ordinary prudence in his own case, under similar circumstances. [section 189]

Example - A consigns provisions to B at Calcutta, with directions to send them immediately to Cuttack. B may sell the provisions at Calcutta, if they will not bear the journey to Cuttack without spoiling.

13.6.4 Delegation of Authority By An Agent

An agent cannot delegate his authority - Section 190 provides, "An agent cannot lawfully employ another to perform acts which he has expressly or impliedly undertaken to perform personally. . . ."

This rule is based on the legal maxim '*Delegatus nonpotest delegare*' which means that a delegate cannot further delegate. An agent is a delegate of the principal and, therefore, he cannot further delegate the authority which he has received from the principal. A principal deposes an agent to do a certain work because of the trust and confidence which the former reposes in the latter, therefore, the latter should not depute some other person to perform the task that he has undertaken to perform personally. That other person called a sub-agent may not enjoy the confidence of the principal.

Exceptions - In the following cases delegations made by an agent to a sub-agent is lawful:

1. Express permission - Where the principal has expressly permitted such delegation.
2. Implied permission - Where it may be inferred from the conduct of the principal that he has permitted to appoint sub-agent.

Example - Q asks R to procure 100 wheat bags for him. In the presence of Q, R asks P to complete this job. Q does not object to it. Thus Q is deemed to have permitted delegation.

3. Custom of trade - Where by the ordinary custom of trade, a sub-agent may be employed.

Example - Q asks R, a stock exchange broker, to purchase some shares for him. Customarily R can entrust this work to his clerks.

4. Nature of agency - Where the work undertaken by the agent is of such nature that it requires delegation.

Example - A asks his banker to let out his house and collect rent. The banker entrusts the work to an estate agent. The delegation is proper.

5. Ministerial acts (i.e., clerical or routine work) - Where the acts to be done are purely ministerial and do not involve exercise of discretion, or personal or professional skill.
6. Emergency - Where unforeseen emergencies arise rendering appointment of the sub-agent necessary.

13.7 SUB-AGENT

Who is a sub-agent - Section 191 of the Indian Contract Act, 1872, provides that, 'A sub-agent is a person employed by, and acting under the control of the original agent in the business of the agency.'

A sub-agent is a person appointed by an agent to perform functions undertaken by the agent for the principal. The relationship of sub-agent with the original agent is, as between themselves, that of an agent and the principal. Hiring a sub-agent is not the same as hiring employees for the principal. For example, when a personnel officer of a corporation hires employees for the corporation, they are not sub-agents of the personnel officer.

13.8 SUBSTITUTED AGENT

Section 194 of the Indian Contract Act, 1872, provides that, "When an agent has an express or implied authority of his principal to name another person to act for the principal and the agent names another person accordingly, such person is not a subagent but a substituted agent of the principal in respect of the business entrusted to him.

Thus a substituted agent is different from a sub-agent. While a sub-agent is the agent of the original agent and the original agent remains responsible for the acts of sub-agent to the principal, a substituted agent becomes the agent of the principal and a direct privity of contract is established between them, and there is no privity of contract between the original agent and the substituted agent. Substituted agent is also called co-agent.

Example - A directs B, his solicitor, to sell estate by auction, and to employ an auctioneer for the purpose. B names C, an auctioneer to conduct the sale. Here C is not a sub-agent, but he is a substituted agent of A.

13.9 PRETENDED AGENT

Where a person pretends to act as the agent of the other, without being so, he is called a 'pretended agent'. As a matter of fact, a pretended agent has no authority to act on behalf of the principal. When a pretended agent enters into a contract with a third party, there may be two possibilities:

1. Principal ratifies the act of the pretended agent - the effect of the transaction is like any other transaction of agency.
2. Principal does not ratify the act of pretended agent - such agent is liable to make compensation to third party for any loss or damage which he has incurred by so dealing.

13.10 DUTIES OF AN AGENT

The Indian Contract Act imposes following duties upon an agent:

(1) To follow principal's directions or customs [section 211]- An agent is bound to

conduct the business of his principal according to the directions given by the principal or, in the absence of any such directions, according to the customs which prevails in doing business of the same kind at the place where the agent conducts such business. When the agent acts otherwise, and any loss is sustained, he must make it good to his principal. and if any profit accrues, he must account for it.

(2) To carry out the work with reasonable skill and diligence [section 212] - An agent is bound to conduct the business of agency with as much skill as is generally possessed by persons engaged in similar business, unless the principal has notice of his want of skill. Further, the agent is bound to act with reasonable diligence and use his skill.

If principal suffers any damage which is a direct consequence of the neglect, misconduct or lack of skill on the part of the agent, the agent is liable to compensate for such damage. However, he is not responsible for any remote or indirect damages suffered by the principal.

(3) To render proper accounts [section 213] - An agent is bound to render proper accounts to his principal on demand. The duty of an agent to account to his principal is an absolute obligation incidental to the contract of agency.

(4) To communicate with the principal in case of difficulty [section 214] - It is the duty of an agent in cases of difficulty, to use all reasonable diligence in communicating with his principal, and in seeking to obtain his instructions.

Thus where an agent has already not been instructed to deal with an emergent situation, and it arises, the agent should communicate with the principal for the instructions. Where, though communication is possible, and the agent refrains from intimating the circumstances and asking for instructions, it would be open to the principal to repudiate the agent's act.

Example - Q sent goods to R for sale. R's shop was very close to river. The civic authorities issued a warning for the forthcoming floods. R placed the goods of Q at a different place to save them from the flood. However, he did not communicated with Q regarding this while it was feasible to communicate. The goods destroyed at the new place also. Here R is liable for the loss to Q.

(5) Not to deal on his own account [Sections 215 and 216] - An agent must not deal on

his own account (i.e., in his own interest) in the business of agency, without first obtaining the consent of his principal and acquainting him with all material circumstances which have come to his own knowledge on the subject.

(6) To pay all sums received for principal [Section 218] - Any amount which an agent receives on behalf of the principal has to be paid to the principal. Of course, the agent can make deductions from it in respect of his expenses and remuneration for the business of the agency.

(7) Not to make secret profits from the agency - An agent must not except with the knowledge and assent of the principal, make any profit beyond the commission or remuneration agreed upon between them. If the agent does so, the principal is entitled to recover the secret profit so earned by him. Moreover, the principal may refuse his usual commission, and may terminate his agency.

(8) Not to delegate authority [Section 190] - An agent is not to delegate his authority except in certain circumstances which are discussed earlier under the heading 'Delegation of authority'.

(9) Duty on principal's death or insanity [Section 209] - When an agency is terminated by the principal's death or his becoming of unsound mind, the agent is bound to take, on behalf of the representatives of his late principal, all reasonable steps for the protection and preservation of the interests entrusted to him.

The rule given by section 209 works as an exception to the general rule that 'the contract of agency is terminated on the death or insanity of the principal'.

Example - A was an agent of P. P died. The agency terminated on the death of P. Thereafter, A gave acknowledgement of debt to the creditors of P who were unaware of his death. Such an acknowledgement by A, the agent, constituted a reasonable step for protection and preservation of the interests of the principal

13.11 RIGHTS OF AN AGENT

(1) To receive remuneration [Sections 219 and 220] - Every agent is clearly entitled to his agreed remuneration, or if there is no agreement, to a reasonable remuneration unless he has acted gratuitously. The difficult question is as to when remuneration becomes due. Section 219 says that, "in the absence of any special

contract, payment for the performance of any act is not due until the completion of such act..." This provision raises two questions. When is the act complete? And secondly, is the act a result of the agent's services?

The act is considered as complete as soon as the agent carry out his part of work. It is immaterial that the relevant transaction matured or not.

An agent who is guilty of misconduct in the business of the agency is not entitled to any remuneration in respect of that part of the business which he has misconducted. In addition, he is liable to compensate the principal for any loss caused by the misconduct.

(2) To retain his dues [Section 217] - The agent has the right to retain his principal's money until his claims, if any, in respect of his remuneration or advances made, or expenses incurred in conducting the business of agency are paid. The right can be exercised on "any sums received on account of the principal in business of agency."

(3) To have a lien [Section 221] - In addition to the above right of retainer, the agent has the right to retain the goods, papers and other property, whether movable or immovable, of the principal received by him, until the amount due to himself for commission, disbursements, and services in respect of the same has been paid or accounted for to him.

This lien is generally a particular lien. But the contract between the parties may provide for a general lien or for no lien at all.

(4) To be indemnified against the consequences of lawful acts [Section 222] - The employer of an agent is bound to indemnify him against the consequences of all lawful acts done by such agent in exercise of the authority conferred upon him.

(5) To be indemnified against the consequences of acts done in good faith [Section 223] - An agent has a right to be indemnified by the principal against the consequences of an act done in good faith though it turns out to be injurious to the rights of third persons.

(6) Right to compensation [Section 225] - The principal must make compensation to his agent in respect of injury caused to such agent by the principal's neglect or want of such skill.

Example - A employs B, a bricklayer in building a house, and puts up the scaffolding himself. The scaffolding is unskillfully put up, and B is in consequence hurt. A must make compensation to B.

(7) Right of stoppage of goods in transit - An agent, like an unpaid seller, has a right to stop the goods in transit to the principal, if-

- he has bought the goods either with his own money or by incurring a personal liability for the price, and
- the principal has become insolvent.

13.12 RIGHTS OF A PRINCIPAL

The rights of a principal are based on the duties of an agent. These are as follows:

1. He can enforce various duties of an agent.
2. He can recover compensation from agent for any breach of duty by him.
3. He can forfeit agent's remuneration where the agent is guilty of misconduct in the business of agency.
4. Principal is entitled to any extra profit that an agent makes out of his agency including illegal gratification, if any.
5. Principal is entitled to receive all sums that agent receives on principal's account, even though the transactions entered into by the agent are illegal or void.

13.13 DUTIES OF A PRINCIPAL

Duties of a principal are a corollary of the rights of an agent. They are as follows:

1. It is duty of the principal to pay agreed remuneration to the agent. However, where the agent is guilty of misconduct in the business of agency, the principal can forfeit the agent's remuneration for such work.
2. It is duty of the principal to indemnify the agent for the consequences of all lawful acts entrusted to him, and for all such acts which he perform in good faith. However, he is not bound to compensate the agent against the consequences of unlawful acts.

3. It is duty of the principal to compensate the agent for any loss or damage incurred by him because of principal's negligence or want of skill.

13.14 POSITION OF PRINCIPAL TOWARDS THIRD PARTIES

In agency transactions, agent acts for the principal in dealings with persons who are outside the agency relationship. These persons are called 'Third Parties'. A principal is bound by the promises or representations made by an agent to a third party on his behalf if the agent has acted within the authority granted by the principal or by the law.

13.15 POSITION OF AN AGENT TOWARDS THIRD PARTIES

An agent is merely a connecting link between his principal and the third party. His main function is to establish contractual relationship between his principal and third parties. Thus as a general rule, an agent cannot personally enforce the contract entered into by him on behalf of his principal, nor can he be personally held liable for such contracts.

Section 230 of the Indian Contract Act, 1872, provides that, "In the absence of any contract to that effect, an agent cannot personally enforce contracts entered into by him on behalf of his principal, nor is he personally bound by them."

13.15.1 Circumstances Where an Agent Becomes Personally Liable To Third Parties

In some circumstances, an agent is presumed to be personally liable on the contract to third parties. These circumstances are discussed below:

(1) The agent expressly agrees - When at the time of making contract with the third party, the agent agrees to be personally liable upon the contract.

(2) The agent acts for a foreign principal - Where an agent contracts for the sale or purchase of goods for a merchant residing abroad, he is presumed to be personally liable.

(3) The agent acts for an unnamed principal - Where an agent acts for an unnamed principal and declines to disclose the identity of the principal, or when the principal stops existing before the agent discloses his name to third parties.

- (4) The agent acts for an undisclosed principal** - Where an agent acts for an undisclosed principal and contracts in his own name, he is personally liable to the third party. But if the third party comes to know about the existence of the principal, he may elect to sue the principal, or the agent, or both.
- (5) The agent acts for the principal who cannot be sued** - An agent is presumed to incur personal liability where he contracts on behalf of a principal who, though disclosed, cannot be sued. For example, where an agent acts for an ambassador, or foreign sovereign, he is personally liable.
- (6) The agent acts for a non-existent principal** - Where an agent acts for the principal who does not exist at the time of contracting. For example, the promoters contracting on behalf of the company, which is yet to be incorporated.
- (7) The agent is a pretended agent** - A pretended agent (if the principal does not ratify his act) is personally liable to third parties for the loss or damage incurred by them because of dealing with him.
- (8) The agent exceeds his authority** - Where an agent acts in excess of his authority, he is liable to the third parties for his acts committed by exceeding his authority. However, if the acts exceeding authority cannot be separated from the acts within the authority, the agent becomes liable for the whole transaction.
- (9) The agent's authority is coupled with interest** - Where the agent has an interest in the subject-matter of the contract, he is liable to the third parties to the extent of that interest. As a matter of fact, the agent is a principal for that interest.
- (10) Personal liability under some custom, usage, or trade** - Where the custom, or usage of a particular trade provides that the agent shall be personally liable for his acts, the agent incurs personal liability. For example, a jobber may hold a broker personally liable as per the custom of trade in a stock exchange.

13.16 TERMINATION OF AGENCY

Termination of agency can occur because of something done by the parties themselves or by operation of law (i.e., something beyond their control).

13.16.1 Termination by Act Of The Parties

(1) Mutual agreement - Regardless of what the principal and agent have agreed originally, they can agree at any time to end their relationship.

(2) Revocation by principal- The principal can always withdraw his authority from his agent.

(3) Renunciation by agent - Renunciation means 'giving up'. An agency can be terminated by an agent by renouncing the agency relationship with the principal. The agent has been given this right to renounce the agency because a person cannot be compelled to continue as against his will. The renunciation may be express or implied in the conduct of the agent. [Section 207]

Example - A appointed B to sell his house. Subsequently, B renounced his agency relationship by tendering a resignation to A. This is an express renunciation by the agent.

However, an agent must give a reasonable notice of renunciation to the principal; otherwise he will be responsible to compensate the principal for any damage resulting thereby [section 206]. Further, if the agency is for a fixed period of time, an agent would have to compensate the principal if he renounces his obligations, before the fixed period without the sufficient cause. [Section 205]

13.16.2 Termination by Operation of Law

(1) Completion of business - At times an agent is appointed to accomplish a particular object, such as a sale of a house belonging to the principal. When this object is accomplished and nothing else remains to be done, the agency relationship obviously terminates. [Section 201]

Example - P employs A, an advocate, to plead his case in the court of law. The court gives his judgment on the case. A's authority comes to an end.

(2) Lapse of time - Where an agent has been appointed for a fixed term, the expiration of the term puts an end to the agency, whether the purpose of the agency is accomplished or not. [Section 201]

(3) Death or insanity- An agency automatically comes to an end on the death or insanity of the principal or the agent.

The Contract Act imposes a duty upon the agent to take all reasonable steps for the protection and preservation of the principal's interests in case the agency gets terminated by the death or insanity of the principal.

Though it is true that the agent need not be a person capable of entering into a contract, still, according to the law, the agency terminates as soon as the agent becomes insane. This is because the agency being the matter of confidence and trust, no principal can reasonably be expected to continue to employ an insane agent.

(4) Insolvency of the principal - The insolvency of the principal puts an end to the agency. But insolvency of the agent does not make any difference.

(5) Destruction of the subject-matter- The loss or destruction of the subject-matter of an agency terminates the agent's authority.

Example - X employs Y to sell grains belonging to X stored in a particular storage. The destruction of the grain by fire will extinguish the Y's authority to sell them.

(6) Principal or agent becomes alien enemy - If principal and agent belongs to two different countries, and these countries becomes alien enemies, the relationship of agency between them becomes unlawful and stands terminated.

(7) Dissolution of a company - Dissolution of a company extinguish its existence. Thus if a principal or agent is an incorporated company, its dissolution terminates the agency relationship.

(8) Change of law - If a change in the law makes the agency or the performance of the authorized act illegal, the agent's authority is ordinarily terminated when he learns of the change.

Example - S is a salesperson who sells the toys manufactured by P. Subsequently the Government determines that the toys manufactured by P are of dangerous nature and ban them. S's authority to sell them is terminated as soon as he comes to know about the governmental ban.

13.16.3 When Termination of Agency Takes Effect

The termination of an agency relationship takes effect with respect to a person from the moment the fact of such termination is communicated to him. Thus although an agency is revoked as a matter of fact, it does not become effective till the time it is made known to the concerned parties.

Section 208 of the Indian Contract Act, 1872, provides that, "The termination of the authority of an agent does not, so far as regards the agent, take effect before it becomes known to him, or, so far as regards third persons, before it becomes known to them: As between the principal and the agent, the authority of the agent ends when he comes to know of the termination.

Example - A directs B to sell goods for him, and agrees to give B 5% commission on the price fetched by the goods. A afterwards, by letter, revokes B's authority. B, after the letter is sent but before he receives it, sells the goods for Rs. 100. The sale is binding on A, and B is entitled to Rs. 5 commission on the sale. As regards third persons, the agency does not terminate until they come to know of the fact of termination.

Example - A, at Madras, by letter, directs B to sell for him some cotton lying in a warehouse in Bombay, and afterwards, by another letter, revokes B's authority to sell and directs him to send the cotton to Madras. B, after receiving the second letter enters into a contract with C, who knows of the first letter, but not of the second. C pays B the money, with which B absconds. C's payment is good as against A.

Even when the agency is terminated by the death of the principal, the termination is effective only when it comes to the knowledge of the agent.

Example - A directs B, his agent, to pay certain money to C. A dies, and D takes out a probate to his will. B, after A's death but before hearing of it, pays the money to C. The payment is good as against D, the executor.

13.17 IRREVOCABLE AGENCY

In certain circumstances an agency becomes irrevocable. This happens when

1. the agency is coupled with the interest, or
2. the agent has incurred a personal liability, or

3. the agent has partly exercised his authority.

13.17.1 Agency Coupled With Interest [Section 202]

The agency in which the agent has an interest in the subject-matter of the agency is called an 'agency coupled with an interest'. This kind of agency is created to secure the interest of the agent.

Examples:

1. P borrows Rs. 10,000 from A. He authorizes A to sell his car, and to retain Rs. 10,000 as repayment of his debt out of the proceeds from the sale of car. This is an agency coupled with interest.
2. A person was entitled to be maintained out of the income of a property. Subsequently, he was given an authority to collect the rent of the property, and retain his maintenance money out of it. This is an agency coupled with interest.

13.17.2 Agent Incurs Personal Liability

In the course of agency, if an agent undertakes personal liability, agency becomes irrevocable. The reason being that the principal cannot be permitted to withdraw leaving the agent exposed to risk or liability which he has incurred.

Example - A authorizes B to buy 1000 bales of cotton on account of A, and to pay for it out of A's money remaining in B's hands. B buys 1000 bales of cotton in his own name, so as to make himself personally liable for the price. A cannot revoke B's authority as regards payment for the cotton.

13.17.3 Agent Partly Exercise the Authority [Section 204]

When the agent has already exercised some authority, the principal cannot revoke the agent's authority for the acts already done. The principal is bound by the acts already done on his behalf.

Example - A authorized B to payout of A's funds lying with him a sum of Rs. 10,000 to C in four equal installments. Subsequently A revoked B's authority by a letter. Before the receipt of the letter, B had already paid one installment of Rs. 2500 to C. In this case, A

is bound by this payment.

13.18 COMPARISONS

13.18.1 Agent and Servant

Agent	Servant
<i>Similarities</i>	
An agent is a person employed by some other person to work for him.	A servant is a person employed by some other person to work for him.
<i>Differences</i>	
Authority - An agent has the authority to act on behalf of his principal and to create contractual relations between the principal and the third parties.	This kind of power is not generally enjoyed by the servant.
Control and Supervision – Generally an agent is told what is to be done, but he is not subject to the direct control and supervision of the principal	A servant is generally told what is to be done and how it is to be done. He acts under direct control and supervision of his master and is bound to confirm all reasonable order of his master during the course of his work.
Liability - A principal is liable only for the acts of his agent within the scope of his authority.	A master is liable for the wrongful acts of his servant if those acts are done in the course of employment.
Remuneration - The mode of remuneration is generally different. An agent receives commission on the basis of work done.	A servant is paid by way of salary or wages
No. of persons represented - An agent may work for the several principals at the same time.	A servant usually serves only one master.

13.18.2 Agent and Independent Contractor

A person who undertakes to do something for the other is called an independent contractor. An agent can be compared from an independent contractor in the following respects:

Agent	Independent Contractor
Similarities	
Agent is a person employed by the other to work on his behalf	An independent contractor is a person employed by the other to work on his behalf.
Differences	
Control and Supervision - Although an agent is not under direct supervision and control of his principal, but he is bound to follow instructions of the principal in carrying out the work. Thus he is subject to some degree of control.	An independent contractor merely under takes to perform a specified task. The mode of performance is left to his discretion.
Representative character - An agent can represent the principal and bind him with the contracts entered into with the third parties acting within the scope of his authority.	An independent contractor cannot represent his employer.

13.18.3 Agent and Bailee

Agent	Bailee
Similarities	
An agent is entrusted with some work on behalf of the principal.	A bailee is entrusted with some work on behalf of the bailor.
Differences	
Subsistence of relationship - The subsistence of relationship of an agent and principal does not necessarily depends upon possession of his principal's property by an agent.	The relationship of a bailor and bailee subsists only so long as the bailee holds some goods belonging to the bailor.
Representative capacity - An agent can represent his principal before the third parties acting within the scope of his authority.	A bailee does not have representative capacity.

UNIT- III

LAW OF TORTS

Before dealing with the TORTS, let us imagine a situation which does not provide for a specific law for administration of justice, what would happen in that situation?

The obvious answer would be to administer justice keeping in mind and in accordance with *“JUSTICE, EQUITY AND GOOD CONSCIENCE”*.

It means breach of some duty independent of contract giving rise to a civil cause of action and for which compensation is recoverable.

Person committing a tort is called a tort-feasor or wrong doer and his misdoing is a tortious act.

CONSTITUENTS OF TORT

(A) GENERAL

Torts is an instrument for making people adhere to standards of reasonable behaviour and respect the rights and interests of one another. This it does by protecting interests and by providing for situations when a person whose protected interest is violated can recover compensation for the loss suffered by him from the person who has violated the same. A protected interest give rise to a legal right which in turn give rise to a corresponding legal duty. Some legal right are absolute in the sense that mere violation of them leads to the presumption of legal damage. These rights are rights actionable per se. In these cases no proof of actual and factual damage is necessary (Defamation).

Whereas some legal rights are such where there is no such presumption of legal damage and actual loss or damage is necessary to complete the injury (Loss caused due to negligent act eg. Accident due to negligence). These legal rights give rise to qualified damage.

Thus to constitute a tort or civil injury (1) there must be a wrongful act committed by a person (2) the wrongful act must give rise to legal damage or actual damage and (3) the wrongful act must be of such a nature as to give rise to a legal remedy in the form of an action for damages.

Wrongful Act

The act complained of should, under the circumstances, be legal wrongful as regards the party complaining; that is, it must prejudicially affect him in some legal right.

The legal rights may be Private Rights which include all rights which belong to a particular person to the exclusion of the world at large. Some of these rights are (1) right of reputation (2) rights to bodily safety and freedom (3) rights of property. The other category of the rights may be Public Rights which include those rights, which belong in common to the members of the State generally.

To every right there corresponds an obligation or duty.

Damage

Damage means the harm or loss suffered or presumed to be suffered by a person as a result of some wrongful act of another. The sum of money awarded by court to compensate "damage" is called "damages".

In consonance with the maxim *ubi jus ibi remedium* (there is no wrong without remedy). Tort is a civil injury. The wrongful act must come under the category of wrongs for which the remedy is a civil action for damages. The essential for a tort is an action for damages.

Torts are an instrument for making people adhere to standards of reasonable behavior and respect the rights and interests of one another. This it does by protecting interests and by providing for situations when a person whose protected interest is violated can recover compensation for the loss suffered by him from the person who has violated the same. A protected interest gives rise to a legal right which in turn give rise to a corresponding legal duty. Some legal rights are absolute in the sense that mere violation of them leads to the presumption of legal damage. These rights are rights actionable per se. In these cases no proof of actual and factual damage is necessary (Defamation).

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Thus to constitute a tort or civil injury (1) there must be a wrongful act committed by a person (2) the wrongful act must give rise to legal damage or actual damage and (3) the wrongful act must be of such a nature as to give rise to a legal remedy in the form of an action for damages.

Remedy

In consonance with the maxim *ubi jus ibi remedium* (there is no wrong without remedy). Tort is a civil injury. The wrongful act must come under the category of wrongs for which the remedy is a civil action for damages. The essential for a tort is an action for damages.

DISCHARGE OF TORTS

Torts can be discharged as under-

1. Waiver by Election
2. Accord and Satisfaction
3. Release
4. Acquiescence
5. Judgment Recovered
6. Statutes of Limitation

1.5.1 Waiver by Election

Where a man has more than one remedy for a tort, and he elects to pursue one of them, giving up the others, the other remedies are waived. He cannot pursue them if he fails in the one elected. Waiver is express or implied: express, when the person entitled to anything expressly and in terms gives it up, in which case it nearly resembles release; implied, when the person entitled to anything does or acquiesces in something else which is inconsistent with that to which he is so entitled. The phrase "waive the tort" does not mean that the tort itself is waived; it is only the right to recover damages for the tort committed that is waived.

There are certain cases in which a person injured by a tort may at his election bring an action of tort, or waive the tort and sue the wrong-doer on a contract implied fictitiously by law. Thus, if the defendant obtains the plaintiff's money by fraud or other wrong, the plaintiff may sue him in tort or for money had and received. Similarly, if a man is wrongfully deprived of his goods, which are afterwards sold, he may bring an

action for damages for the tort, or he may sue for the price received by the defendant.

1.5.2 Accord and Satisfaction

An accord is an agreement between two or more persons, one of whom has a right of action against the other, that the latter shall render and the former accept some valuable consideration in substitution for the right of action. 'Accord' indicates the agreement, and 'satisfaction' the consideration which makes it operative. When the agreement is executed, and satisfaction has been made, the arrangement is called accord and satisfaction and operates as a bar to the right of action. An accord and satisfaction in favour of one joint tort-feasor operates in favour of them all when the injury is one and indivisible. It can then give rise to but one cause of action, and consequently if satisfaction is accepted as full and complete as against one person, it operates with respect to the entire cause of action.

1.5.3 Release

A release is the giving up or discharging of the right of action which a man has or may have against another man. But a release executed under a mistake or in ignorance of one's rights, or obtained by fraud, is not valid.

A covenant not to sue at all is equivalent to a release and may be pleaded in bar. A mere covenant not to sue one of two joint tort-feasors does not operate as a release so as to discharge the other.

1.5.4 Acquiescence

Where a person who knows that he is entitled to enforce a right, neglects to do so for a length of time, the other party may fairly infer that he has waived or abandoned his right. But to deprive a man of his legal remedies there must be something more than mere delay. Direct acquiescence takes away the right of action.

1.5.5 Judgment Recovered

The cause of action against a wrong-doer in respect of a wrong is extinguished by a judgment obtained in a Court of law. The judgment is a bar to the original cause of action, because it is thereby reduced to a certainty and the object of the suit attained, so far as it can be at that stage; and it would be useless and vexatious to subject the defendant to another suit for the purpose of obtaining the same result. The person injured cannot bring a second action for the same wrong even though it is subsequently

found that the damage is much greater than was anticipated when the action was brought. If in an assault a person sustains a broken arm and a broken leg, he must sue for both the injuries in the same action.

1.5.6 Statues of Limitation

There is a distinction between wrongs which are actionable per se, and those which are actionable only where the plaintiff can prove that he has suffered actual damage. The period of limitation runs, in the first case, from the time when the wrongful act is committed; in the second, from the time of the plaintiff's first sustaining actual injury.

The periods within which suits can be brought in Indian Courts against wrongdoers for obtaining redress are governed by the provisions of the Indian Limitation Act, 1963.

1.6 REMEDIES

There are two kinds of remedies for torts, namely, judicial and extra-judicial. Judicial remedies are remedies which are afforded by the Courts of law; while extra-judicial remedies are those which are available to a party, in certain cases of torts, by his own acts alone. Extra-judicial remedies are (i) expulsion of trespasser, (ii) re-entry on land, (iii) recaption of goods, (iv) distress damage feasant and (v) abatement of nuisance. But these remedies, which are in the nature of self-help, should not be normally resorted to, for the person resorting to them may frequently exceed his rights and may be faced with a case civil or criminal alleging that he took the law in his own hands. It may also create problems of law and order. Judicial remedies are: (1) awarding of damages; (2) granting of injunction; and (3) specific restitution of property. Damages and injunctions are merely two different forms of remedies against the same wrong.

1.6.1 Damages

In a suit for damages in a tort case, the Court awards pecuniary compensation to the plaintiff for the injury or damage caused to him by the wrongful act of the defendant. After it is proved that the defendant committed a wrongful act, the plaintiff would be entitled to compensation, may be nominal, though he does not prove any specific damage or injury resulting to him, in cases where the tort is actionable per se. But even in these cases when specific damage is alleged and in all other cases, where tort is not actionable per se, and it becomes the duty of the plaintiff to allege the damage resulting from the wrongful act for which he claims damages, the Court's enquiry resolves in deciding three questions: (1) Was the damage alleged caused by the

defendant's wrongful act? (2) Was it remote? and (3) What is the monetary compensation for the damage?

Causation

If the damage alleged was not caused by the defendant's wrongful act the question of its remoteness will not arise. In deciding the question whether the damage was caused by the wrongful act, the generally accepted test is known as 'but for' test. This means that if the damage would not have resulted but for the defendant's wrongful act, it would be taken to have been caused by the wrongful act. Conversely it means that the defendant's wrongful act is not cause of the damage if the same would have happened just the same, wrongful act or no wrongful act. Thus when a doctor is negligent in failing to see and examine a patient and give him the proper treatment, the claim will still fail if it is shown on evidence that the patient would have died of poisoning even if he had been treated with all due care. The doctor's negligence in such cases is not the cause of the patient's death.

Measure of damages is an important aspect so far as the field of valuation and value is concerned.

The expression "measure of damages" means the scale or rule by reference to which the amount of damages to be recovered is, in any given case, to be assessed. Damages may rise to almost any amount, or they may dwindle down to being merely nominal. The law has not laid down what shall be the measure of damages in actions of tort; the measure is vague and uncertain, depending upon a vast variety of causes, facts and circumstances. In case of criminal conversion, battery, imprisonment, slander, malicious prosecution, etc., the state, degree, quality, trade, or profession of the party injured, as well as of the person who did the injury, must be, and generally are, considered by a court in giving damages. "The common law says that the damages due either for breach of contract or for tort are damages which, so far as money can compensate, will give the injured party reparation for the wrongful act. If there be any special damage which is attributable to the wrongful act that special damage must be averred and proved. But restitution is seldom, if at all, really possible and the law provides only for notional restitution, i.e. restitution as nearly as may be by award of compensation. This is specially so when the plaintiff is compensated for non-pecuniary damage such as pain and suffering. At common law damages are purely compensatory, except where the plaintiff is injured by the oppressive, arbitrary or unconstitutional action by the executive or the servants of the Government and when the defendant's conduct has been calculated by him to make a profit for himself which may well exceed

the compensation payable to the plaintiff. In latter two classes of cases exemplary damages may be awarded.

Damages in an action for personal injuries

Personal injury may cause (a) non-pecuniary as well as (b) pecuniary loss to the plaintiff. Non-pecuniary loss may cover the following heads of damage :(i) Pain and suffering; (ii) loss of amenities, and (iii) loss of expectation of life. Pecuniary loss may cover the following heads: (i) Consequential expenses; (ii) cost of care; and (iii) loss of earnings.

Injury to Property

If a chattel be lost or destroyed by a wrongful act of the defendant, the measure of damages is the value of the chattel, but if the chattel be only injured, then the depreciation in its value is the measure, with an extra allowance for the loss of the use of the chattel while it is being repaired or replaced. The measure of damages where goods shipped are lost by fire would be the market value of the goods when and where the goods were damaged less the proceeds of the sale of the damaged goods, and in addition any freight, insurance, and other incidental expenditure which may have been lost. A person to whom a wrong is done is entitled to full compensation for restoring the thing damaged to its original condition. This applies equally to a private person as to a Corporation or trustee. If this is called restitution, a Corporation as well as a private person would be entitled to it, but if by restitution is meant complete reconstruction irrespective of the damage done and then neither a private person nor a Corporation or a trustee is entitled to complete reconstruction irrespective of the damage done.

Specific Restitution

The third kind of remedy is the specific restitution of property. Thus a person who is wrongfully dispossessed of immovable property or of specific movable property is entitled to recover the immovable or movable property, as the case may be.

UNIT - IV

Law of arbitration and conciliation: salient features

INTRODUCTION

According to Halsbury, an Arbitration is the reference of a dispute or difference between not less than two parties for determination, for hearing the sides in a judicial manner, by a person or persons other than a court of competent jurisdiction.

The arbitration and conciliation comes under an Alternate Disputes Resolution.

In Maharashtra & Gujarat arbitration proceedings are held in respect of Draft Town Planning Schemes framed and published under the provisions of respective Town Planning Acts, where a valuer may be required to either function as an Arbitrator/Town Planning Officer or represent his client who may be either individual owner or a Local Planning Authority. Further a valuer may be required to function as an Arbitrator in case of dispute between two or more parties regarding fair market value of a property. The knowledge of the Law of Arbitration is therefore essential for a professional valuer.

STRUCTURE OF THE UNIT :

- 1.1 Objectives**
- 1.2 (Part I) Arbitration**
 - 1.2.1 Arbitration Agreement**
 - 1.2.2 Power to Refer Parties' to Arbitration Where There is an Arbitration Agreement - (Section 8)**
 - 1.2.3 Interim Order - (Section/s 9 & 17)**
 - 1.2.4 Composition of Arbitral Tribunal - (Section 10)**
 - 1.2.5 Appointment of Arbitrators - (Section 11)**
 - 1.2.6 Section 12, 13, 14 & 15**
 - 1.2.7 Jurisdiction of the Arbitral Tribunal – (Section 16)**
 - 1.2.8 Conduct of Arbitral Proceedings - (Section/s 18-25)**
 - 1.2.9 Making of Arbitral Award and Termination of Proceedings – (Sections 28-33)**
 - 1.2.10 Form and Contents of Arbitral Award - (Section 31)**
 - 1.2.11 Termination of Proceedings – (Section 32)**
 - 1.2.12 Objection, Appeal, Finality and Enforcement of Award - (Section/s 34- 37)**
- 1.3 (Part II) Enforcement of foreign awards**
- 1.4 (Part III) Conciliation**
- 1.5 (Part IV) Supplementary Provisions**

The Arbitration and Conciliation Act of 1996, India is divided into four parts namely (i) Arbitration (ii) Enforcement of Foreign Awards (iii) Conciliation & (iv) Supplementary Provisions, which deal separately with the various aspects of both domestic and international Commercial Arbitration.

1.1 OBJECTIVES

In this Unit the basic important provisions of the Arbitration and Conciliation Act are discussed with its' salient features.

1.2 PART – I ARBITRATION

The Appraisal of law relating to Arbitration and Conciliation have been the topic of discussions since its inception. It is not possible to deal with all the provisions in this Unit. The important sections needing attention are however being discussed here so as to have an analytical appraisal of the development of law that has taken place in respect of emergence of the method of alternative disputes resolution by way of Arbitration. This part applies in all statutory (if not inconsistent with provisions of other enactment or statutory Rules) and/or non-statutory cases and is the most part for the professional valuers.

1.2.1 Arbitration Agreement - (Section 7)

Arbitration agreement, under this provision, must be in writing and means an agreement by the parties to submit to arbitration all or certain disputes which have arisen or may arise between them in respect of a defined legal relationship. The said agreement, if not contained in the specific arbitration clause, may be inferred from documents signed by the parties, by exchange of letters, telex, telegram or other means of communication and also from admission of the parties not denying the existence of Arbitration. The arbitration clause has always to be treated as an agreement distinct and independent of the main agreement (1999 (5) SCC 651).

1.2.2 Power to Refer Parties' to Arbitration Where There is an Arbitration Agreement - (Section 8)

If a judicial authority, in a suit or action brought before it, comes to know about the existence of arbitration agreement with respect to the dispute pending before it, it may refer the parties to arbitration provided the party requiring arbitration so applies to such judicial authority before submitting his written statement on the substance of a dispute.

In Haryana Telcom Ltd. Vs. Sterlite Ltd. (1999 (5) SCC 688), the Supreme Court placed an embargo and held that notwithstanding any agreement between the parties, the arbitrator would have no jurisdiction to order winding-up of a company which power vests under the Companies Act with the competent court and thus a dispute relating to

winding-up of a company cannot be referred to arbitration.

1.2.3 Interim Order - (Section/s 9 & 17)

The arbitral tribunal has the power to pass an interim order so as to protect the substance of the dispute during the pendency of the arbitral proceedings under Section 17. Similarly the court has the power under Section 9 to pass interim orders before, during and after the arbitral proceedings.

In *Sundaram Finance Vs. NEPC India Ltd.* (1999 (2) SCC 479), the Supreme Court affirmed this power and held that an interim order can be sought from the court even before commencement of arbitration proceedings.

1.2.4 Composition of Arbitral Tribunal - (Section 10)

Under this section, the parties are free to determine the number of arbitrators provided that such number shall not be even numbers. A sole arbitrator can be appointed.

A dispute arose in *MMTC Ltd. Vs. Sterlite Ltd.* (1996 (6) SCC 716), where in the arbitration clause provided for nomination of the arbitrator by each of the parties and the arbitrators so nominated were required to appoint an umpire. The MMTC Ltd. contended that since the arbitration clause provided for appointment of even number of arbitrators, such clause was not valid in view of provisions of Section 10(1). This controversy was resolved by the Supreme Court by stating that the validity of the arbitration agreement does not depend on the number of arbitrators. The arbitration agreement though specifying an even number of Arbitrator cannot be a ground to render the arbitration agreement invalid in as much as the agreement satisfied the requirement of the section 7 of the Act and as such it is a valid agreement. By nominating an umpire a valid arbitral tribunal of three persons (Odd Number) can be constituted satisfying the requirement of the section 10 of the Act.

1.2.5 Appointment of Arbitrators - (Section 11)

Arbitrator can be appointed by agreement of parties and in case of failure of either of the parties, when request is made for appointment, the aggrieved party may approach the Chief Justice of the concerned High Court in case of Domestic Arbitration and the Chief Justice of India in case of International Commercial Arbitration for appointment of arbitrator. All High Courts in India have framed a scheme for such purpose. While

appointing the arbitrator, the designated authority shall have due regard to any qualification fixed by the agreement of the parties for the arbitrator and also to other considerations as are likely to secure the appointment of an independent and impartial arbitrator as held by the Hon'ble Supreme Court in the case of ICICI Ltd. Vs. East Coast Boat Building and Engineers (1998 (9) SCC 728). The decision with respect to appointment of arbitrator by a designated authority is normally final and binding on the parties.

1.2.6 Section 12, 13, 14 & 15.

The arbitrator has to disclose in writing any circumstances likely to cause justifiable doubts as to his independence or impartiality and in case of any doubt about his independence or impartiality and of his qualification, the authority of the arbitrator can be challenged by a party to the arbitration as per procedure laid down in section 13 and, in case the challenge is unsuccessful, the arbitral tribunal shall continue the proceedings and make an award.

The mandate of an arbitrator shall terminate under Section 14 on his becoming de-jure or de-facto unable to perform his function, or for his undue delay, or if he withdraws from his office, or the parties agree to the termination of his mandate. In the event of termination of mandate, a substitute arbitrator may be appointed according to the rules that were applicable to the appointment of the arbitrator being replaced. The mandate of an arbitrator is however not terminated by death of any party by whom the arbitrator was appointed [section 40(2)] and the legal heir/representative will substitute the demised party.

1.2.7 Jurisdiction of the Arbitral Tribunal – (Section 16)

The arbitral tribunal has power to decide on its own jurisdiction, including any objection with respect to the very existence and validity of the arbitration agreement, and for that purpose, the arbitration clause which forms part of the contract as an agreement independent from the other terms of contract. A decision by the tribunal that the contract is invalid, shall not invalidate the arbitration clause, vide Olympus Superstructure Pvt. Ltd. Vs. Meena Vijay Khetan (1999 (5) SCC 651).

1.2.8 Conduct of Arbitral Proceedings - (Section/s 18-25)

The parties to the arbitration have to be treated equally and have to be given full opportunity, by following the principles of natural justice, to present their case (Section

18). The arbitral tribunal shall not be bound by the Code of Civil Procedure or by Indian Evidence Act. Parties are free to agree on procedure and in case of non-agreement, the tribunal shall conduct the proceedings in the manner it consider appropriate. Normally the arbitration proceedings shall be deemed to have commenced on the date on which a request for reference of the dispute to arbitration has been received by the respondent (Section 21). The arbitrator has power under Section 22 to appoint one or more expert/s to report on specific issue and also seek assistance of the court in taking evidence.

1.2.9 Making of Arbitral Award and Termination of Proceedings - (Sections 28-33)

No time limit is fixed for making the award, though it is always expected under the scheme of the Act that the tribunal will resolve the dispute in accordance with the substantive law for the time being in force in India. In case of international Commercial Arbitration, the tribunal shall decide the dispute, and failing any such agreement with respect to the applicable law, the tribunal shall apply the rules of law which it considers to be appropriate in the circumstances surrounding the dispute.

In the case of tribunal consisting of more than one arbitrator, any decision of the tribunal shall be made by the majority of the members of the tribunal. A crisis may arise when there is no consensus between the members of the tribunal and when the members of the tribunal take divergent views. In such circumstances, the Arbitration will fail. The parties may settle the matter during the arbitral proceedings either by mediation, conciliation or by other proceedings and in such case the settlement will take the form of award.

1.2.10 Form and Contents of Arbitral Award - (Section 31)

- (a) The award should be in writing and signed by the members of the tribunal, and unless the parties have agreed otherwise, it must state reason.
- (b) The tribunal may at any time during the proceedings make an interim award in any matter with respect to which it may make a final award.
- (c) In case of an award for payment of money, the tribunal will award interest.
- (d) The award shall state the date and place of arbitration, the cost of arbitration and the party entitled to cost and the party who will pay the cost and the manner in which the cost shall be paid.

1.2.11 Termination of Proceedings – (Section 32)

The arbitral proceedings shall be terminated by the final award or by an order of the tribunal under Section (2), i.e. in the circumstances when (a) the claimant withdraws (b) the parties agree on the termination of the proceedings or (c) when the tribunal finds that the continuation of the proceedings has, for some reasons, become unnecessary and impossible.

1.2.12 Objection, Appeal, Finality and Enforcement of Award - (Section/s 34- 37)

Objection to Award (Section 34)

The correctness of the arbitral award can be objected to under Section 34 in a competent court of law within three months from the date of the award with another grace period of 30 days, with reasonable explanation for not challenging the award within 3 months. The award can be set aside only if –

(A) the party complaining furnishes the proof of the following -

- (a) He (i.e. the party) was under some incapacity (to present the case).
- (b) The arbitration agreement was not valid under applicable law.
- (c) He was not given proper notice of appointment of arbitrator or of arbitral proceedings or was otherwise unable to present his case.
- (d) The award is beyond scope of reference, vide R.K. Khanna vs. Union of India (1998 (7) SCC 129) and as such the award deals with a dispute not contemplated by or not falling within the terms of the submission to the arbitration.
- (e) The composition of the tribunal is not in accordance with the agreement of the parties.

(B) the Court finds that -

- (a) The subject matter of the dispute was not capable of settlement by arbitration under the applicable law, or
- (b) The arbitral award is in conflict with the public policy of India.

Appeal (Section 37)

An appeal under section 37 shall also lie from the following orders –

- (a) Granting or refusing to grant any interim order under Sec. 9 & 17;
- (b) Setting aside or refusing to set aside an award under sec. 34;
- (c) Accepting the plea of bar of jurisdiction under sec. 16;

No appeal lies from an order passed under section 37 except right to appeal to the Supreme Court by the special leave.

Where the time for making an application to set aside the award under sec. 34 has expired or it has been refused the award shall be enforced in the same manner as if it were the decree of the court.

Limitation (Section 43)

Law of limitation squarely applies to arbitration, and for the purpose of limitation, arbitration shall be deemed to have commenced on the date the request for reference is received by the other party. Besides, where an arbitration agreement provides that any claim shall be barred unless some step to commence the arbitration proceedings is taken within time fixed by the agreement of the parties, it must be commenced within that time, and if it is not done, the leave of the court has to be obtained for extension of time to lodge the claim.

1.3 PART – II ENFORCEMENT OF FOREIGN AWARDS

A “foreign Award” means an arbitral award on a dispute of commercial nature and made on or after 28th July 1924 if under Geneva Convention Award, or on or after October 1960, if made under New York Convention Award. Enforcement of a foreign award can be refused by the court on some what similar grounds as found in Section 34 of the Act, besides that enforcement of an arbitral award may be refused if the court finds that:

- (a) The subject matter of dispute is not capable of settlement by arbitration under Indian law, or
- (b) Enforcement of award would be contrary to the public policy of India, i.e. if the making of award was induced or affected by fraud or corruption, which may also mean to include an award contrary to the fundamental principle of Indian law, justice and morality see. Refer: Renu Power Co. Vs. EC (AIR 1994 SC 860).

1.4 PART – III CONCILIATION

The provision of conciliation is given under Sections 61-81 under Part III of the Arbitration and Conciliation Act. The conciliation can be initiated by the consensus of the parties and once the machinery of conciliation is set into motion, parties are precluded from initiating any arbitral or judicial proceedings in respect of a dispute which is subject matter of conciliation proceedings except under Section 9 of the Act for interim protection of the substance of the dispute.

A Conciliator, who may be appointed by the parties, is required to assist the parties, in an independent and impartial manner, in reaching an amicable settlement of dispute. A conciliator is required to be guided by the principal of objectivity, fairness and justice, giving consideration to rights and obligations of the parties, usages of the trade and circumstances surrounding the dispute, including any past business practice between the parties. Any settlement arrived at pursuant to conciliation has the same status and effect as an arbitral award.

Another important feature of the conciliation is that the conciliator and the parties are required to maintain confidentiality in all matters related to conciliation proceedings and its fallout. If the conciliation fails then neither of the parties may rely or take benefit of (a) views expressed or suggestions made by the other party in respect of a possible settlement of the dispute, (b) admission made by the other party in the course of conciliation proceedings, (c) proposal made by the conciliator, and (d) the fact that the other party had indicated his willingness to accept a proposal for settlement made by the conciliator.

1.5 PART – IV SUPPLEMENTARY PROVISIONS

Power of High Court to make rules - (Section 82)

The High Court may make rules consistent with this Act as to all proceedings before the Court under this Act.

Removal of Difficulties - (Section 83)

The Central Government may, by notification in the Official Gazette, make rules for carrying out the provision of this Act.

UNIT – V

Auction Sale

INTRODUCTION

The term 'Sale' is a very common term we use in our daily routine life, but the term 'Contract of Sale' makes us alert. What is a contract? A Contract is an agreement between a seller and buyer. A seller transfers or agrees to transfer the property or goods to the buyer for a price. The term Auction is something different than the usual buyer and seller's term. The subject Auction Sale is one kind of Sale, where the goods or property is sold or proposed to be sold at the highest price and its purpose is to fetch the highest price to the product. An Auction is a proceeding at which people are invited to compete and make offers for the purchase of the property or goods put up for sale by a seller/s through successive offers of advancing sums.

STRUCTURE OF THE UNIT

- 1.1 Objective**
- 1.2 Definition and Object of Auction Sale**
- 1.3 Features of Auction Sale**
 - 1.3.1 Arbitration Agreement**
 - 1.3.2 Particulars and Catalogues**
 - 1.3.3 Conduct of Sale**
 - 1.3.4 Mis-description and Misrepresentation**
 - 1.3.5 Auction Sale in Lots**
 - 1.3.6 Reserve Price**
 - 1.3.7 Right to bid**
 - 1.3.8 Bidding Agreement – Knock Out**
 - 1.3.9 Statements on the Rostrum**
 - 1.3.10 Memorandum of Sale**
 - 1.3.11 Duties of Vendor, Purchaser and Public**
- 1.4 Auctioneer and Authority of Auctioneer**
 - 1.4.1 Authority of the Auctioneer**
 - 1.4.2 Rights and Duties of Auctioneer**
- 1.5 Sales under Statute and By Order of the Court**
 - 1.5.1**
 - 1.5.2**
 - 1.5.3 Proclamation of Sales by Public Auction**
 - 1.5.4 Mode of making Proclamation**
 - 1.5.5 Time of Sale**
 - 1.5.6 Sale by Public Auction**
 - 1.5.7 Delivery of Movable Property**

1.1 OBJECTIVE

This chapter gives details of various aspects and features of Auction Sale under the legal provision.

1.2 DEFINITION AND OBJECT OF AUCTION SALE

A sale by auction is a public sale, where goods are offered to be taken by the highest bidder.

Section – 64 of the Sale of Goods Act deal with **AUCTION SALE** - in case of a sale by auction:

- (1) Goods are put for sale in lots; and each is prima facie deemed to be the subject of a separate contract of sale;
- (2) The sale is complete when the auctioneer announces its completion with the fall of the hammer or in other customary manner; and until such announcement is made, any bidder may retract his bid;
- (3) A right to bid may be reserved expressly by or on behalf of the seller and, where such right is expressly so reserved, but not otherwise, the seller or any one person on his/her behalf may, subject to the provisions hereinafter contained, bid at auction;
- (4) Where the sale is not notified to be subject to a right to bid on behalf of the seller, it shall not be lawful for the seller to bid himself/herself or to employ any person to bid at such sale or for the auctioneer knowingly to take any bid from the seller or any such person; and any sale contravening this rule may be treated as fraudulent by the buyer;
- (5) The sale may be notified to be subject to a reserved or upset price;
- (6) If the seller makes use of pretended bidding to raise the price, the sale is voidable at the option of the buyer.

Auction in common terms is sale in which goods or property is sold to highest bidder.

The important elements of auction are

Auction property → property for auction
Auction price → Price for auction
Auctioneer → Person conducting auction

1.3 FEATURES OF THE AUCTION SALE

1.3.1 Advertisements:

There has to be an advertisement or proclamation of auction sale, to make public know that such an auction is going to be conducted specifically in the form of public auction, which gives description of goods, date, time, venue of auction sale, the name of the auctioneer and such other conditions of sale like reserve price, and so on.

1.3.2 Particulars and Catalogues:

In some auctions the Auctioneer offer particulars and catalogues of goods and other conditions of such auction for the prospective buyers to peruse prior to the auction.

1.3.3 Conduct of Sale:

The advertisement specifies how the auction sale will be conducted, it will also specify if there is any other mode than the ordinary one.

1.3.4 Mis-description and Misrepresentation:

If either party by guilt, fraud or of deceitful misrepresentation, whereby the bidders are misled; or if either party acts under a mistake as to a material and essential particular, the sale is thereby rendered voidable as to the party affected by the fraud or misrepresentation or the mistake so that he/she can, within a reasonable time, retract.

1.3.5 Auction Sale in Lots:

Auction can be in lots; each lot is subject of a separate contract under Sec. 64 (1), and this may be excluded by intention of parties to the contrary. If the goods are sold in separate lots by auction, each lot is prima facie the subject of a separate contract. The goods are displayed in lots, and the auctioneer's call to bid can amount to mere

invitation, and each bid received would be an offer that could qualify to become a contract, on acceptance by the auctioneer or his agent.

In a sale by auction, the seller may withdraw goods, or the bidder may retract his bid at any time before they are knocked off for so long as the final consent of both parties are not signified by the blow of the hammer, or in any other customary manner.

1.3.6 Reserve Price:

Normal practice is to sell the goods or property to the highest bidder, with the restriction may be imposed by the seller/Auctioneer of minimum sale price i.e. Reserve Price, at which the goods to be sold for and not for less than the amount reserved. Reserve price is not necessarily to be disclosed to the buyer. Condition of reserve price must be made known to the buyer under notification, or else, the reserve price cannot be applied, as reserve price.

1.3.7 Right to Bid:

Every bidding is nothing more than an offer on the one side, and not binding on either party till confirmed on the other. The Bidder may withdraw the bid before the fall of the hammer. Any condition prohibiting retraction is bad in law in view of Sec. 64(2) of the Sale of Goods Act. No contract of sale is complete until it is accepted and remains merely an offer. Refusal of the buyer to carry through the bid or confirm the bid till the completion of the auction by the auctioneer and acceptance of the bid, there would be no cause of action for or in favour of the buyer. The auctioneer is equally competent to refuse, as is the buyer to withdraw the offer before acceptance. (AIR 1965 Mad. 14, Coffee Board Vs. Famous Coffee & Tea Works.)

In case of a sale by government auction, the sale is not complete until the bid is accepted in the form of the confirmation of the collector. (Muthu Pillai Vs. Secy of State, 1923 Mad. 582.)

Once an offer is accepted, the goods become the property of the buyer on fall of hammer (1969 S.C. 569, A.V. Thomas & Co. Ltd. Vs. Deputy Commissioner of Agricultural Income Tax & Sales Tax Trivandrum). It is immaterial whether there is any condition like goods not to be removed till payment received. Once the sale is completed, the buyer is the owner and can sell the property immediately.

The Seller cannot bid either directly in person or through other employees. Such sale is voidable in the interest of public policy and equity. Seller can bid only if he has reserved his right to do so in the condition notified, otherwise which is prevented under sec. 64(6). To avoid unnecessary, unscrupulous false rise in the bidding, the buyer can rescind the contract on knowledge and sue for money paid. Even if the seller is allowed only one person on his behalf, the seller can bid straight away. If more persons than one are involved such a bid amounts to fraud. As one can also protect the property more with the intention of enhancing the price, the sale is rendered void, whereas it is not necessary that such person should bid only once.

1.3.8 Bidding Agreement – Knock Out:

Combination or agreement between intending bidders not to bid against each other, or refrain from doing so, it is illegal and is known as “Knock out”. Such a thing governs Auction (bidding Agreements) Acts 1947 in England but there is no such act in India.

For preventing Auction ring i.e. arrangement whereby the intending bidders agree not to bid against each other, the reason being to allow one of them to buy the goods as cheaply as possible and subsequently to hold their own private auction. This is a criminal offence under the English Act. The Seller can rescind such a sale at the auction. However, it does not apply to joint agreement to purchase goods such as joint venture.

The Auctions Bidding Agreements Act, 1927, provides that it is a criminal offence for a dealer to give or receive consideration etc., for abstaining from bidding. Such knockout agreements are illegal. A dealer is a person who in the normal course of business attends sales by auction for the purpose of purchasing goods with a view to reselling them. Knockout agreements by non-dealers are not necessarily illegal even after the above Act of 1927.

1.3.9 Statements on the Rostrum:

Any offer or retraction by either party should, however, be made so loud as to be heard by the others.

But as soon as the hammer is struck down, which is the typical notification by the seller that the offer of the buyer is accepted, the bargain is considered as concluded, and the

seller has no right afterwards to accept a higher bid, nor the buyer to withdraw from the contract.

1.3.10 Memorandum of Sale:

The auctioneer has to record each and every offer with regard to its sequence and timing, and ultimately the final bid and its confirmation to avoid any mismanagement during the auction, so as to trace out the bidding agreement of the buyers in case there is any, or to keep in check. In case if the seller has reserved his right to bid, he is not misusing it.

1.3.11 Duties of Vendor, Purchaser and Public:

It is the duty of the vendor to represent the correct description of the goods to be sold in auction under a advertisement/proclamation. The duty of the purchaser is to deposit the auction money with the auctioneer of the seller and complete the sale procedure as the time stipulated in such auction sale.

The deposit: the bidder becomes purchaser as soon as his offer is final on e and it his duty thereafter to deposit the amount as specified in the condition of auction and subsequently to complete the payment as per the condition of mode of payment as specified in the advertisement.

1.4 AUCTIONEER AND AUTHORITY OF AUCTIONEER

Auctioneer: The Auctioneer is an agent of the owner, the seller, with the authority to sell.

1.4.1 Authority of the Auctioneer:

- (i) Implied authority to sell the goods on behalf of the seller
- (ii) Implied authority to sign the contract on behalf of the seller, but this does not extend to sale of unsold goods
- (iii) To receive the deposit from the buyer as per the condition of the auction sale
- (iv) To receiver consideration price.

An auctioneer cannot, in general, bind his principal by receiving payment otherwise than in money, as by taking a bill of exchange in payment, unless he was expressly authorized so to do, or unless it was customary, in like cases, to settle by bill.

The authority committed to an auctioneer is a personal trust which he cannot delegate to another without the consent of the owner. He cannot, therefore authorize his clerk to act as agent for his employer, in his absence.

An auctioneer, like every other agent, cannot, ordinarily, purchase the goods of his principal either on his own account, or on behalf of a third person, which may tend directly to the furtherance of fraud.

The auctioneer has no authority to:

- (i) Sell by private contract - even if this were to fetch more price than the reserved price.
- (ii) To rescind the contract.
- (iii) To warrant the goods sold.
- (iv) To deliver the goods sold without payment of price.
- (v) To allow the buyer to set off dues to him from the seller.

1.4.2 Rights and Duties of Auctioneer:

(a) Rights:

The auctioneer is the agent of the vendor for the purpose of sale, and has ordinary rights and liabilities of a special agent. He has therefore, a claim on compensation, which is ordinarily in the form of a commission for services, and is determined, in absence of any special agreement, by the common usage and also a right to claim a reimbursement for all expenses and advances, properly incurred by him in the course of his agency.

He is also entitled to sue either party, while he has a beneficial interest. He may, therefore, personally sue his principal for damages, or expenses, or for his commission, or he may as representative of the seller sue the buyer for the price of goods.

(b) Duties:

The duties of the auctioneer are in the first place, to take care of the goods, sent to him for sale. Again it is his duty to observe strictly all the instructions of his principal and all the conditions of the sale. If he deviates from them, he will be personally liable for the consequences.

Where an auctioneer, after a sale by public auction, receives a deposit thereof from the vendee, it is his duty, as the agent, or rather as the stakeholder of both vendor and vendee, to retain the deposit until the sale is complete, and it is ascertained to whom the money belongs.

1.5 SALES UNDER STATUTE AND BY ORDER OF THE COURT:

The auction sale under any execution proceedings of a decree, or any order or judgment of any court falls under the provisions of Order XXI of the Code of Civil Procedure 1908. The difference in ordinary auction rather than auction under this is that there is an attachment of the goods or property of the judgment debtor under the execution proceedings in this, whereas the seller or owner of the goods or property puts his property or goods in auction. The purpose of auction here is to disburse the claim of decree-holder under the execution of the decree obtained by him by seize and attachment of the property of the judgment debtor.

1.5.1 Any court executing a decree may order that any property attached by it and liable to sale, or such portion thereof as may seem necessary to satisfy the decree, shall be sold, and that the proceeds of such sale, or a sufficient portion thereof, shall be paid to the party entitled under the decree to receive the same.

1.5.2 Every sale shall be conducted by an officer of the court or by such other person as the court may appoint in this behalf and shall be made by public auction in manner prescribed.

1.5.3 Proclamation of Sales by Public Auction:

(i) Where any property is ordered to be sold by public auction in execution of a decree, the court shall cause a proclamation of the intended sale to be made in the language of such court.

(ii) Such proclamation shall be drawn up after notice to the decree-holder and the judgment- debtor and shall state the time and place of sale, and specify as fairly and accurately as possible:

(a) the property to be sold, or where a part of the property would be sufficient to satisfy the decree, such part;

(b) the revenue assessed upon the estate or part of the estate, where the property to be sold is an interest in an estate or in part of an estate paying revenue to the Government; any encumbrance to which the property is liable.

(c) the amount for recovery of which the sale is ordered; and

every other thing which the court considers material for a purchaser to know in order to judge of the nature and value of the property, provided further that notice of the date for settling the terms of the proclamation has been given to the judgment-debtor by means such as notice of attachment affixed in court of the property attached.

The proclamation shall include the estimate of the value of the property if any given by either or both of the parties.

(iii) Every application for an order for sale under this rule shall be accompanied by statement signed and verified in the manner prescribed for the signing and verification of pleadings and containing, so far as they are known to or can be ascertained by the person making the verification.

(iv) For the purpose of ascertaining the matters to be specified in the proclamation, the court may summon any person whom it thinks necessary to summon and may examine him in respect of any such matters and require him to produce any document in his possession or power relating thereto.

1.5.4 Mode of making Proclamation:

1. Every proclamation shall be made and published, as nearly as may be, in the manner prescribed under the rule.
2. Where the court so directs, such proclamation shall also be published in the Official Gazette or in a local newspaper, or in both, and the costs of such publication shall be deemed to be the costs of the sale.
3. Where property is divided into lots for the purpose of being sold separately, it shall not be necessary to make a separate proclamation for each lot, unless proper notice of the sale cannot, in opinion of the court, otherwise be given.

1.5.5 Time of Sale:

Where the movable property in the possession of judgment-debtors, and the property attached by actual seizure and taken in custody of attaching officer, unless the property is perishable or expense of it or storage is more. No sale shall, without the consent in writing of the judgment-debtor, take place until after the expiration of at least fifteen days in case of immovable property, and of at least seven days in the case of movable property, calculated from the date on which the copy of the proclamation has been affixed in the court-house of the judge ordering the sale.

The Court may adjourn or stop the sale in its discretion to a specific day and hour.

The defaulting purchaser answerable for the loss on re-sale any deficiency of price which may occur on re-sale by reason of the purchaser's default, and all expenses attending such re-sale, shall be certified to the court by the officer and shall, at the instance of either the decree-holder or the judgment debtor, be recoverable from the defaulting purchaser under the provisions relating to the execution of a decree for the payment of money.

The Decree-holder cannot bid for or buy the property without permission of the Court.

A Mortgagee cannot bid at sale without the leave of the court; if leave to bid is granted to such mortgagee, then the court shall fix a reserve price as regards the mortgagee, or as the court directs.

No officer or other person having any duty to perform in connection with any sale shall, either directly or indirectly, bid for acquiring or attempt to acquire any interest in the property sold.

1.5.6 Sale by Public Auction:

Where movable property is sold by public auction, the price of each lot shall be paid at the time of sale, or as soon after as the officer or other person holding the sale directs, and in default of payment, the property shall forthwith be re-sold.

- (1) On payment of the purchase-money, the officer or other person holding the sale shall grant a receipt for the same, and the sale shall become absolute.
- (2) Where the movable property to be sold is a share in goods belonging to the judgment-debtor and co-owner, and two or more persons, of whom one is such co-owner, respectively bid the same sum for such property or for any lot, the bidding shall be deemed to be the bidding of the co-owner.

1.5.7 Delivery of Movable Property:

Where the property sold is movable property of which actual seizure has been made, it shall be delivered to the purchaser.

Where the property sold is movable property in the possession of the some person other than the judgment-debtor, the delivery thereof to the purchaser shall be made by giving notice to the person in possession, prohibiting him from delivering possession of the property to any person except the purchaser.

UNIT - VI

Law of Evidence

Introduction

Study of law of evidence is useful to the valuers while giving expert evidence or opinion in the court of law or before any other authority. Therefore, this unit provides basic knowledge of law of evidence.

STRUCTURE OF THE UNIT

- 1.1** Objectives
- 1.2** Definitions
 - 1.2.1** "Fact"
 - 1.2.2** "Fact in issue"
 - 1.2.3** "Evidence"
 - 1.2.4** "Proved"
 - 1.2.5** "Disproved"
 - 1.2.6** "Not proved"
- 1.3** "May presume"
- 1.4** "Shall presume"
- 1.5** "Conclusive proof"
- 1.6** Admission
 - 1.6.1** Admission – Proof.
 - 1.6.2** Admission to be taken as whole.
 - 1.6.3** Admissions are not conclusive proof of the matter.
 - 1.6.4** Admission
 - 1.6.5** Principle.
 - 1.6.6** Admission defined.
- 1.7** S.45 Opinions of experts-
- 1.8** S.101 Burden of Proof
- 1.9** S.102 On whom burden of proof lies.

1.1 OBJECTIVE

By the end of this chapter student will learn about –

- Definition and explanation of various terminology used in law of evidence.

1.2 DEFINITIONS

1.2.1 "Fact"

"Fact" means and includes -

1. Anything, state of things, or relation of things, capable of being perceived by the senses;
2. Any mental condition of which any person is conscious.
 - (a) That there are certain objects arranged in a certain order in a certain place, is a fact.
 - (b) That a man heard or saw something, is a fact.
 - (c) That a man said certain words, is a fact.
 - (d) That a man holds a certain opinion, has a certain intention, acts in good faith or fraudulently, or uses a particular word in a particular sense, or is or was at a specified time conscious of a particular sensation, is a fact.
 - (e) That a man has a certain reputation, is a fact.

1.2.2 "Fact in issue"

The expression "facts in issue" means and includes-any fact from which, either by itself or in connection with other fact, the existence, non-existence, nature or extent of any right, liability or disability, asserted or denied in any suit or proceeding, necessarily follows.

Explanation - Whenever, under the provisions of the law for the time being in force relating to Civil Procedure, any Court records an issue of fact, the fact to be asserted or denied in the answer to such issue, is a fact in issue.

A is accused of the murder of B.

At his trial the following facts may be in issue:
that A caused B's death;
that A intended to cause B's death;

that A had had received grave and sudden provocation from B;
that A at the time of doing the act, which caused B's death, was by reason of
unsoundness of mind, incapable of knowing its nature.

1.2.3 "Evidence"

"Evidence" means and includes -

1. All statements which the Court permits or requires to be made before it by witnesses, in relation to matters of fact under inquiry; such statements are called oral evidence.
2. All documents produced for the inspection of the Court; such documents are called documentary evidence.

1.2.4 "Proved"

A fact is said to be proved when, after considering the matters before it, the Court either believes it to exist, or considers its existence so probable that a prudent man ought under the circumstances of the particular case, to act upon the supposition that it exists.

1.2.5 "Disproved"

A fact is said to be disproved when, after considering the matters before it, the Court either believes that it does not exist or considers its non-existence so probable that a prudent man ought, under the circumstances of the particular case, to act upon the supposition that it does not exist.

1.2.6 "Not proved"

A fact is said not to be proved when it is neither proved nor disproved.

1.3 "MAY PRESUME"

Whenever it is provided by this Act that the Court may presume a fact, it may either regard such fact as proved, unless and until it is disproved, or may call for proof of it. (s.4).

"Shall presume" - Whenever it is directed by this Act that the Court shall presume a fact, it shall regard such fact as proved, unless and until it is disproved.

"Conclusive proof" - Where one fact is declared by this Act to be conclusive proof of another, the Court shall, on proof of the one fact, regard the other as proved, and shall not allow evidence to be given for the purpose of disproving it.

“May presume” – Whenever, it is provided that the Court may presume a fact, the Court may take notice of the fact without calling for its proof or may call upon a party to prove that fact. Here the Court has discretion to presume a fact or not to presume it. Section 90 of the Evidence Act provides that when a document purporting to be thirty years old is produced from a proper custody, the court may presume that the document was signed and written by the person by whom it is purported and is said to have been written and signed. Generally, when a document is filed in a case it is to be proved by adducing evidence as to who wrote the deed and who signed it. If a document produced before the court is thirty years old, the court may dispense with the proof of it and read the document in evidence without calling for the proof of it. The Court may also call for the proof of it and may order that the document will not be read in evidence without being proved. Section 88 of the Evidence Act lays down that when a telegram has been received the court may presume that the message forwarded from a Telegraph Office to a person is the same which was delivered for transmission at the office from which the message was sent. As said above this clause refers to the presumptions of fact. The presumptions of fact have been dealt with in Sections 86, 87, 88, 90 and 114 of the Act.

Raising or not of a presumption is a matter for judicial discretion; and the court must apply its mind in each case to the question whether it is a proper case to raise such presumption. When the lower court does not exercise a proper judicial discretion, in raising the presumption the appellate court must interfere.

It is open to a court upon the proof of a marriage to hold as proved the subsistence of such marriage unless the contrary is proved.

“May Presume” – Child witness – Evidence – Corroboration – A dying declaration, or evidence of a prosecutrix in a rape case or the statement of a child witness does not need corroboration to be efficacious in terms of the Evidence Act.

Section 4 of the Evidence Act purporting to explain the terms “may presume” has left entire matter to the court concerned and has provided that while a case may presume a fact as provided in Section 114 thereof, it may also call for the proof of it.

1.4 “SHALL PRESUME”

Whenever there is a provision to the effect “that the Court shall presume a fact” the Court cannot exercise its discretion. It is compelled to take the fact as provided, i.e., it shall have to presume the fact. But in this case the Court will be at liberty to allow the opposite party to adduce evidence to disprove the fact so presumed and if the opposite party is successful in disproving it, the Court shall not presume the fact. The term “shall be presumed” means that the court is bound to take the fact as proved until the evidence is adduced to disprove it, and the party interested in disproving must produce such evidence if he can. In the Indian Evidence Act the words “shall presume” indicate that the presumption therein is rebuttable. Section 89 of the Evidence Act provides “that the Court shall presume that every document, called for and not produced after notice to produce, was attested, stamped and executed in the manner required by law”. Sections 79 to 85, 89 and 105 of the Act deal with this clause.

“Shall presume – Marriage – Proof by conduct – Nothing is found in Section 50 of the Act or in the proviso thereto to militate or to have anything to do against any presumptions as to the due observance of forms and ceremonies arising from the proof of performance of a marriage in fact. And if the Court, will have to presume due observance of forms and performance of ceremonies, then one would have thought further that the court will have to regard such observance and performance as proved unless they are disproved by evidence in accordance with the principles enacted in the definition of “shall presume” in Section 4 of the Act.

1.5 “CONCLUSIVE PROOF” –

Whenever it is mentioned that a fact is a “conclusive proof” of another fact, the Court has no discretion at all. It cannot call upon a party to prove that fact nor can it allow the opposite party to adduce evidence to disprove the fact. When one fact is declared by law to be conclusive proof of another, the Court cannot allow evidence to be given in rebuttal.

Section 41 of the Evidence Act provides inter alia that a final judgment order or decree of a competent court in exercise of matrimonial jurisdiction is a conclusive proof of that legal character. For example suppose A files a suit in a court of law for a declaration that B is his legally married wife. The court gives a decree in favour of A and declares that B is his wife. After a few years in the lifetime of A, B files a suit against D for the property of one C, alleging that she is widow of C. In this case there

will be an issue whether B is the wife of C. D files the copy of the judgment of the previous case (A versus B). This judgment will prove that B is legally married wife of A. Now that B is legally married wife of A, is a conclusive proof of the fact that she is not a wife of C. Therefore, after the judgment mentioned above has been filed the court cannot allow B to adduce evidence to prove that she is wife of C and not of A.

“Conclusive proof” in Section 4 of the Evidence Act shows that by declaring certain fact to be conclusive proof of another an artificial probative effect is given by the law to certain facts and no evidence is allowed to be produced with a view to combating that effect. These cases generally occur when it is against the policy of Government or the interest of society that a matter may be further open to dispute. This clause lays down that when a fact is declared to be conclusive proof of another, the Court at the proof the first – (a) must take the second as proved, and (b) shall not allow evidence to rebut the fact presumed to be proved.

If the law says that proof of a particular fact is conclusive about the existence of another fact, that fact may be proved either by some other fact or by that evidence which makes it conclusive. But once the fact which is the conclusive proof of that fact is proved no other evidence would be allowed to detract from the conclusiveness of the evidence.

“Conclusive proof”, “may presume” and “shall presume” – Meaning of - In respect of a fact which the Court “shall presume”, the Court has no option to call for proof of it and has to accept such fact as proved unless and until it is disproved. In both cases of “may presume” and “shall presume” it is, however, open to the party adversely affected by such presumption to adduce evidence to disprove the presumed fact, but in case of a fact which the Court has to regard as conclusively proved by reason of the meaning attributed to the term, “conclusive proof” by Section 4 of the Act. It was not open either to the court or to the party adversely affected by such conclusive presumption to accept or lead evidence in disproof of that conclusive presumption.

1.6 ADMISSION

An admission is a statement, oral or documentary which suggests any inference as to any fact in issue or relevant fact, and which is made by any of the persons and under the circumstances hereinafter mentioned. (s.17)

S.22 When oral admission as to contents of documents are relevant -Oral admissions as to the contents of a document are not relevant unless and until the party proposing

to prove them shows that he is entitled to give secondary evidence of the contents of such document under the rules hereinafter contained, or unless the genuineness of a document produced is in question

S.22 A When oral admission as to contents of electronic records are relevant - Oral admissions as to the contents of electronic records are not relevant, unless the genuineness of the electronic record produced is in question.

S.23 Admission in Civil cases, when relevant - In civil cases no admission is relevant, if it is made either upon an express condition that evidence of it is not to be given, or under circumstances from which the court can infer that the parties agreed together that evidence of it should not be given

Explanation - Nothing in this section shall be taken to exempt any barrister, pleader, attorney or vakil from giving evidence of any matter of which he may be compelled to give evidence under Section 126.

1.6.1 Admission – Proof.

Once a party accepts his earlier statements, it becomes a substantive piece of evidence of the fact(s) admitted, therein in view of Sections 17 and 21. It is a different matter what weightage is to be attached to such a statement. Before using such a statement, it was not required to be put to its maker to provide him an opportunity to explain it when he appears as a witness or by calling him as a witness. The purpose of confronting a witness with his earlier statement was altogether different, that is, to test the veracity of his later statement if it differs from the earlier statement.

Vague allegation of ownership does not amount to admission of landlordship of the owner.

1.6.2 Admission to be taken as whole.

One part of the admission cannot be accepted and the other part rejected. Admission to be taken as whole and conviction cannot be based on this evidence.

1.6.3 Admissions are not conclusive proof of the matter

There cannot be any doubt that the statement of defendant in her written statement and deposition about the adoption of plaintiff to the deceased is an admission within

the meaning of Section 17 of the Evidence Act.

But the law of admissions as propounded as above for the appellant appears to be neither totally correct nor exhaustive. The codified jurisprudence of admissions may be succinctly propounded. As already stated, “Admission” is a statement oral or documentary which suggest inference as to any fact in issue or relevant fact. Therefore, it becomes admissible under rules of evidence. Therefore, the statements of parties in the pleadings become admissions and may be used as evidence against the person making the statement.

It should be emphasized that the rights in a suit cannot be founded merely on admissions which is a rule of evidence and not of legal rights which must be independently established by a party in a court of law.

1.6.4 Admission

Admission plays a very important part in judicial proceedings. If one party to a suit or any other proceeding proves that the other party has admitted his case, the work of the court becomes easier. **A** files a suit against **B** alleging that **B** is not the last male owner’s daughter’s son and that he (**A**) is the last male holder’s sapinda. **B** files a document in which **A** admitted **B** to be the daughter’s son of the last male holder. This document is not only admissible in evidence but is a very strong and important piece of evidence. Admission has been dealt with in Sections 17 to 23 and 31. the intervening Sections, i.e. 24 to 30 are devoted to confession.

1.6.5 Principle

Sections 17 to 20 define “admission”. Section 21 gives as to which party to a proceeding can use admission i.e., it gives as to when an admission by one person can be proved by another and when and in what circumstances it can be proved by the person making the statement. Section 22 excludes the oral evidence against the contents of documents. Section 23 deals with relevancy in civil cases of admission made upon an expressed condition that it shall not be given in evidence.

1.6.6 Admission defined

Sections 17, 18, 19 and 20 taken together define “admission”. Section 17 lays down that statements oral or documentary which suggest any inference to any fact in issue or relevant fact made by persons a under the circumstances mentioned in Sections 18,

19 and 20, are admissions. The definition of the term “admission” as used in the Indian Evidence Act will be clear by reading all these four sections together. If all these sections were to be written in one sentence, they would read as follows:-

As admission is a statement, oral or documentary, which suggests any inference as to any fact in issue or relevant fact and which is made by :-

1. A party to the proceeding;
2. An agent to any party whom the court regards under the circumstances of the case, as expressly or impliedly authorized by him (the party) to make them;
3. Parties to suits, suing or being sued in representative capacity if the party making the statement held that representative capacity while making the statement;
4. Persons who have proprietary or pecuniary interest in the subject matter of proceeding, and who make the statement in their character of persons so interested and also if the statements are made during the continuance of the interest of the person making the statements;
5. Persons from whom the parties to the suit have derived their interest in the subject-matter of the suit, if the statements are made during the continuance of the interest of the persons making the statement (Section 18);
6. Persons whose position or liability it is necessary to prove as against any party to the suit, if such statements would be relevant as against such persons (making the statement) in relation to such position or liability in a suit brought by or against them and if such statements are made which the person making them occupies such position or is subject to such liability (Section 19).
7. Persons to whom a party to the suit has expressly referred for information in reference to a matter in dispute (Section 20).

According to the definition given above, the statement of parties to the suits or proceedings and also of persons who are not parties to such suits or proceedings, i.e., of strangers are admissions if they are made under the circumstances mentioned above and suggest any inference as to any fact in issue or relevant fact. Admission is a

statement written or oral, as to fact in issue or relevant fact, made by a party to an action or by a person deemed to be entitled to make such statement on his behalf.

1.7 S.45 OPINIONS OF EXPERTS

When the Court has to form an opinion upon a point of foreign law, or of science, or art, or as to identity of hand writing or finger-impressions, the opinions upon that point of persons specially skilled in such foreign law, science or art, or in questions as to identity of handwriting or finger impressions, are relevant facts. Such person called experts.

1.8 S.101 BURDEN OF PROOF

Whoever desires any Court to give judgment as to any legal right or liability dependent on the existence to facts which he asserts must prove that those facts exist.

When a person is bound to prove the existence of any fact, it is said that the burden of proof lies on that person.

1.9 S.102 ON WHOM BURDEN OF PROOF LIES –

The burden of proof in a suit or proceeding lies on that person who would fail if no evidence at all were given on either side.

UNIT – VII

Salient Features Of Insolvency And Bankruptcy Code Of India, 2016 Concerning Valuation

Insolvency is when an individual or organization is unable to meet its outstanding financial debt towards its lender as it become due. Insolvency can be resolved by way of changing the repayment plan of the loans or writing off a part thereof. If it cannot be resolved, then a legal action may lie against the insolvent and its assets will be sold to pay off the outstanding debts. Generally, an official assignee/liquidator appointed by the Government of India, realizes the assets and allocates it among the creditors of the insolvent.

Bankruptcy is a concept slightly different from insolvency, which is rather amicable. A bankruptcy is when a person voluntary declares himself as an insolvent and goes to the court. On declaring him as 'bankrupt', the court is responsible to liquidate the personal property of the insolvent and hand it out to its creditors. It provides a fresh lease of life to the insolvent

INTRODUCTION

Insolvency and Bankruptcy Code represents the legal and institutional mechanisms in India for dealing with debt default of companies and limited liability entities, partnership firms and individuals. However, this does not automatically cover default by financial service providers, unless notified by the Government.

OBJECTIVE OF THE CODE

The new law aims to consolidate the laws relating to insolvency of companies and limited liability entities (including limited liability partnerships and other entities with limited liability), unlimited liability partnerships and individuals, contained in a number of legislations, into a single legislation and provide for their reorganization and resolution in a time bound manner for maximization of value of their assets. Such consolidation will provide for a greater clarity in law and facilitate the application of consistent and coherent provisions to different stakeholders affected by business failure or inability to pay debt.

The Code separates commercial aspects of the insolvency proceedings from judicial aspects. While **Insolvency Professionals (IPs)** will deal with commercial aspects such as management of the affairs of the corporate debtor, facilitating formation of committee of creditors, organising their meetings, examination of the resolution plan, etc., judicial issues will be handled by proposed Adjudicating Authorities (**National Company Law Tribunal / Debt Recovery Tribunal**). One more important institution created under the Code is the 'Information Utility' which would store financial information and data and terms of lending in electronic databases. This would eliminate delays and disputes about facts when default does take place.

The Code also provides a fast track insolvency resolution process for corporates and LLPs. This will be an enabler for start-ups and small and medium enterprises (SMEs) to complete the resolution process in 90 days (extendable to 45 days in deserving cases).

LIQUIDATION

In the event that:

- i. the COC cannot agree on a workable resolution plan within the IRP Period (i.e. 180 days extendable once by another 90 days);
- ii. the COC decides to liquidate the company;
- iii. the NCLT rejects the resolution plan; or
- iv. the corporate debtor contravenes provisions of the resolution plan, the NCLT shall:
- v. pass an order requiring liquidation of corporate debtor;
- vi. make a public announcement of corporate debtor entering liquidation; and
- vii. require a liquidation order to be sent to the registering authority of the corporate debtor (for example Registrar of Companies in case of companies incorporated under Companies Act).

The IP acting as the resolution professional shall, upon commencement of liquidation shall be appointed as the liquidator for the process, unless replaced by NCLT.

THE LIQUIDATION PROCESS

The liquidation process starts with the winding up order and ends with the order of dissolution of the corporate debtor. It involves realization of the assets of the entity in liquidation and distribution of the realization proceeds among the creditors and other stakeholders who have claim to share the proceeds and other incidental activities by

virtue of the liquidator being the trustee for the stakeholders as discussed hereunder:

Taking possession and control of the liquidation estate of corporate debtor

The Code lists the assets which shall form the liquidation estate and which the liquidator shall hold as fiduciary for the benefit of all creditors. And also mentions the assets which shall not form part of the liquidation estate. The liquidator has to take into his custody or control all the assets, property,

Distribution of assets and other aspects

Section 53 of the Code stipulates in case of liquidation, the assets of the corporate debtor will be sold and the proceeds will be distributed amongst the creditors in the following order of priority:

- i. cost of the insolvency resolution process and liquidation;
- ii. secured creditors (who choose to relinquish their security enforcement rights and workmen's dues relating to a period of 24 months preceding the liquidation commencement date);
- iii. wages and unpaid dues of employees (other than workmen) for a period of 12 months preceding the liquidation commencement date;
- iv. financial debts owed to unsecured creditors;
- v. statutory dues to be received on account of Consolidated Fund of India or Consolidated Fund of a State (relating to a period of whole or part of 2 years preceding the liquidation commencement date) and debts of secured creditors (remaining unpaid after enforcement of security);
- vi. remaining debts and dues;
- vii. dues of preference shareholders; and
- viii. dues of equity shareholders or partners (as may be applicable)

Dissolution of corporate debtor

Where the assets of the corporate debtor have been completely liquidated, the liquidator shall make an application to NCLT for the dissolution of such corporate debtor and NCLT shall order that the corporate debtor shall be dissolved from the date of that order and the corporate debtor shall be dissolved accordingly. A copy of an order of dissolution shall be forwarded to the authority with which the corporate debtor is registered within 7 days from the date of such order

Moratorium :

An interim-moratorium period which would commence after filing of the application for a fresh start process and shall cease to exist after elapse of a period of 180 days from the date of application. During such period, all legal proceedings against such debtor should be stayed and no fresh suits, proceedings, recovery or enforcement action may be initiated against such debtor.

However, the certain restrictions are imposed on the debtor during the moratorium period such as the debtor shall be not be permitted to act as a director of any company (directly/indirectly) or be involved in the promotion or management of a company during the moratorium period. Further, he shall not dispose of his assets or travel abroad during this period, except with the permission of the Adjudicating Authority.

INSOLVENCY RESOLUTION PROCESS

An application to initiate an IRP under the Code can be either made by the debtor (personally or through an insolvency resolution professional) or by a creditor (either personally or jointly with other creditors through an insolvency resolution professional). However, a partner of a partnership firm is not eligible to apply for an IRP unless a joint application is filed by majority of the partners of the partnership firm.

Fresh start process :

Under this process, eligible debtors as specified in the Code can apply to the Debt Recovery Tribunal for a fresh start for discharge of his qualifying debt. After filing an application, an interim- moratorium shall commence on the date of filing of the said application.

The insolvency resolution process consists of a repayment plan by the debtor, for approval of creditor. If approved, the Debt Recovery Tribunal passes an order binding the debtor and creditors to the repayment plan. If rejected, the debtor or creditors may apply for bankruptcy order.

VOLUNTARY LIQUIDATION OF CORPORATE PERSONS :

A corporate person (which includes companies as well as LLPs) may put the entity into voluntary winding up .The conditions and procedural requirements that may be specified by the Board.

Procedure for voluntary liquidation:

1. Declaration of Solvency to be made by the majority of Directors

Majority of directors of the company/entity must make a declaration verified by an affidavit stating that-

1. they have made a full inquiry into the affairs of the company and they have formed an opinion that either the company has no debt or that it will be able to pay its debts in full from the proceeds of assets sold/ to be sold in the voluntary winding up; and
2. the company is not being liquidated to defraud any person

2. Documents to accompany the declaration

1. Audited financial statements and record of business operations of the company for the previous two years or for the period since its incorporation, whichever is later;
2. a report of the valuation of the assets of the company, if any prepared by a registered valuer.

Registrar of companies and insolvency and bankruptcy board of India to be notified about the general body resolution within seven days

The company is required to notify the Registrar of Companies and the Insolvency and Bankruptcy Board of India about the general body resolution for voluntary winding up of the company within seven days of such general body resolution or within seven days of the subsequent approval of the general body resolution by the creditors, as the case may be.

Approval of creditors must be obtained within seven days of general body resolution where the company owes any debt to any person

If the company owes any debt to any person, approval of the resolution for voluntary winding up of the company is required from creditors representing two-thirds in value of the debt of the company within seven days of general body resolution.

General body resolution to be passed within four weeks of making of declaration of solvency

The company should pass a special resolution in a general meeting where the company is to be liquidated voluntarily and appointment of an insolvency professional to act as liquidator.

Or

A resolution of the members of the company in a general meeting requiring the company to be liquidated voluntarily as a result of expiry of the period of its duration, if any, fixed by its articles or on the occurrence of any event in respect of which the articles provide that the company shall be dissolved, as the case may be and appointing an insolvency professional to act the liquidator should be passed.

Voluntary liquidation proceedings in respect of a company shall be deemed to have commenced from the date of passing of the resolution.

Where the affairs of the corporate person have been completely wound up, and its assets completely liquidated, the liquidator can make an application to the Adjudicating Authority for the dissolution of such corporate person.

On such application the Adjudicating Authority shall pass an order for dissolution.

A copy of the order is to be forwarded to the authority with which the corporate is registered with fourteen days.

**REFERENCE TO VALUATION BY REGISTERED VALUERS UNDER THE
INSOLVENCY AND BANKRUPTCY CODE, 2016**

S. No.	Topic	Provision
1.	Insolvency and Bankruptcy Board of India (Insolvency Resolution Process for Corporate Persons) Regulations, 2016	<ul style="list-style-type: none"> • "registered valuer" means a person registered as such in accordance with the Companies Act 2013 (18 of 2013) and rules made thereunder – Reg. 2(1)(m); • The interim resolution professional shall within seven days of his appointment, appoint two registered valuers to determine the liquidation value of the corporate debtor in accordance with Regulation 35: <p>Provided that the following persons shall not be appointed as registered valuers:</p> <ul style="list-style-type: none"> (a) a relative of the interim resolution professional; (b) a related party of the corporate debtor; (c) an auditor of the corporate debtor in the five years preceding the insolvency commencement date; or (d) a partner or director of the insolvency professional entity - Reg. 27. • Liquidation value- Reg. 35: <ul style="list-style-type: none"> 1) Liquidation value is the estimated realizable value of the assets of the corporate debtor if the corporate debtor were to be liquidated on the insolvency commencement date. 2) Liquidation value shall be determined in the following manner: <ul style="list-style-type: none"> a) the two registered valuers appointed under Regulation 27 shall submit to the interim resolution professional or the resolution

		<p>professional, as the case may be, an estimate of the liquidation value computed in accordance with internationally accepted valuation standards, after physical verification of the inventory and fixed assets of the corporate debtor;</p> <p>b) if in the opinion of the interim resolution professional or the resolution professional, as the case may be, the two estimates are significantly different, he may appoint another registered valuer who shall submit an estimate computed in the same manner; and</p> <p>c) the average of the two closest estimates shall be considered the liquidation value.</p> <ul style="list-style-type: none"> • Information Memorandum - Reg. 36: The information memorandum shall contain assets and liabilities, as on the insolvency commencement date, classified into appropriate categories for easy identification, with estimated values assigned to each category, the liquidation value, etc.; • Resolution Plan - Reg. 38: A resolution plan shall identify specific sources of funds that will be used to pay the liquidation value due to operational creditors and liquidation value due to dissenting financial creditors.
2.	Insolvency and Bankruptcy Board of India (Liquidation Process) Regulation, 2016	<p>Valuation of assets intended to be sold - Reg. 35:</p> <ol style="list-style-type: none"> 1. The liquidator shall appoint at least two registered valuers to value the assets as required under Regulation 34(2). 2. The provisions of Regulation 7 shall apply mutatis mutandis to registered valuers appointed under sub-regulation (1). 3. The registered valuers appointed under

		<p>sub-regulation (1) shall independently submit to the liquidator the estimates of the realizable value of the asset(s) computed in accordance with internationally accepted valuation standards, after physical verification of the assets of the corporate debtor.</p> <p>Asset memorandum -Reg. 34(2): The asset memorandum shall provide the following details in respect of the assets which are intended to be realized by way of sale value of the asset, valued in accordance with Regulation 35; value of set of assets or assets in parcels or assets in slump sale, as the case may be, valued in accordance with Regulation 35, if intended to be sold as specified in Regulation 32(b), etc.</p>
3.	Voluntary Liquidation of corporate person - Section 59(3)	<p>Voluntary liquidation proceedings of a corporate person registered as a company shall be accompanied with:</p> <ul style="list-style-type: none"> • a declaration from majority of the directors of the company verified by an affidavit stating that they have made a full inquiry into the affairs of the company and they have formed an opinion that either the company has no debt or that it will be able to pay its debts in full from the proceeds of assets to be sold in the voluntary liquidation; • a report of the valuation of the assets of the company, if any prepared by a registered valuer.
4.	Insolvency and Bankruptcy Board of India (Voluntary Liquidation Process) Regulation, 2017	<p>Final Report - Reg. 38(1)(c): On completion of the liquidation process, the liquidator shall prepare the Final Report consisting of a sale statement in respect of all assets containing-</p> <ol style="list-style-type: none"> i. the realized value; ii. cost of realization, if any; iii. the manner and mode of Sale; iv. an explanation for the shortfall, if the value realized is less than the value

		<p>assigned by the registered valuer in the report of the valuation of assets;</p> <p>v. the person to whom the sale is made; and</p> <p>vi. any other relevant details of the sale.</p>
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UNIT - VIII

Salient Features Of Companies (Registered Valuers And Valuation) Rules 2017

Please refer to Companies (Registered valuers and valuation) Rules 2017 under Section 247 of the Companies Act, 2013.

UNIT – IX

Salient Features of The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002

INTRODUCTION:

The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 is a legislation that helps financial institutions to ensure asset quality in multiple ways. This means that the Act was framed to address the problem of NPAs (Non-Performing Assets) or bad assets through different processes and mechanisms. The enactment of the SARFAESI Act, 2002 enabled banks and financial institutions to sell off their non-performing assets to asset reconstruction companies registered with RBI

The SARFAESI Act gives detailed provisions for the formation and activities of Asset Securitization Companies (SCs) and Reconstruction Companies (RCs). RBI is the regulator for these institutions. As a legal mechanism to insulate assets, the Act addresses the interests of secured creditors (like banks). Several provisions of the Act give directives and powers to various institutions to manage the bad asset problem.

OBJECTIVES:

Following are the main objectives of the SARFAESI Act.

- The Act provides the legal framework for securitization activities in India
- It gives the procedures for the transfer of NPAs to asset reconstruction companies for the reconstruction of the assets.
- The Act enforces the security interest without Court's intervention
- The Act gives powers to banks and financial institutions to take over the immovable property that is hypothecated or charged to enforce the recovery of debt.

FEATURES:

Major feature of SARFAESI is that it promotes the setting up of asset reconstruction (RCs) and asset securitization companies (SCs) to deal with NPAs accumulated with the banks and financial institutions.

The Act provides three methods for recovery of NPAs, viz:

- (i) Securitization;
- (ii) Asset Reconstruction; and
- (iii) Enforcement of Security without the intervention of the Court.

The Act, thus brings three important tools/powers into asset management of financial banks and institutions – securitization of assets, reconstruction of assets and powers for enforcement of security interests (means asset security interests). To understand the SARFAESI Act, we should know the meaning of these terms as well.

MEANING

What is Securitization?

Securitization is the process of pooling and repackaging of financial assets (like loans given) into marketable securities that can be sold to investors.

In the context of bad asset management, securitization is the process of conversion of existing less liquid assets (loans) into marketable securities. The securitization company takes custody of the underlying mortgaged assets of the loan taker. It can initiate the following steps:

- i. Acquisition of financial assets from any originator (bank), and
- ii. Raising of funds from qualified institutional buyers by issue of security receipts (for raising money) for acquiring the financial assets or
- iii. Raising of funds in any prescribed manner, and
- iv. Acquisition of financial asset may be coupled with taking custody of the mortgaged land, building etc.

What is asset reconstruction?

- (i) Asset reconstruction is the activity of converting a bad or non-performing asset into performing asset. The process of asset reconstruction involves several steps including purchasing of bad asset by a dedicated asset reconstruction company (ARC) including the underlying hypothecated asset, financing of the bad asset conversion into good asset using bonds, debentures, securities and cash, realization of returns from the hypothecated assets etc. The Act also laid the framework to the constitution of Asset Reconstruction Companies (ARCs) specializing in securitizing distressed assets purchased from banks.

Asset Reconstruction Companies take over non-performing assets of banks at discounted rate and manage and dispose of such assets. Reconstruction, is to be done with the RBI regulations and the SARFAESI Act gives the following components for reconstruction of assets –

- a) taking over or changing the management of the business of the borrower,
- b) the sale or lease of a part or whole of the business of the borrower;
- c) rescheduling of payment of debts payable by the borrower;
- d) enforcement of security interest in accordance with the provisions of this Act;
- e) settlement of dues payable by the borrower;
- f) taking possession of secured assets in accordance with the provisions of this Act.

It empowers the Reserve Bank of India to regulate asset reconstruction companies in a changing business environment. It empowers the RBI to carry out Audit and conduct inspections of an ARC from time to time. The RBI may impose a penalty where an ARC fails to comply with any direction issued by RBI;

- (ii) exemption from stamp duty on loans assigned by banks and financial institutions to asset reconstruction companies;
- (iii) enabling non-institutional investors besides qualified buyers to invest in security receipts by ARCs; specific timeline for taking possession of secured assets; and
- (iv) priority to secured creditors in repayment of debts

What is mean by Non-Performing Asset?

‘Non Performing Asset’ means an asset or account of a borrower, which has been classified by a bank or financial institution and sub-standard, doubtful or loss asset, in accordance with the directions or guidelines relating to asset classification issued by RBI .

Other functions of securitisation company or reconstruction company. —

Any Securitisation company or reconstruction company registered may –

- (a) act as an agent for any bank or financial institution for the purpose of recovering their dues from the borrower on payment of such fees or charges as may be mutually agreed upon between the parties;

- (b) act as a manager on such fee as may be mutually agreed upon between the parties;
- (c) act as receiver if appointed by any court or tribunal.

Provided that no securitisation company or Reconstruction Company shall act as manager if acting as such gives rise to any pecuniary liability.

No securitisation company or reconstruction company which has been granted a certificate of registration, shall carry on, any business other than that of securitisation or asset reconstruction without prior approval of the Reserve Bank.

If in case a securitisation company or reconstruction company is carrying any business other than the business of securitisation or asset reconstruction on or before the commencement of this Act, it will shall cease to carry on any such business within one year from the date of commencement of this Act.

What is mean by 'enforcement of security interests'?

The Act empowers the lender (banker), when the borrower defaults, to issue notice to the defaulting borrower and guarantor, calling to repay the debt within 60 days from the date of the notice. If the borrower fails to comply with the notice, the bank or the financial institution may enforce security interests (means interest of the bank/creditor) by following the provisions of the Act:

- a) Take possession of the security;
- b) Sale or lease or assign the right over the security;
- c) Appoint Manager to manage the security;
- d) Ask any debtors of the borrower to pay any sum due to the borrower.

If there are more than one secured creditors, the decision about the enforcement of SARFEASI provisions will be applicable only if 75% of them are agreeing.

The SARFAESI Act allows secured creditors to take steps to enforce their security interests in respect of any debt of a borrower that is classified as a non-performing asset without the intervention of a court or tribunal if certain conditions specified in the Act are met.

Rights of borrower

A borrower can object to the measures taken under this Act within 45 days without

depositing any amount with DRT. However for making application at the second appeal stage Debt Recovery Appellate Tribunal 50% of the amount outstanding has to be deposited which can also be reduced to 25% at the discretion of the Appellate Tribunal.

Establishment of a Central Registry

The functions relating to securitisation, asset reconstruction and creation of security interest is sought to be administered and regulated by a Central Registry. A Central Registrar shall head the Registry. The functions of the Central Registry are as under:

- Particulars relating to securitisation of assets, reconstruction of financial assets and creation of security interest are entered in a record called Central Register.
- The records can be kept in electronic form also .
- The particulars of every transaction of securitisation, asset reconstruction or creation of security interest shall be filed within 30 days of the transaction by SCO, RCO or the lender as the case may be.
- Modifications made in the security interest registered with the Registry are to be filed within 30 days of such modification.
- Satisfaction of security interest is required to be filed with the Registry within 30 days of satisfaction.
- Records maintained at the Central Registry are open to inspection for any person on payment of the prescribed fee.

Need for Central Registry

The RBI is the regulator of the major player in the Indian Financial System and has to ensure financial intermediaries engage in Securitisation prudently. To prevent fraud in loan cases involving, multiple lending from different banks on the same immovable property, the Central Electronic Registry under SARFAESI Act, 2002 has become operational since 31 March, 2011. The records maintained by the Central Electronic Registry will be available for search by any lender or any other person desirous of dealing with the property.

When the borrower is a company, there is a strong mechanism to verify the charges created by the company on its assets by searching its records maintained with the concerned Registrar of Companies.

Therefore, the establishment of a Central Registry was a welcome idea under the Act

and is a necessary step to maintain data relating to the charges created on any asset by any person.

Besides being beneficial to the lenders and innocent third parties, the establishment and notification of the Central Registry would result in advantages given below:

- a single source to verify charges, if any, on any asset created by any entity,
- charges/encumbrances created on the asset of an unregistered entity including individuals, HUF, Association of Persons can be easily traced and the information be readily available,
- chances of use of false title deeds or false representations on the title of the assets can be eliminated. Accordingly, fraud on title of properties can be controlled, minimised and eliminated,
- due diligence on portfolio securitisation can be eased out,
- due diligence on sale and purchase of assets/properties would become easy and transparent,
- gullible public and innocent buyers who are generally left in the hands of unscrupulous real estate brokers and builders can be saved and their interests protected,
- data on charged and encumbered properties can be made available in a transparent manner giving the industry reflection and exposure of the lenders on such assets, and

Since the land records are not computerized in all the states and tracing the title of properties is still a complex problem, the Central Registry would better equip the lender to make a fair assessment of risk undertaken while providing finance against the property, thus making lending more easy and safe.

Bureaucratic delays and fleecing which happens on account of lack of transparency and procedure to determine the encumbrances would be reduced or eliminated, restoring faith in the land record system as well in respect of assets other than real estate.

CONCLUSION:

Though the enactment of SARFAESI Act sought to mobilise blocked funds of the banks in the non-performing assets, the various provisions of the acts have created deep sorrows for the genuine buyers. The various provisions meant to balance the

requirements of the borrowers and the banks, have their balance of favour tilted towards the banks. These powers are, at majority of the times, mis-utilized by the banks to appropriate their interests against the interests of the buyers. In such a situation it is pertinent for the civil courts to assume a more social responsibility for the larger interest of the borrowers on one hand and to share the responsibilities of the banks to mobilize their funds from the numerous non-performing assets.

UNIT – X

Section 5(n) of Banking Regulation Act, 1949

- **SECURED LOAN OR ADVANCE IS DEFINED UNDER SECTION 5(n) OF BANKING REGULATION ACT,1949 as follows:**

“secured loan or advance”:

means a loan or advance made on the security of assets the market value of which is not at any time less than the amount of such loan or advance; and

“unsecured loan or advance” :

It means a loan or advance not so secured

UNIT – XI

Companies Act 2013 :

Section 192(2), 230 (1,2,3), 231, 232, 247(1), 281(1)

Please refer to the Companies Act 2013.

INTRODUCTION TO STATISTICS

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OVERVIEW OF STATISTICS

Statistics is a Science of collection, presentation, analysis, and reasonable interpretation of data. Statistics presents a rigorous scientific method for gaining insight into data.

For example, suppose we measure the weight of 100 patients in a study. With so many measurements, simply looking at the data fails to provide an informative account. However statistics can give an instant overall picture of data based on graphical presentation or numerical summarization irrespective to the number of data points. Besides data summarization, another important task of statistics is to make inference using data and predict relations of variables.

Why valuers are required to study statistics?

Because, valuers estimate the price of an asset on the basis of number of data.

- We collect number of data, for example, in case of real estate;
- Identify the identical or similar asset or property under valuation;
- Identify the various factors which will affect the value of the property such as shape, size, location, social factors like nearness to market, school, hospital, railway station, bus station, playground, recreational places, cinema, theatre, banks, government offices, legal factors like DCR, FSI, ULC Act, Rent Control Act, Technological factors like specifications of building, material of constructions, arrangement of rooms, light, air, ventilation etc;
- Give the weightage to each factor as per the preferences of the local public;
- Find out final weightage score;
- Compare all heterogeneous property by bringing them to the same platform;
- Comparison of heterogeneous property is possible;
- Draw our conclusion about the value.
- in case of plant and machinery, statistical methods are useful in comparison as well as in estimation of balance life.

OBJECTIVES

- To show the difference between samples and populations
- To convert raw data to useful information
- To construct and use data arrays
- To construct and use frequency distributions
- To graph frequency distributions with histograms, polygons and ogives

UNIT – 1

DATA CLASSIFICATIONS AND PROCESSING, GRAPHICAL REPRESENTATION OF DATA, FREQUENCY DISTRIBUTIONS

2.1 DATA

Data is any kind of Information pertaining to any subject, theme or phenomenon.

For example,

- Number of patients visit hospital for check-up
- Selling of car per day
- Number of students using bike.

Data could be of two types:

- i. Qualitative: Information relating of occurrence or non occurrence of some phenomenon.
- ii. Quantitative: Information dealing with magnitude or amount of values of some entities determining a phenomenon.

A collection of observations is called a data set or simply data, and a single observation is called a data point.

Collection of data :

Select the observations so that all relevant groups are represented in the data.

e.g. To determine potential market for a new product, suppose analyst study 100 consumers in a certain area. Analyst must be certain that this group contains people from various income levels, races, neighborhoods, having different educational background, etc.

Source of data :

Primary data: Generated or collected directly by the researcher.

Secondary data: Obtained from published sources (Statistical yearbooks / statistical handbooks /population census) such as departmental reports and census and other publications.

Use of data :

Data can assist decision makers in making guesses, probable effects of certain characteristics in a given situation.

Past experience can be useful in predicting future trends.

2.2 SAMPLE AND POPULATION

- population is a whole, and a sample is a fraction or segment of that whole.
- Statisticians gather data from a sample.
- Use this information to make inferences about the population that the sample represents.

A population is a collection of all the elements we are studying and about which we are trying to draw conclusions.

A sample is a collection of some, but not all, of the elements of the population.

A representative sample contains the relevant characteristics of the population in the same proportions as they are included in that population.

To find a meaningful pattern in the data

There are many ways to sort data. If the data is quantitative, we can list the data points from lowest to highest in numerical value. But if the data is qualitative like colour, degree of skill of worker, then we must organize them differently as per organizing principle like divide data into similar category or classes and count the number of observation that fall into each category or class. This is known as frequency distribution.

- Purpose of organizing data is to enable us to see quickly some of the characteristics of the data.

- The information like the range, apparent patterns, what values the data may tend to group around, what values appear most frequent from our sample can be very much helpful in understanding the population and better decision can be made.

Raw data or Ungrouped data:

Information before it is arranged and analyzed is called raw or Ungrouped data. Raw because it's unprocessed by statistical methods.

Use of biased and incomplete data leads to poor decisions.

Data array :

It arranges values in ascending or descending order.

2.3 FREQUENCY DISTRIBUTION (F.D.)

It compresses the data :

In F.D. some information can be lost as compared to array because in array, each data point is listed whereas in F.D., number of data points that fall into each group are recorded but due to construction of F.D., pattern or trend can be ascertained. When data is organized in this form it is called a grouped data.

A F.D. is a table that organizes data into classes i.e. into groups of values describing one characteristic of the data.

Example: 1- Consider the Data ~~array~~ of average sales in thousands, for 20 stores :

2.0	3.8	4.1	4.7	5.5
3.4	4.0	4.2	4.8	5.5
4.3	4.1	4.3	4.9	5.5
3.8	4.1	4.7	4.9	5.5

The Frequency distribution of the above data :

Class (Group of similar values of data points)	Frequency (No. of observations in each class)	<u>Relative frequency</u>
2.0 to 2.5	1	1/20 = 0.05
2.6 to 3.1	0	0/20 = 0.00
3.2 to 3.7	2	2/20 = 0.10
3.8 to 4.3	8	8/20 = 0.40
4.4 to 4.9	5	5/20 = 0.25
5.0 to 5.5	4	4/20 = 0.20
	20	1.00

A F.D. shows the number of observations from the data set that fall into each of the several non-overlapping classes.

Note that, In this case, in class 1, we consider all possible values ≥ 2 and ≤ 2.5 , in class 2, all the \geq values 2.6 and < 3.1 etc. In the last class all the values ≥ 5.0 and ≤ 5.5 are considered.

Suppose 'N' is the no. of observations then ideally No. of classes (C) into which the data should be grouped is given by: $C = 1 + 3.3 \log_{10} N$.

And width of the Class interval is given by:

$$\text{Class width} = \frac{\left(\begin{array}{c} \text{Next Unit Value after} \\ \text{Largest value in data} \end{array} \right) - \left(\begin{array}{c} \text{Smallest Value} \\ \text{In data} \end{array} \right)}{\text{Total number of class interval}}$$

Example: 2 Consider another dataset:

16.25, 16.52, 16.0, 15.82, 16.77, 16.33, 15.6, 15.8, 16.39, 15.44, 16.64, 15.65, 15.88, 16.18, 15.7, 15.79, 16.27, 15.95, 16.05, 15.93, 16.88, 15.81, 16.59, 15.89, 15.87, 15.52, 15.99, 15.26, 16.30, 17.0

Observe that here, $N = 30$ and hence, $C = 1 + 3.3 \log_{10} 30 = 1 + 4.87 = 5.87 \cong 6$.

$$\text{Class width} = (17.0 - 15.2) / 6 = 1.8 / 6 = 0.3$$

Thus the Frequency distribution for this data is as follows

	<u>Class</u>	<u>Frequency (f)</u>	<u>Relative Frequency</u>
15.2 to	15.5	2	0.06
15.5 to	15.8	5	0.17
15.8 to	16.1	11	0.37
16.1 to	16.4	6	0.20
16.4 to	16.7	3	0.10
16.7 to	17.0	3	0.10
		30	1.00

Note that, In above case, in class 1, we consider all possible values > 15.2 and < 15.5 , in class 2, all the $>$ values 15.5 and < 15.8 etc. In the last class all the values > 16.7 and < 17.0 are considered. Such a frequency distribution is called continuous frequency distribution.

In-case we consider classes consisting of only one distinct data value starting from lowest value to highest value like $15.2, 15.3, 15.4, 15.5 \dots 16.9, 17.0$ and class frequency as number of times the class value occurs in the data set Then the type of frequency distribution we get, is called discrete frequency distribution.

In case of qualitative data also, if we consider classes corresponding to each category in the data set, we get a discrete frequency distribution.

Example 3:

Guests staying at Marada Inn were asked to rate the quality of their accommodations as being **excellent (E)**, **above average (AA)**, **average (A)**, **below average (BA)**, or **poor (P)**. The ratings provided by a sample of size $N = 20$ guests are shown below:

BA, A, AA, AA, AA, AA, AA, BA, BA, A, P, P, AA, E, AA, A, AA, A, AA, A.

The Frequency distribution for this data is given by:

Rating	Frequency (f)	Relative Frequency(f/N)	% ((f/N)100)	Frequency
Poor	2	0.1	10	
Below average	3	0.15	15	
Average	5	0.25	25	
Above average	9	0.45	45	
Excellent	1	0.05	5	
Total	20	1.00	100	

2.4 GRAPHICAL/DIAGRAMATIC PRESENTATION OF QUANTITATIVE DATA:

Frequency distribution or relative frequency distribution gives tabular representation of the raw data. Such a grouped / tabular data can be nicely presented in the form of diagrams or graphs for better understanding of the nature of data. Quantitative data can be represented by Histogram, frequency polygon, frequency curve, Ogive curve etc. while; qualitative data can be represented by bar charts, Pie charts etc. We illustrate these diagrams for the examples given above.

HISTOGRAM / FREQUENCY POLYGON / FREQUENCY CURVE

graphical presentation of quantitative data is called a Histogram. In histogram, the variable of interest is placed on the horizontal axis and the frequency, relative frequency, or percent frequency is placed on the vertical axis. A rectangle is drawn above each class interval with its height corresponding to the interval's frequency, relative frequency, or percent frequency. A histogram has no separation between rectangles of adjacent classes.

If midpoints of the upper side of the rectangles in a Histogram are connected by straight lines, the resulting curve is called the Frequency Polygon.

If points on frequency polygon are connected by smoothed curve is called Frequency Curve.

Figure -1: Histogram & frequency polygon for example-2

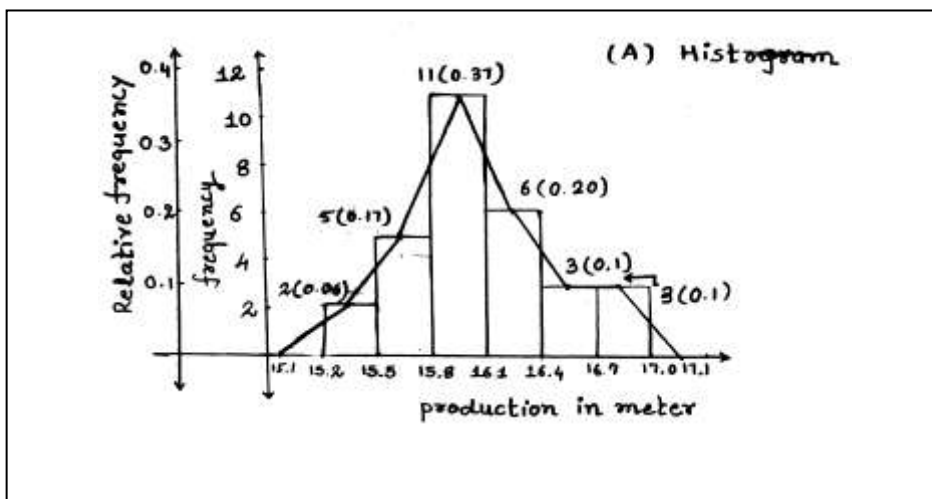
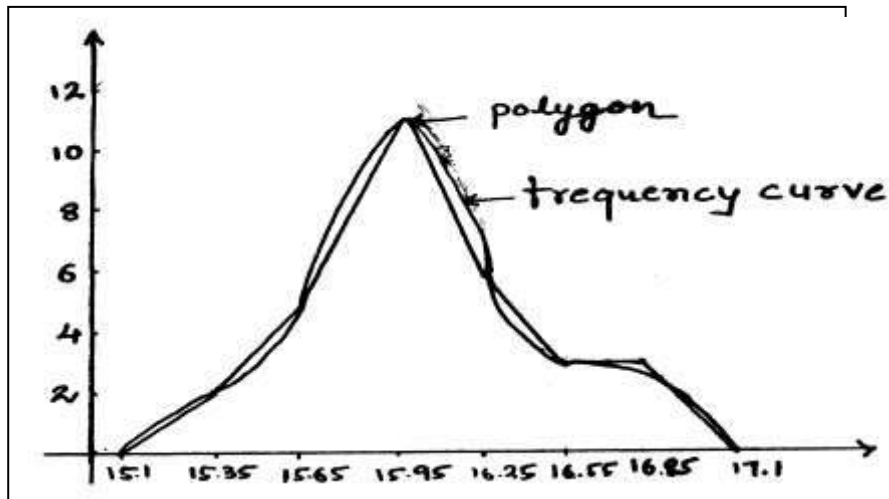


Figure 2: Frequency Polygon and Frequency curve (example-2)

OGIVE

A cumulative frequency distribution enables us to see how many observation lie above or below certain values, rather than merely recording the number of items within intervals.

A graph of a cumulative frequency distribution is called an 'Ogive' (pronounced as 'Ohjive').

'LESS THAN' OGIVE: Cumulative distribution (\leq) for example-2 is given below.

<u>Class</u>	<u>Cumulative Frequency</u>
Less than 15.2	0
Less than 15.5	2
Less than 15.8	7
Less than 16.1	18
Less than 16.4	24
Less than 16.7	27
Less than 17.0	30

'More than' Ogive for example-2 is as follows:

<u>Class</u>	<u>Cumulative Frequency</u>
Less than 15.2	30
Less than 15.5	28
Less than 15.8	23
Less than 16.1	12
Less than 16.4	6
Less than 16.7	3
Less than 17.0	0

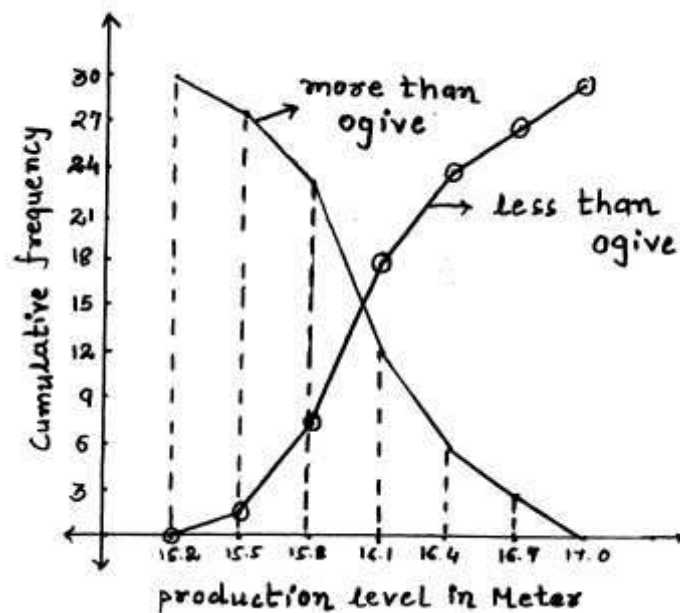


Figure 3: \leq and \geq Ogive

2.5 GRAPHICAL PRESENTATION OF QUALITATIVE DATA:

In contrast to quantitative data graphs that are plotted along a numerical scale, qualitative graphs are plotted using non-numerical categories. In this section, we will examine two types of qualitative data graphs: (1) pie charts, (2) bar charts.

PIE – DIAGRAM (CIRCLE DIAGRAM)

A pie chart is a circular depiction of data where the area of the whole pie represents 100% of the data and slices of the pie represent a percentage breakdown of the different classes / categories. Pie charts show the relative magnitudes of the parts to the whole. They are widely used in business, particularly to depict such things as budget categories, market share, and time / resource allocations. A typical Pie chart is depicted below.

Pie Chart for Example 3 is given by:

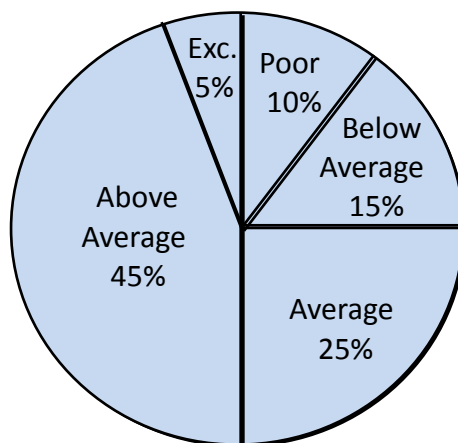


Figure 4: Pie chart for example 3 (Quality rating)

BAR CHART:

A bar graph or chart contains two or more categories along one axis and a series of bars, one for each category, along the other axis. Typically, the length of the bar represents the magnitude of the measure (amount, frequency, money, percentage, etc.) for each category. It is similar to Histogram except that in this case bars are separated from each other.

Bar chart for example 3 is given below.

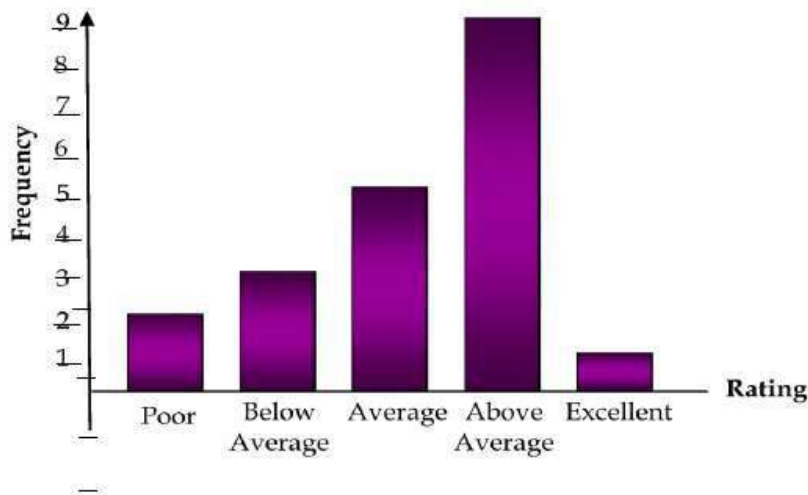


Figure 5: Bar Chart for example 3

2.6 REVIEW

2.6.1 Here are the ages of 50 members of a country social service programme.

83	51	66	61	82	65	54	56	92	60
65	87	68	64	51	70	75	66	74	68
44	55	78	69	98	67	82	77	79	62
38	88	76	99	84	47	60	42	66	74
91	71	83	80	68	65	51	56	73	55

Use these data to construct relative frequency distributions using 7 equal intervals and 13 equal intervals. State policies on social service programmes require that approximately 50 percent of the programme participants be older than 50.

- Is the programme in compliance with the policy?
- Does your 13-interval relative frequency distribution help you answer part (a) better than your 7-interval distribution?
- Suppose the Director of Social Services wanted to know the proportion of programme participants between 45 and 50 years old. Could you estimate the answer for her better with a 7 or a 13 interval relative frequency distribution?

2.6.2 High performance bicycle products company in Firozpur, sampled its shipping for a certain day with these results:

Time from Receipt of Order to Delivery (in Days)

4	12	8	14	11	6	7	13	13	11
11	20	5	19	10	15	24	7	29	6

Construct a frequency distribution for these data and a relative frequency distribution. Use intervals of 6 days.

- What statement can you make about the effectiveness of order processing from the frequency distribution?
- If the company wants to ensure that half of its deliveries are made in 10 or fewer days, can you determine from the frequency distribution whether they have reached this goal?
- What does having a relative frequency distribution permit you to do with the data that is difficult to do with only a frequency distribution?

2.6.3 Mr. Amit, a safety engineer for the Ratnagiri Power Generating Station, has charted the peak reactor temperature each day for the past year and has prepared the following frequency distribution:

<u>Temperature in °C</u>	<u>Frequency</u>
Below 500	4
501-510	7
511-520	32
521-530	59
531-540	82
541-550	65
551-560	33
561-570	28
571-580	27
581-590	23
Total	360

List and explain any errors you can find in Mr. Franks's distribution.

2.6.4 Here is a frequency distribution of the weight of 150 people who used a passenger lift on a certain day. Construct a histogram for these data:

Class	Frequency
75-89	10
90-104	11
105-119	23
120-134	26
135-149	31
150-164	23
165-179	23
180-194	9
195-209	6
210-224	2

- What can you see from the histogram about the data that was not immediately apparent from the frequency distribution?
- If each passenger lift chair holds two people but is limited in total safe weight capacity to 400 pounds, what can the operator do to maximize the people capacity of the ski lift without exceeding the safe weight capacity of a chair? Do the data support your proposal?

2.6.5 The V.S. Hospital has the following data representing weight in pounds at birth of 200 premature babies.

Class	Frequency
0.5-0.9	10
1.0-1.4	19
1.5-1.9	24
2.0-2.4	27
2.5-2.9	29
3.0-3.4	34
3.5-3.9	40
4.0-4.4	17

Construct an ogive that will help you answer these questions:

- c. What was the approximate middle value in the original data set?
- d. If premature babies under 3.0 pounds are normally kept in an incubator for several days as a precaution, about what percentage of V.S.'s premature babies will need an incubator?

UNIT – 2

MEASURES OF CENTRAL TENDENCY, DISPERSION AND SKEWNESS

CHARACTERISTICS OF FREQUENCY DISTRIBUTIONS:

3.1 CENTRAL TENDENCY

Data is a set of observations and each observation gives some information / value of interested variable, say x . Now there is a natural tendency to concentrate most of the information at centre point (like centre of gravity). Our aim is to locate this central point and measure the information at this point. Figure - 6 depicts three distributions (curves A, B and C) for values of x . Central locations of Curve 'A' and Curve 'B' is equal but Central locations of Curve 'C' lies to the right of those of Curve 'A' and Curve 'B'.

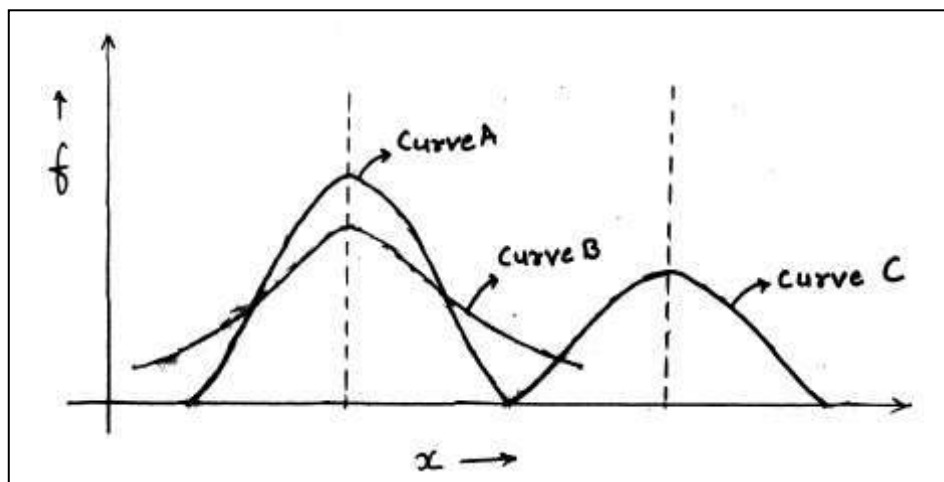


Figure 6: Central locations of distribution of x

3.2 DISPERSION

Dispersion is the spread of the data in a distribution. i.e. the extent to which the observations are scattered. Curve 'B' has wider spread or dispersion than Curve 'A'.

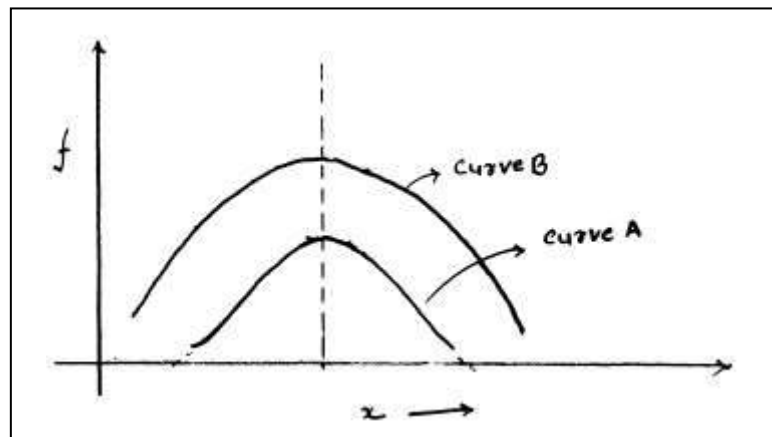


Figure 7: Dispersion of distribution of x

Other two characteristics to make decision are: Skewness and Kurtosis

3.3 SKEWNESS

Distributions representing the data points in the data set may be symmetrical or skewed.

Symmetrical curve A like shown in figure 8 i.e. if vertical line drawn from center of the curve to Horizontal Axis divides the area under the Curve into two equal parts. Mirror image of the other

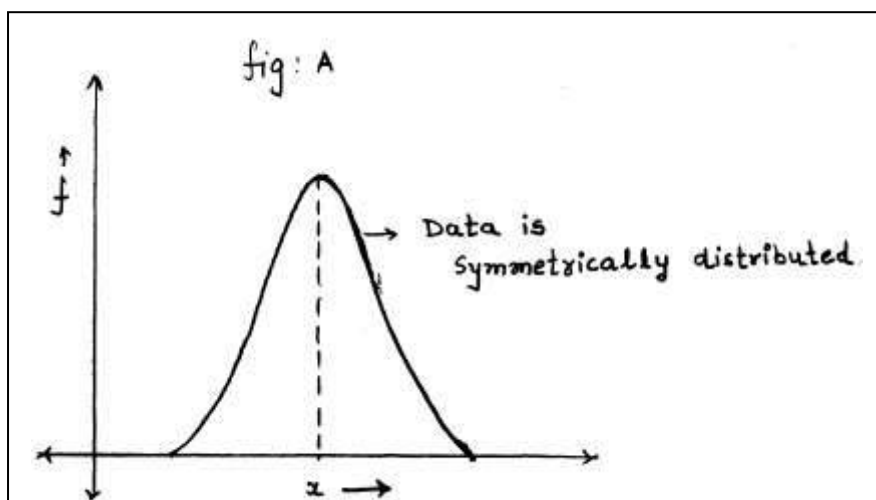


Figure 8: symmetric distribution

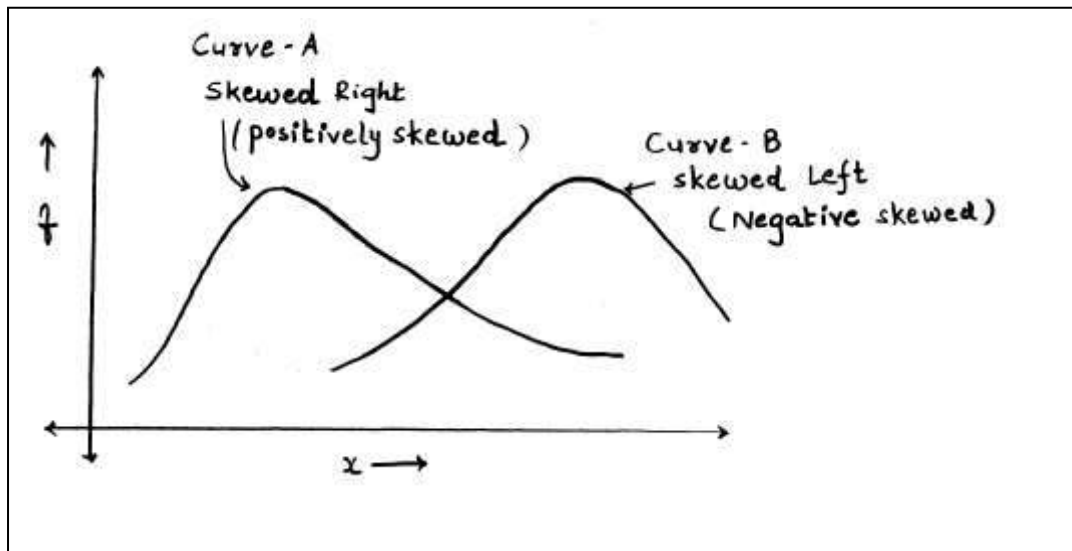


Figure 9: Skewed distributions

Curve 'A' and Curve 'B' shown in Figure 9 are skewed curves. They are skewed because values in their frequency distributions are concentrated at either lower or higher end of the measuring scale on the horizontal axis. The values are not equally distributed. Curve 'A' is skewed to right (or positively skewed) because it tails off towards the higher end of the scale. Curve 'B' is just opposite. It is skewed to left (negatively skewed) because it tails off towards the lower end of the scale.

e.g. Curve 'A' might represent the frequency distribution of the number of hours Vs. Supply of the Daily News Paper of distributor. The curve would be skewed to the right, with many values at early hours of the morning and very few in the evening. Stocks will turn over rapidly.

Similarly, Curve 'B' could represent the frequency of the number of days a real estate broker requires to sell a house. It would be skewed to the left, with many values at the high end and few at low, because selling of houses of a big project turns over very slowly.

KURTOSIS:

Peakedness of a data set is called Kurtosis.

Curve 'A' and Curve 'B' differ only in that one is more peaked than the other.

They have same Central Location and Dispersion and both are symmetrical but the two curves have different degrees of Kurtosis (Different Peak)

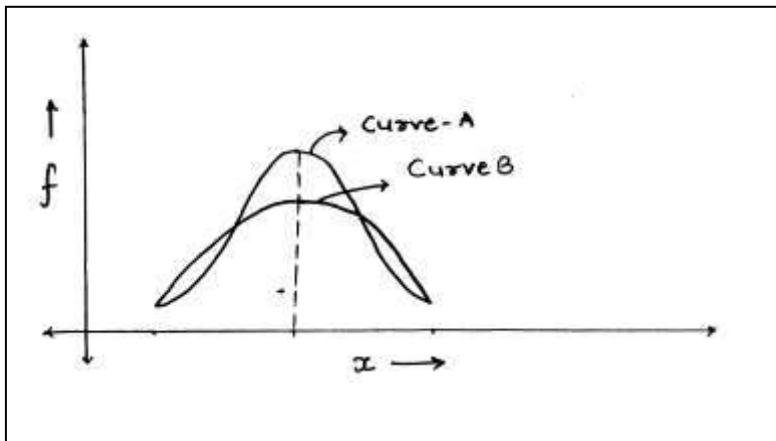


Figure 10: Distributions with different Kurtosis

Two curves with same central location. Dispersion and both are symmetrical but different Kurtosis.

3.4 MEASURES OF CHARACTERISTICS OF PROBABILITY DISTRIBUTIONS:

In the previous section, various characteristics of a probability distributions like, Central tendency, dispersion, skewness, kurtosis have been discussed conceptually. In this sections we give numerical measures for these characteristics.

MEASURES OF CENTRAL TENDENCY:

Commonly used measures of central tendency are Mean, Median and Mode. The formulae for these measures are different for grouped and ungrouped data.

The arithmetic mean for ungrouped data:

If the ungrouped data is given as $\{x_1, x_2, \dots, x_n\}$ then the Mean (the simple Arithmetic mean)

$$\bar{x} = \frac{\{\sum_{i=1}^n x_i\}}{n} = \frac{\text{Sum of all data values}}{\text{Total number of observations}}$$

Example: 4 Suppose time required to complete the job by 7 labours are as under :

Worker	:	1	2	3	4	5	6	7
Time in hours:		4.2	4.3	4.7	4.8	5.0	5.1	9.0

$$\bar{x} = \frac{(37.1)}{7} = 5.3 \text{ hours}$$

Observe that the 7th data value 9 is much away from other data values lying in the interval [4.2, 5.1]. If we exclude the worker no.7 and compute mean time for first 6 worker, the mean is 4.7 hours.

This extreme value of 9.0 distorts the value we get for the mean. It would be more representative to calculate mean without including extreme value. Such extreme values in the data are called outliers.

The Arithmetic Mean for Grouped Data:

Consider the group data distributed in k class intervals $[a_i, b_i]$ having frequency f_i , for $i = 1, 2, \dots, k$. Let $x_i =$ class midpoint $= (a_i + b_i) / 2$. Then the Arithmetic mean for such a group data is given by $\bar{x} = \frac{\sum_{i=1}^k x_i f_i}{n}$, where $n = \sum_{i=1}^k f_i$.

Assumed Mean Method: This method is used to reduce the computational efforts in computing the arithmetic mean for the group data in which the data values are large. To achieve this, it is assumed that the mean of the data is the midpoint of the middle class, say a. Compute $y_i = (a - x_i) / (\text{Class width})$ for all $i = 1, 2, \dots, k$. Then the Arithmetic mean for such a group data is given by:

$$\bar{x} = a + \bar{y} \cdot (cw) = a + \frac{\{\sum_{i=1}^k y_i f_i\} \cdot cw}{n}, \text{ where } n = \sum_{i=1}^k f_i.$$

Example 5 Find out the average floor area of the house (arithmetic mean) of a following grouped data :

Class ($a_i - b_i$) Floor area in Sq. ft.	Frequency f_i Nos. of houses	$\left[\frac{a_i + b_i}{2} \right]$ Mid value x_i	$x_i f_i$	For Assumed Mean Method	
				y_i	$y_i f_i$
100 - 800	15	450	6750	-3	-45
800 - 1500	3	1150	3450	-2	-6
1500 - 2200	2	1850	3700	-1	-2
2200 - 2900	2	2550	5100	0	0
2900 - 3600	2	3250	6500	1	2
3600 - 4300	1	3950	3950	2	2
4300 - 5000	0	4650	0	3	0
	$\Sigma f_i = 25$ $n = 25$		$\Sigma f_i x_i =$ 29450		$\Sigma y_i f_i =$ -49

Average floor area of the house = Arithmetic Mean \bar{x}

$$= \frac{\{\sum_{i=1}^n x_i f_i\}}{n} = \frac{29450}{25} = 1,178 \text{ sq. ft.}$$

Computing the arithmetic mean for this data by Assumed mean method:

Here, we take assumed mean a = Midpoint of 4th class = 2550.

Class width = 700 and hence $y_i = (x_i - 2550) / 700$, for $i = 1, 2, \dots, 7$.

Column 5 and 6 in table gives values of y_i 's and $y_i f_i$.

This gives, $\sum_{i=1}^n y_i \cdot f_i = -49$.

$$\begin{aligned} \text{Hence, } \bar{x} &= a + \bar{y} \cdot cw = a + \frac{\{\sum_{i=1}^k y_i \cdot f_i\} \cdot cw}{n} \\ &= 2550 + (-49 \times 700) / 25 = 1178 \text{ sq. ft} \end{aligned}$$

- For large number of observations, it's tedious to compute mean.
- Unable to compute the mean for the dataset that has open-ended classes at high or low end of the scale.

e.g. Open ended class like 5.1 and above, 2.1 and less etc.

3.5.1 CENTRAL TENDENCY : THE WEIGHTED MEAN

The weighted mean enables us to calculate an average that takes into account the importance of each value to the overall total.

e.g. Labour input in G.I.D.C., Vitthal Udyognagar

Grade of Labour	Hourly wages in INR	Labour hours per unit Product X
Unskilled	50	1
Semi-skilled	100	2
Skilled	150	5

Arithmetic mean of labour wage

$$= \text{Rs.} \left\{ \frac{50 + 100 + 150}{3} \right\} = \text{Rs. 100 per hour'}$$

But this answer is incorrect.

To get the correct answer, we must take into account that different amounts of each grade of labour.

We should consider, that, how much time each labour has spent. Considering these times 1 hr, 2hr and 5 hr we get

$$\text{Arithmetic Mean} = \frac{(50 \times 1) + (100 \times 2) + (150 \times 5)}{(1+2+5)}$$

Average labour cost per unit = Rs.125/- per unit

This type of arithmetic mean is called Weighted arithmetic mean. Note that in this case, data item 50, 100, 150 are assigned the weights 1, 2 and 5.

Thus, the weighted mean \bar{x}_w of the data points $\{x_1, x_2, \dots, x_n\}$ having corresponding weights (the relative importance of the values of x) $\{w_1, w_2, \dots, w_n\}$, is given by

$$\bar{x}_w = \frac{\sum_{i=1}^n w_i x_i}{\sum_{i=1}^n w_i}$$

3.5.2 CENTRAL TENDENCY : THE GEOMETRIC MEAN

When we are dealing with quantities that change over a period of time, we need to know an average rate of change, such as an average growth rate over a period of several years. In such cases, we need to find is the Geometric Mean (G.M.).

$$\text{G.M.} = \sqrt[n]{\text{Product of all } x \text{ values}}, \text{ where } n = \text{No. of } x \text{ values}$$

Example 6: In very highly inflationary economies, banks must pay high interest rates to attract savings. Suppose let us assume a very unstable and inflationary economy of Iraq, they have decided to pay interest at annual rates of 100, 200, 250, 300 and 400%, which correspond to Growth Factors of 2, 3, 3.5, 4 and 5

Year	Interest Rate	Growth factor	Saving at the end of the year
1	100%	2	\$ 1000 x 2 = 2000
2	200%	3	6000
3	250%	3.5	21,000
4	300%	4.0	84,000
5	400%	5.0	4,20,000

Suppose initial deposit is \$ 1,000. This will grow \$ 1000 x 2 x 3 x 3.5 x 4 x 5

$$\text{Arithmetic Growth factor} = \frac{(2+3+3.5+4+5)}{5} = 3.5$$

Corresponds to an average interest rate 250%. If the banks actually gave interest at a constant rate of 250% per annum, then \$ 1000 would grow to

$$\$ 1000 \times 3.5 \times 3.5 \times 3.5 \times 3.5 \times 3.5 = \$ 5,25,219$$

This answer will exceed the actual \$ 4,20,000 by more than \$ 1,05,219.

This is a very big error.

Let's find Geometric Mean for the above case.

$$\begin{aligned} \text{G.M.} &= \sqrt[5]{\text{Product of all } x \text{ values}} \\ &= \sqrt[5]{2 \times 3 \times 3.5 \times 4 \times 5} = \sqrt[5]{420} = 3.347 \end{aligned} \quad \text{Average growth factor.}$$

This growth factor corresponds to an average interest rate of $(3.347 - 1 = 2.347 \cong 234.7\%$ per annum). With this growth rate \$ 1000 would grow to

$\$ 1000 \times 3.347 \times 3.347 \times 3.347 \times 3.347 \times 3.347 = 420028$ which is very close to the exact value.

Hence, the appropriate mean in this case is the G.M. which makes significant difference.

3.5.3 CENTRAL TENDENCY : HARMONIC MEAN

Harmonic Mean is the reciprocal of the arithmetic mean of the reciprocal of the individual observation. For the ungrouped data $\{x_1, x_2, x_3, \dots, x_n\}$,

$$H. M. = \frac{n}{\frac{1}{x_1} + \frac{1}{x_2} + \frac{1}{x_3} + \dots + \frac{1}{x_n}} = \frac{n}{\sum_{i=1}^n \left(\frac{1}{x_i}\right)}$$

For grouped data with discrete distinct data points $\{x_1, x_2, x_3, \dots, x_k\}$, with corresponding frequencies $\{f_1, f_2, f_3, \dots, f_k\}$, the Harmonic mean is given by

$$H. M. = \frac{n}{\sum_{i=1}^k \left(\frac{f_i}{x_i}\right)}, \text{ where } n = \sum_{i=1}^k f_i.$$

For grouped data with continuous data points with k distinct classes having class mid-points $\{m_1, m_2, m_3, \dots, m_k\}$, with corresponding frequencies $\{f_1, f_2, f_3, \dots, f_k\}$, the Harmonic mean is given by

$$H. M. = \frac{n}{\sum_{i=1}^k \left(\frac{f_i}{m_i}\right)}, \text{ where } n = \sum_{i=1}^k f_i.$$

Example 7: An automobile driver travels from plain to hill station 100 km distance at an average speed of 30 km per hour. He then makes the return trip at an average speed of 20 kilometer per hour. What is his average speed over the entire distance (200 kilometer)?

$$\text{Arithmetic Mean} = (30 + 20) / 2 = 25 \text{ km / hour.}$$

But A.M. is not correct as indicated by the following computations:

	Distance	Average Speed	Time Taken
Going	100 kms	30 kms per hour	3 hours 20 minutes
Returning	100 kms	20 kms per hour	5 hours 00 minutes
Distance	200 kms		8 hours 20 minutes

Hence, the average speed = $200 / 8.33 = 24 \text{ km / hr.}$

$$\text{Now, H.M.} = \frac{2}{\frac{1}{20} + \frac{1}{30}} = \frac{2 \times 60}{5} = 24 \text{ km/hr.}$$

Which gives correct average speed.

If distances are same then H.M. is correct 24 kms per hour.

If time is same then Arithmetic mean gives the correct average.

Speed	Hour	Distance
30 kms per hour	4	120 kms
20 kms per hour	4	80 kms
	8	200 kms

$$\text{Average speed} = \frac{200}{8} = 25 \text{ km / hr., which is same as the Arithmetic mean.}$$

3.5.4 CENTRAL TENDENCY : THE MEDIAN

The Median is a measure of Central Tendency different from any of the means discussed earlier.

For ungrouped data:

The median of a data set is the value in the middle when the data items are arranged in ascending order.

If there is an odd number of items, the median is the value of the middle item.

If there is an even number of items, the median is the average of the values for the middle two items.

Median = $\left(\frac{n+1}{2}\right)^{\text{th}}$ item in a data array sorted in the ascending order if number of items n in the array is odd.

Suppose, in a data array, students admitted a valuation programme since last 7 years.

a)	1996	1997	1998	1999	2000	2001	2003
	13	14	16	17	18	18	19

Note that number of data items is odd and data values are already sorted in the ascending order. Hence,

$$\text{Median} = \left(\frac{n+1}{2}\right) = \frac{8}{2} = 4^{\text{th}} \text{ item} = 17.$$

b) No. of completion certificate issued by the Municipal Authority in Anand since last 8 months.

Dec'02	Jan	Feb	March	April	May	June	July'03
20	25	28	30	32	35	38	40

Note that here number of data items is 8 which is an even number and data items are sorted in the ascending order. And $(n + 1) / 2 = 9 / 2 = 4.5$. Hence,

$$\text{Median} = \text{Average of } 4^{\text{th}} \text{ and } 5^{\text{th}} \text{ data items} = (30 + 32) / 2 = 31.$$

If the raw data is not in sorted order, the data items has to be sorted first and then the above procedure should be applied.

Median for grouped data

Suppose that the grouped data is organized in the form of following cumulative frequency distribution for data items lying in the interval [a, b].

Class	frequency	Cumulative frequency
a - a ₁	f ₁	f ₁ = C ₁
a ₁ - a ₂	f ₂	f ₁ + f ₂ = C ₂
a ₂ - a ₃	f ₂	f ₁ + f ₂ + f ₃ = C ₃
-		
- (previous class)	f _p	C _p
a _l - a _u (Median class)	f _m	C _m
-		-
-		-
a _n - b	f _{n+1}	f ₁ + f ₂ + ... + f _{n+1} = N

Median class: Class in which $\left(\frac{N+1}{2}\right)^{th}$ item lies. That is $C_p < (N+1)/2 \leq C_m$,

Where C_p and C_m are cumulative frequencies of previous class (class previous to median class) and median class respectively.

Then the Median = $a_l + \frac{\frac{N}{2} - C_p}{f_m} W$, where

a_l = lower limit of the median class; a_u = upper limit of the median class;

f_m = frequency of the median class;

W = a_u - a_l = class width of the median class.

Example 8: Estimate Median from the following group data :

Area of plot in sq. mt. in TP-1	Number of plots	Cumulative frequency
100 – 105	15	15
105 – 110	20	35
110 – 115	22	57
115 – 120	23	80
120 – 125	28	108
125 – 130 (Median class)	30	138
130 – 135	35	173
135 – 140	45	218
	N = 218	

Now since $108 < N/2 = 109 < 138$, the Median class interval is [125, 130].

Hence, in this case, a_l = 125; a_u = 130; C_p = 108, f_m = 30 and W = 130 – 125 = 5.

Hence, Median = $125 + \left(\frac{109-108}{30}\right) \times 5 = 125.167$.

3.5.5 CENTRAL TENDENCY : MODE

The mode is the value that is repeated most often in the data set. For ungrouped data Mode is the value of the variate for which the frequency is maximum.

Example 9: 1, 2, 3, 4, 5, 5, 5, 5, 6, 7, 8, 8, 8, 9, 9, 10

Here, value 5 is maximum times repeated than any other values.

$\therefore \text{Mode} = 5$

If there are two values having maximum frequency then Mode is not an appropriate measure of central tendency.

For a grouped data organized in the following form

Class	frequency
a - a ₁	f ₁
a ₁ - a ₂	f ₂
a ₂ - a ₃	f ₂
-	-
- (pre-modal class)	f _{m-1}
a _l - a _u (Modal class)	f _m
- Post-modal class	f _{m+1}
-	-
a _n - b	f _{n+1}

Modal class is the class for which the frequency is maximum.

Then the mode for this grouped data is given by:

$$\text{Mode} = a_l + \frac{f_m - f_{m-1}}{2f_m - f_{m-1} - f_{m+1}} \times W$$

Where,

a_l = Lower limit of the modal class;

f_m = Frequency of the modal class;

f_{m-1} = Frequency of the class just before the modal (pre-modal) class;

f_{m+1} = Frequency of the class just after the modal (post-modal) class;

W = a_u - a_l = Class width of the modal class.

Example 10: Find the modal daily wages of employees in a factory.

Daily wages in Rs.	Number of workers
100 - 150	2
150 - 200	10 = f_{m-1}
200 - 250 (Modal class)	26 = f_m
250 - 300	19 = f_{m+1}
300 - 350	11
350 - 400	5

$a_l = 200$; $W = \text{class width} = 50$.

$$\text{Mode} = a_l + \frac{f_m - f_{m-1}}{2f_m - f_{m-1} - f_{m+1}} \times W$$

$$= 200 + \frac{26 - 10}{52 - 10 - 19} \times 50$$

$$= 200 + (16 / 23) \times 50 = 234.78$$

Example 11: The summer earnings of a Sardar Patel University students are as under :

Summer earning in Rs.	No. of students
0 - 500	231
1000 - 1500 (Modal class)	304 = f_{m-1}
1500 - 2000	400 = f_m
2000 - 2500	296 = f_{m+1}
2500 - 3000	123
3000 or more	68
	23

If student aid is restricted to those whose summer earnings were at least 10% lower than the modal summer earnings, how many of the applicants qualify?

- Modal class = Rs.1,000/- – Rs.1,500/-
- Hence $a_l = 1000$; $W = 500$. Hence,

$$\text{Mode} = a_1 + \frac{f_m - f_{m-1}}{2f_m - f_{m-1} - f_{m+1}} \times W = 1000 + \frac{400 - 304}{800 - 304 - 296} \times 500$$

$$= 1000 + (96 / 200) \times 500 = 1240.$$

- c) Modal summer earnings = 1240
 10% lower than summer earnings = $0.9 \times 1240 = 1116$

Draw less than Ogive and find out frequency @ 1116 point from the curve :

Less than	0	0
Less than	500	231
Less than	1000	535
Less than	1500	935
Less than	2000	1231
Less than	2500	1354
Less than	3000	1422

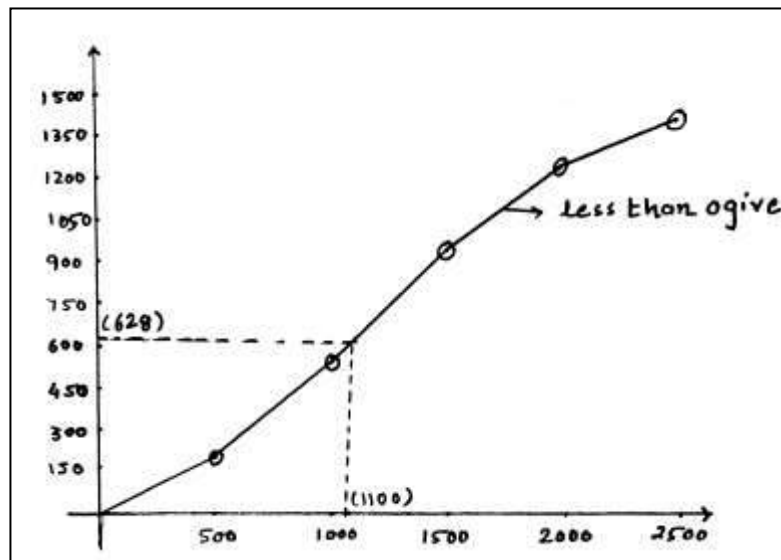


Figure 11: Less than Ogive

Approximately 628 students qualify for students aid.

3.5.6 RELATIONSHIP BETWEEN MEAN, MEDIAN AND MODE

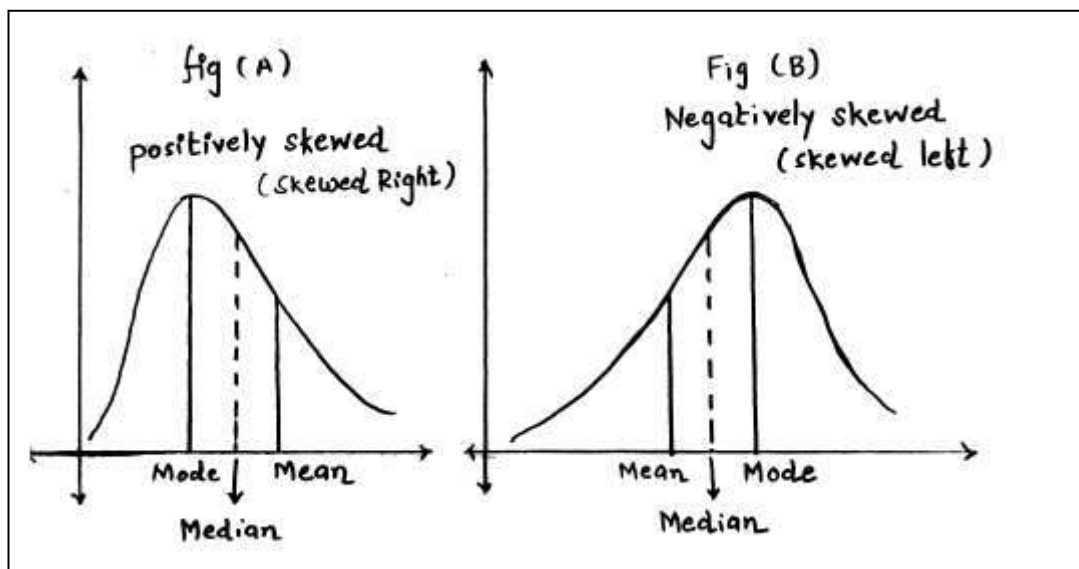
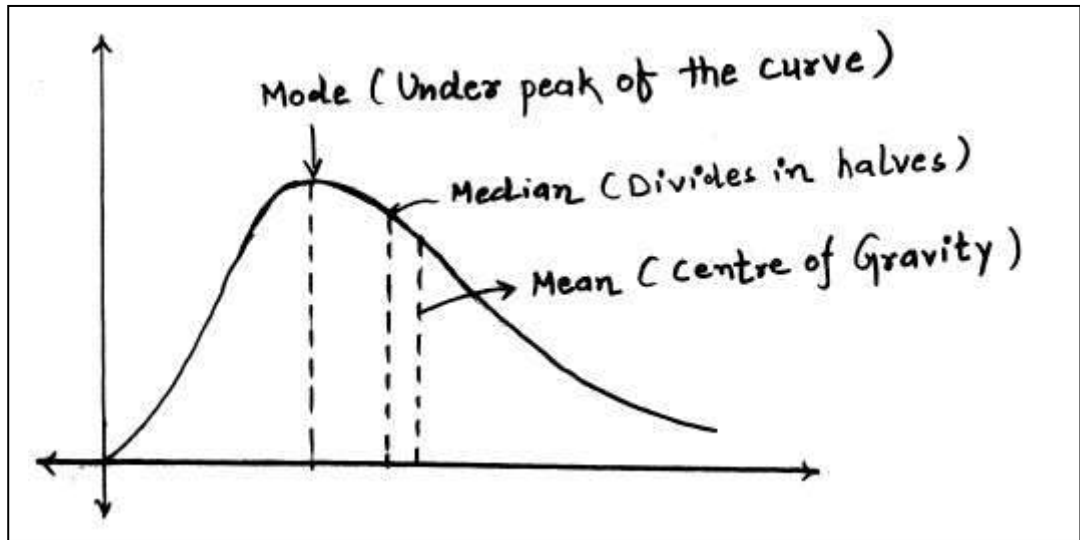


Figure 12: Relative positioning of Mean, Median, and Mode.

Symmetrical distributions have same value for the mean, median and mode. In a positively skewed distribution (one skewed to the right) as in Figure-A, Mode is the highest point of distribution, the median is to right and mean is right to median and in a negatively skewed distribution mean and median are left to Mode as shown in Figure-B.

3.5 DISPERSION

The mean of all three curves is the same, but curve 'A' has less spread (or variability) than curve 'B' which has less spread than curve 'C'. If we measure only the mean of these three distributions, we will miss an important difference among the three curves, likewise for any data, to increase our understanding of the pattern of the data, we must also measure its dispersion – its spread or variability.

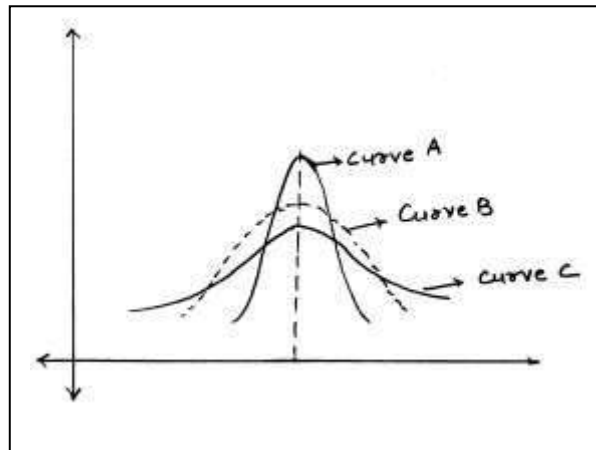


Figure 13: Distributions having same Mean and different dispersions

Use of dispersion measures

- i. To determine the reliability of an average.
- ii. To serve as a basis for the control of the variability means to determine nature and cause of variation in order to control variation itself.
- iii. To compare two or more series with regard to their variability.
- iv. To facilitate the use of other statistical measures.

MEASURES OF DISPERSION : RANGE

3.6.1 The range is the difference between the highest and lowest observed values.

Range = highest observed value - lowest observed value

Example 12:

Annual Selling of books: 100 150 135 149 104 103 99 98 164 170 75 151 155 175

$$\text{Range} = 175 - 75 = 100$$

Example 13:

Series 'A'	56	6	56	56	56	56	6	56
Series 'B'	6	10	16	26	36	46	56	56
Series 'C'	356	356	345	348	349	350	310	306

Range for Series 'A', 'B', 'C' is same 50 but it does not mean that the distributions are alike, therefore Range is most unreliable guide to the dispersion of the values within a distribution.

Range cannot be computed in case of open-end distribution.

3.6.2 MEASURES OF DISPERSION : THE INTERQUARTILE RANGE

Range is based on two extreme items and it fails to take account of the scatter within the range. From this, there is a reason to believe that if the dispersion of the extreme items is discarded, the limited range thus established might be more instructive. For this purpose there has been a developed measure, called the inter-quartile range, the range which includes the middle 50% of the distribution. That is, one-quarter of the observations at the lower end, and another quarter of the observations at the upper end of the distribution are excluded in computing the inter-quartile range.

Inter-quartile range represents the difference between the third quartile and the first quartile.

$$\text{Inter-quartile range} = Q_3 - Q_1$$

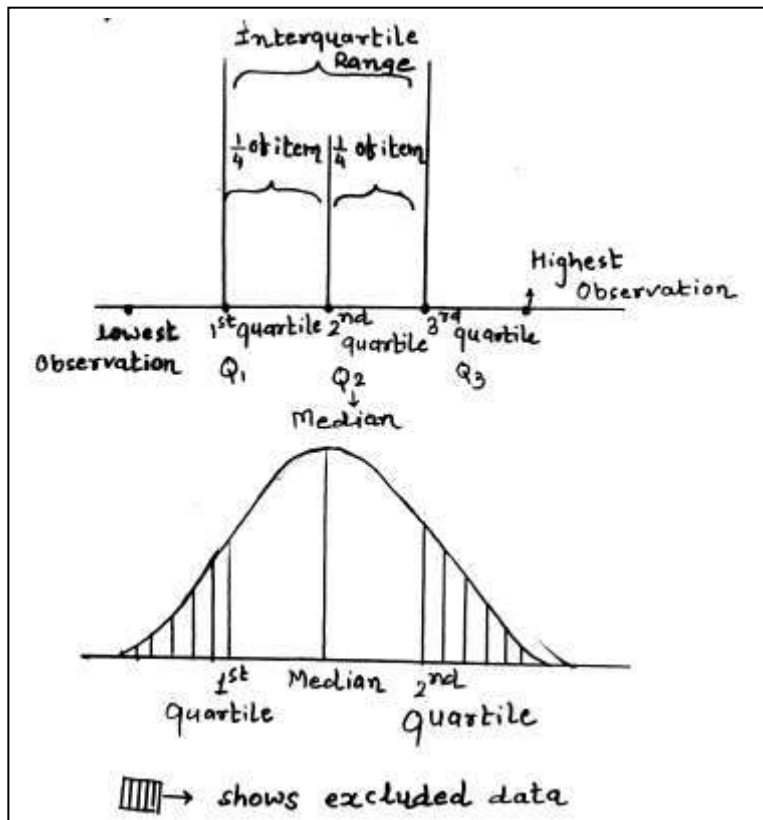


Figure 14: Inter-quartile range

The quartiles divide the area under the distribution into four equal parts, each containing 25% of the area. As shown in the figure, 25% observations have values below Q_1 and 75% above Q_1 . Whereas for Q_3 , 75% observations have values below Q_3 and 25% above Q_3 . The second quartile is the median. The formulae for Q_1 and Q_3 can be obtained on the same lines as that of the Median.

Width of the four quartiles need not be equal.

3.6.3 MEAN DEVIATION FROM MEAN

The Mean Deviation is also known as the average deviation.

It is the average difference between the items in a distribution and the median or mean of that data.

Consider an ungrouped data with data values $\{x_1, x_2, \dots, x_n\}$, having mean \bar{X} .

Let $d_i = |x_i - \bar{x}|$ = deviation of x_i from mean, for $i = 1, 2, \dots, n$
 = Absolute value of $(x_i - \bar{x})$ (ignoring + or - signs). Then

$$\text{Mean Deviation from mean} = \frac{\sum_{i=1}^n d_i}{n}$$

For a grouped data with k classes having class mid-points as $\{x_1, x_2, \dots, x_k\}$, and frequencies $\{f_1, f_2, \dots, f_n\}$, having mean as \bar{x} ,

$$\text{Mean Deviation from mean} = \frac{\sum_{i=1}^n d_i f_i}{\sum_{i=1}^n f_i}$$

Co-efficient of Mean Deviation (C. D.) = (Mean Deviation (MD)) / Mean.

Example 14: Calculate the mean deviation from mean and also co-efficient of mean deviation for following data :

Sale price (Rs. in lakhs)	Number of Transaction (f_i)	(Mid-point) x_i	$x_i f_i$	d_i	$f_i d_i$
7.5 - 12.5	2	10	20	12	24
12.5 - 17.5	4	15	60	7	28
17.5 - 22.5	6	20	120	2	12
22.5 - 27.5	8	25	200	3	24
27.5 - 32.5	5	30	150	8	40
	$\sum_{i=1}^5 f_i = 25$		$\sum_{i=1}^5 x_i f_i$ = 550		$\sum_{i=1}^5 d_i f_i$ = 128

$$\text{Mean } \bar{x} = \frac{\sum_{i=1}^5 x_i f_i}{\sum_{i=1}^5 f_i} = \frac{550}{25} = 22$$

$$\text{Mean deviation from Mean} = \frac{\sum_{i=1}^5 d_i f_i}{\sum_{i=1}^5 f_i} = \frac{128}{25} = 5.12$$

$$\text{Co-efficient of Mean deviation} = \frac{\text{Mean deviation}}{\text{Mean}} = \frac{5.12}{22} = 0.2327$$

Example 15: Calculate mean deviation from Median and Co-efficient of mean Deviation for the data given in above example

Sale price (Rs. in lakhs)	Number of Transaction (f_i)	(Mid-point) x_i	Cumulative frequency	d_i	$f_i d_i$
7.5 - 12.5	2	10	2	12.8	25.6
12.5 - 17.5	4	15	6	7.8	31.2
17.5 - 22.5	6	20	12	2.8	16.8
22.5 - 27.5	8	25	20	2.2	17.6
27.5 - 32.5	5	30	25	7.2	36
	$\sum_{i=1}^5 f_i = 25$				$\sum_{i=1}^5 d_i f_i = 127.2$

Here $N = 25$ and $N / 2 = 12.5$ and hence Median class interval is [22.5, 27.5].

And $f_m = 8$; $f_p = 6$; and class width = 5; Hence,

$$\text{Median} = a_1 + \frac{\frac{N}{2} - C_p}{f_m} W = 22.5 + \frac{12.5 - 12}{8} \times 5 = 22.5 + 0.3125 \cong 22.8.$$

In this case, $d_i = |x_i - \text{Median}|$.

$$\text{Mean deviation from Median} = \frac{\sum_{i=1}^5 d_i f_i}{\sum_{i=1}^5 f_i} = \frac{127.2}{25} = 5.088$$

$$\begin{aligned} \text{Co-efficient of Mean deviation from Median} &= \frac{\text{Mean deviation from median}}{\text{Median}} \\ &= \frac{5.088}{22.8} = 0.2232 \end{aligned}$$

3.6.4 THE STANDARD DEVIATION AND THE VARIANCE

It is most important and widely used measure of studying dispersion. The standard deviation concept was introduced by Karl Pearson in 1823. Its significance lies in the fact that it is free from those defects from which the earlier methods suffer and satisfies most of the properties of a good measure of dispersion.

Standard deviation is also known as root mean square deviation for the reason that it is the square root of the mean of the squared deviations from the arithmetic mean. The mean of the squared deviations from the arithmetic mean is called the variance.

The standard deviation measures the absolute dispersion (or variability of a distribution). The greater the amount of dispersion or variability, greater the standard deviation, means greater will be the magnitude of the deviations of the values from their mean.

A small standard deviation means a High degree of uniformity of the observation as well as homogeneity of a series.

A large standard deviation means just the opposite.

Thus, if we have two or more comparable series with identical or nearly identical mean, it is the distribution with the smallest standard deviation that has the most representative mean.

Hence, standard deviation is extremely useful in judging the representativeness of the mean.

Difference between Mean Deviation and Standard Deviation

Both of the measures of dispersion are based on each and every item of the distribution, but they differ in the following respects :

- i. Algebraic signs are ignored while calculating mean deviation whereas in the calculation of standard deviation signs are taken into account. However, the signs become redundant while computing the standard deviation.

- ii. Mean deviation can be computed either from median or mean. The standard deviation, on the other hand, is always computed from the arithmetic mean because the sum of the squares of deviation of the items from the arithmetic mean is the least.

3.6.5 POPULATION VARIANCE (‘ σ^2 ’ SIGMA SQUARED)

If a Population consists of **ungrouped data** with data values $\{x_1, x_2, \dots, x_N\}$, having mean μ , then the population variance (σ^2) is defined as

$$\sigma^2 = \frac{\sum_{i=1}^N (x_i - \mu)^2}{N} = \frac{\sum_{i=1}^N x_i^2}{N} - \mu^2.$$

The last equality can be proved mathematically.

“Units in which the variance is expressed cause a problem i.e. units are the squares of the units of the data:

Dollars squared, this is confusing, to rectify this confusion, square root of variance is considered which is standard deviation, we take square root of unit as well as value in standard deviation (σ), then the unit of σ becomes the same as original data”.

Population Standard Deviation (σ)

The population standard deviation for the **ungrouped data** as above is the square root of the population variance

$$\sigma = \sqrt{\frac{\sum_{i=1}^n (x_i - \mu)^2}{N}} = \sqrt{\frac{\sum_{i=1}^n x_i^2}{N} - \mu^2}.$$

Example 16: The rate (Rs. per sq. ft.) which the residential have been sold in a locality are as under : (ungrouped Population)

40	140	170	190	220
60	140	170	210	240
120	150	180	210	250

Find out the variance and standard deviation of rate of residential plots in rupees per sq. ft.

Observation (x_i)	Mean (2) $\mu = \frac{2490}{15}$	Deviation ($x_i - \mu$) (1) - (2)	(Deviation) ² ($x_i - \mu$) ²	(Observation) ² (x_i) ²
(1)	(2)	(3)	(4)	(5)
40	166	-126	15876	1600
60	166	-106	11236	3600
120	166	-46	2116	14400
140	166	-26	676	19600
140	166	-26	676	19600
150	166	-16	256	22500
170	166	4	16	28900
170	166	4	16	28900
180	166	14	196	32400
190	166	24	576	36100
210	166	44	1936	44100
210	166	44	1936	44100
220	166	54	2916	48400
240	166	74	5476	57600
250	166	84	7056	62500
$\sum x_i = 2490$			$\sum (x_i - \mu)^2 = 50960$	$\sum x_i^2 = 464300$

$$\sigma^2 = \frac{\sum_{i=1}^n (x_i - \mu)^2}{N} = \frac{50960}{15} = 3397.33$$

Or

$$\sigma^2 = \frac{\sum_{i=1}^n x_i^2}{N} - \mu^2 = \frac{464300}{15} - (166)^2 = 30953.33 - 27556 = 3397.33$$

Hence, Standard deviation $\sigma = \sqrt{3397.33} = \text{Rs. } 58.28 \text{ per sq. ft.}$

- If a population consists of a **grouped data** with k classes having class mid points as $\{x_1, x_2, \dots, x_k\}$, and frequencies $\{f_1, f_2, \dots, f_k\}$, having mean as μ , then the population variance (σ^2) is defined as

$$\sigma^2 = \frac{\sum_{i=1}^k f_i (x_i - \mu)^2}{N} = \frac{\sum_{i=1}^k f_i x_i^2}{N} - \mu^2, \text{ where } N = \sum_{i=1}^k f_i$$

The population **standard deviation** for the **grouped data** as above is the square root of the population variance

$$\sigma = \sqrt{\frac{\sum_{i=1}^k f_i (x_i - \mu)^2}{N}} = \sqrt{\frac{\sum_{i=1}^k f_i x_i^2}{N} - \mu^2}.$$

Example 17: Determine the variance and Standard Deviation of area of 100 plots in the Town Planning Scheme No.1 of Anand.

Class (Sm) Area in Sq.Mt.	Mid point x (1)	Freq. f_i (2)	$f_i \cdot x_i$ (3) = (1) × (2)	Mean μ (4)	$x_i - \mu$ (1) - (4)	$(x_i - \mu)^2$ ((1) - (4)) ²	$f_i (x_i - \mu)^2$ (2) × ((1) - (4)) ²	$f_i x_i^2$	
70 – 80	75	4	300	125	- 50	2500	10000	5625	22500
80 – 90	85	7	595	125	-40	1600	11200	7225	50575
90 -100	95	8	760	125	-30	900	7200	9023	72200
100-110	105	10	1050	125	-20	400	4000	11025	110250
110-120	115	12	1380	125	-10	100	1200	13225	158700
120-130	125	17	2125	125	0	0	0	15625	265625
130-140	135	13	1755	125	10	100	1300	18225	236925
140-150	145	10	1450	125	20	400	4000	21025	210250
150-160	155	9	1395	125	30	900	8100	24025	216225
160-170	165	7	1155	125	40	1600	11200	27225	190575
170-180	175	2	350	125	50	2500	5000	30625	61250
180-190	185	1	185	125	60	3600	3600	34225	34225
		N=100	12500				66800		162930
									0

$$\text{Hence, Mean} = \frac{\sum_{i=1}^k f_i x_i}{N} = 12500 / 100 = 125;$$

$$\sigma^2 = \frac{\sum_{i=1}^k f_i (x_i - \mu)^2}{N} = 66800 / 100 = 668;$$

Hence, Standard deviation $\sigma = \sqrt{668} = 25.84$.

Sample Variance

If the population size is very large then computing measures of central tendency and dispersion is quite time consuming or in some cases data for the entire population may not be available. In such cases population measures are estimated by taking a sample and computing these measures for the sample.

For Ungrouped data

If a Sample consists of **ungrouped data** with data values $\{x_1, x_2, \dots, x_n\}$, having mean \bar{x} then

- a) If sample size (no. of observations, n) is large relative to the size of the population (generally $n > 30$), then we compute sample variance using following formula, which is same as that of population variance ,

$$s^2 = \frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n} = \frac{\sum_{i=1}^n x_i^2}{n} - \bar{x}^2.$$

- b) But, when sample size is sufficiently small relative to the size of the population ($n < 30$) the above estimate is not good and hence we use formula

$$s^2 = \frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n-1} = \frac{\sum_{i=1}^n x_i^2}{n-1} - \frac{n\bar{x}^2}{n-1}.$$

For Grouped data

If a Sample consists of a grouped data with k classes having class mid points as $\{x_1, x_2, \dots, x_k\}$, and frequencies $\{f_1, f_2, \dots, f_k\}$, having mean as \bar{x} , then

- (a) If sample size is greater than 30, then sample variance

$$s^2 = \frac{\sum_{i=1}^k f_i (x_i - \bar{x})^2}{N} = \frac{\sum_{i=1}^k f_i x_i^2}{N} - \bar{x}^2, \text{ where } N = \sum_{i=1}^k f_i$$

- (b) If sample size is less than 30, then sample variance

$$s^2 = \frac{\sum_{i=1}^k f_i (x_i - \bar{x})^2}{N-1} = \frac{\sum_{i=1}^k f_i x_i^2}{N-1} - \frac{N\bar{x}^2}{N-1}, \text{ where } N = \sum_{i=1}^k f_i$$

Sample Standard Deviation

As in the case of a population standard deviation, sample standard deviation in above four cases is the square root of the sample variance in the respective cases. For example, for sample of small size, consisting of a grouped data as above, the sample standard deviation

$$s = \sqrt{\frac{\sum_{i=1}^k f_i(x_i - \bar{x})^2}{N-1}} = \sqrt{\frac{\sum_{i=1}^k f_i x_i^2}{N-1} - \frac{N\bar{x}^2}{N-1}}, \text{ where } N = \sum_{i=1}^k f_i$$

Standard score of an item in a sample.

$$\text{Sample standard score} = \frac{x - \bar{x}}{s}$$

x = Observation from the sample

\bar{x} = Sample mean

s = Sample standard deviation

Example 18:

In an attempt to estimate potential future demand, the National Motor Company did a study asking married couples how many cars the average energy-minded family should own in 1998. For each couple, National Motor Company averaged the husband's and wife's responses to get the overall couple response. The answers were then tabulated, and it is as under:

<u>Number of cars</u>	<u>Frequency</u>
0	02
0.5	14
1.0	23
1.5	07
2.0	04
2.5	02

- a) Calculate the variance and the standard deviation.
- b) Since the distribution is roughly bell-shaped, how many of the observations should theoretically fall between 0.5 and 1.5? Between 0 and 2 ? How many actually do fall in those intervals?

Answer :

No. of Cars – x	Frequency - (f)	fx	x ²	f x ²
0	02	00	0	0
0.5	14	07	0.25	3.5
1.0	23	23	1	23
1.5	07	10.5	2.25	15.75
2.0	04	08	4	16
2.5	02	05	6.25	12.50
	-----	-----	-----	-----
	∑ = 52	∑ = 53.5	∑ = 13.75	70.75

$$\bar{x} = \frac{\sum fix_i}{\sum f} = \frac{53.5}{52} = 1.0288 \text{ cars,}$$

$$s = \sqrt{\frac{\sum fx^2}{n-1} - \frac{n\bar{x}^2}{n-1}} = \sqrt{\frac{70.75}{51} - \frac{52 \times (1.0288)^2}{51}} = \sqrt{1.387 - 1.079} = \sqrt{0.308}$$

= 0.55 cars.

- c) (0.5, 1.5) is approximately $\bar{x} + s$, so about 68% of data, or $0.68 \times 52 = 35.36$ Observation should fall in this range. In fact, 44 observations fall into this interval.

(0,2) is approximately $\bar{X} + 2s$, so about 95% of data, or $0.95 \times 52 = 49.4$ Observations should fall in this range, in fact, 50 Observations fall into this interval.

Use of the Standard Deviation (S.D.)

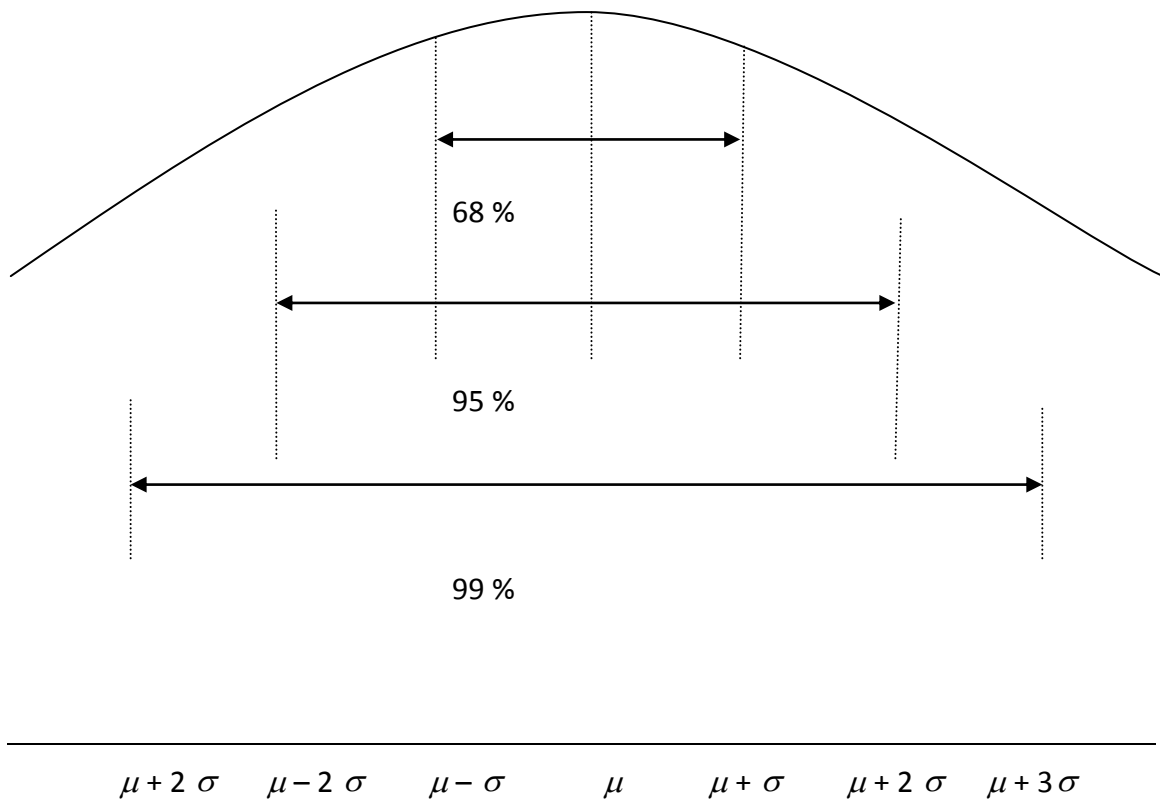


Figure 15: Number of observations in the given interval

We can measure with even more precision, the percentage of items that fall within specific ranges in a symmetrical, bell-shaped curve as shown in Figure A.

About 68% of the values in the population will fall within \pm one S.D. from the mean.

\cong 95% within $\pm 2 \times$ S.D. from the mean.

\cong 99% within $\pm 3 \times$ S.D. from the mean.

If you analyse the above example.

By part (a), Mean = Rs.166/- per sq. ft. and σ = Rs.58.28 per sq. ft.

$$\mu - 2\sigma = 166 - 2 \times 58.28 = 166 - 116.56 = 49.44$$

$$\mu + 2\sigma = 166 + 2 \times 58.28 = 166 + 116.56 = 282.56.$$

14 values out of 15 values are actually falling within this interval ($\mu - 2\sigma$, $\mu + 2\sigma$)

i.e. 93.33% of items fall in ($\mu - 2\sigma$, $\mu + 2\sigma$) interval, i.e. close to 95% for an interval of Mean $\pm 2\sigma$ of a bell-shaped curve theoretically.

3.6.6 Concept of a Standard Score

The S.D. is also useful in describing how far individual items in a distribution depart from the mean of the distribution.

Standard score gives us the number of S.D. a particular observation lies below or above the mean.

Population Standard Score = $\frac{x - \mu}{\sigma}$, Where, x = Observation from the population;

μ = Population mean; and σ = Population standard deviation.

Suppose, we observe a rate of Rs.210/- per sq. ft., the standard score of an observation 210 is

$$\frac{210 - 166}{58.28} = 0.755.$$

The standard score indicates that a rate of Rs.210/- per sq. ft. deviates from the mean by 0.755 times standard deviation.

3.6.7 Co-efficient of the Standard Deviation

The standard deviation cannot be the sole basis for comparing two distributions. If we have a standard deviation 10 and mean 5, the values vary by an amount twice as large as the mean itself. On the other hand, if we have a S.D. 10 and a mean 5000, the variation relative to mean is insignificant. Therefore, we can not know the dispersion of a data set until we know the S.D. and the mean both.

What we need is a relative measure that will give us a feel for the magnitude of the deviation relative to the magnitude of the mean. The coefficient of variation is one such relative measure of dispersion. It relates S.D. and mean by expressing the S.D. as a % of mean.

Coefficient of Variation

$$\begin{array}{l} \text{Population Coefficient of variation} \\ = \end{array} \begin{array}{l} \nearrow \text{ S.D.} \\ \frac{S}{\bar{X}} \times 100 \\ \searrow \text{ mean} \end{array}$$

Example 19:

In a quality control department, a laboratory technician A completes on average 40 analyses per day with S.D. of 5 and technician B completes on average 160 analyses per day with a S.D. of 15. Which employees shows less variability?

$$\text{Co-efficient of variation} = \frac{S}{\bar{X}} \times 100$$

$$\text{For A} - \frac{5}{40} \times 100 = 12.5\%$$

$$\text{For B} - \frac{15}{160} \times 100 = 9.4\%$$

Technician B shows less variability.

Example 20: Sachin Tendulkar scores 10,000 test runs with an average 54 and S.D. 9 whereas Brian Lara has scored 8000 test runs with an average 60 and S.D. 18. who is most reliable player?

$$\text{C.V. of Sachin Tendulkar} = \frac{S}{\bar{X}} \times 100 = \frac{9}{54} \times 100 = 16.66\%.$$

$$\text{C.V. of Brian Lara} = \frac{18}{60} \times 100 = 30.00\%.$$

Sachin Tendulkar is more reliable than Brian Lara.

3 SKEWNESS

When a distribution is not symmetrical it is said to be asymmetrical or skewed. A distribution is said to be 'skewed' when the mean and the median fall at different points in the distribution and the balance (or center of gravity) is shifted to one side or the other to left or right.

Difference between Dispersion and Skewness:

Dispersion is concerned with the amount of variation rather than with its direction. Skewness tells us about the direction of the variation or the departure from symmetry.

In fact, measure of skewness are dependent upon the amount of dispersion.

4.1 Measures of Skewness

Measures of skewness tell us the direction and extent of asymmetry in a series and permit us to compare two or more series with regard to these. They may be either absolute or relative.

$$\text{Absolute } s_k = \bar{X} - \text{Mode}$$

If $\bar{X} > \text{Mode}$, Skewness will be positive

$\bar{X} < \text{Mode}$, Skewness will be negative.

The greater the distance, whether positive or negative, the more asymmetrical the distribution.

Absolute (When skewness is based on quartiles) $S_k = Q_3 + Q_1 - 2 \text{ Median}$.

The various measures of central tendency and dispersion can be expressed in terms of Statistical Moments which are defined as follows:

For an ungrouped data with data values $\{x_1, x_2, \dots, x_n\}$, having mean \bar{x} , the for any positive integer k , the k^{th} **Moment about origin** is defined as $M_k^o = \frac{\sum_{i=1}^n x_i^k}{n}$.

The kth Moment about Mean is defined as:

$$M_k^m = \frac{\sum_{i=1}^n (x_i - \bar{x})^k}{n} \quad \text{OR} \quad \frac{\sum_{i=1}^n (x_i - \bar{x})^k}{n-1},$$

depending on whether the data corresponds to a sample of size significantly small as compared to the size of the population from which the sample is drawn. This definition immediately yields that

- a) First moment about origin is the Mean.
- b) Second moment about mean is the Variance.

The Third moment about mean measures the Skewness of the data, In fact, the Skewness of an ungrouped data as given above is defined as:

$$\text{Skewness} = \frac{M_3^m}{s^3}, \text{ where } s \text{ is the standard deviation.}$$

4.2 Kurtosis

Kurtosis is the degree of peakedness of a distribution, usually taken relative to a normal distribution.

Kurtosis in Greek means 'Bulginess'. In statistics Kurtosis refers to the degree of flatness or peakedness in the region about the mode of a frequency curve. The degree of Kurtosis of a distribution is measured relative to the peakedness of Normal Curve.

If a curve is more peaked than the normal curve, it is called 'leptokurtic'. In such a case items are more closely bunched around the Mode. On the other hand, if a curve is more flat-topped than the normal curve, it is called 'platykurtic'. The normal curve itself is known as 'mesokurtic'.

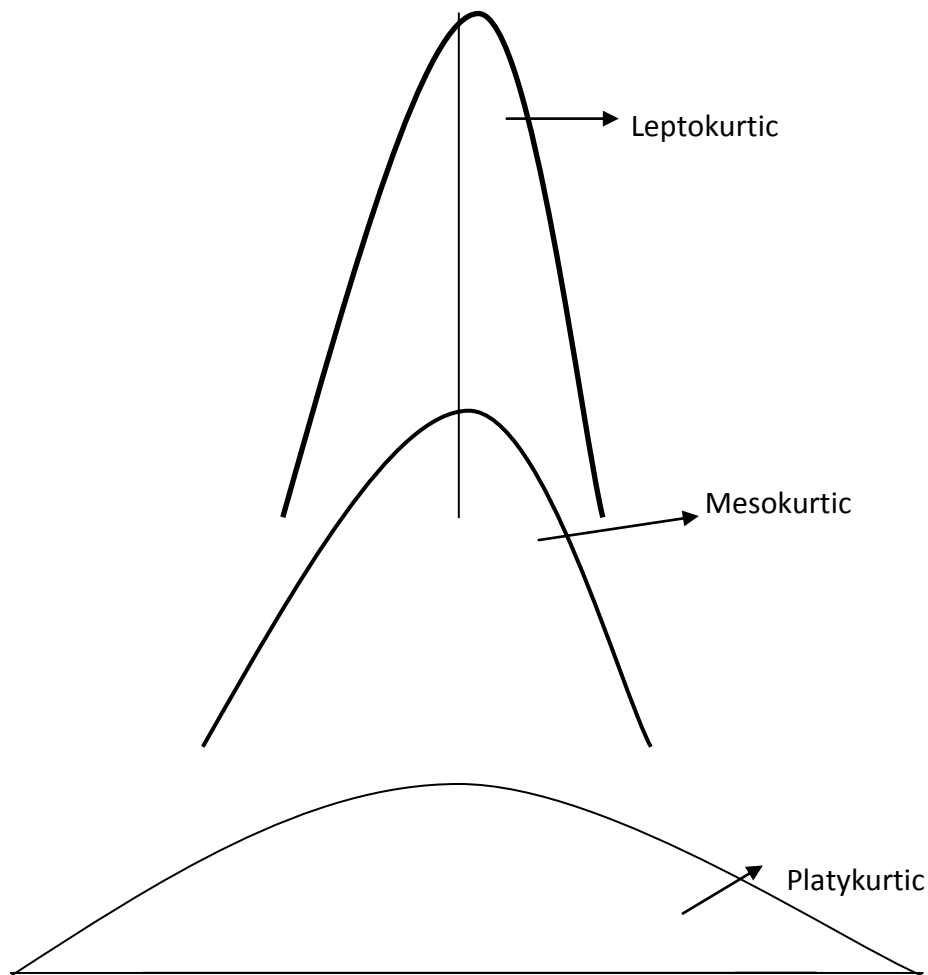


Figure 16: Kurtosis

One of the measures of Kurtosis depend on the fourth Moment about Mean and is defined as: Kurtosis = $\frac{M_4^m}{s^4}$, where s is the standard deviation.

4.3.1 Exercises

- Comfy Furniture Company has a revolving credit agreement with the UTI Bank. The loan showed the following ending monthly balances last year in Rs. :

Jan.	121,300	Apr.	72,800	July	58,700	Oct	52,800
Feb.	112,300	May	72,800	Aug.	61,100	Nov	49,200
Mar.	72,800	June	57,300	Sept.	50,400	Dec	46,100

The company is eligible for a reduced rate of interest if its average monthly balance is over Rs.65,000. Does it qualify?

2. DB's Store advertises, "If our average prices are not equal or lower than everyone else's, you get it free." One of DB's customers came into the store one day and threw on the counter bills of sale for six items she bought from a competitor for an average price less than DB's.

The items cost in Rs.

1.29 2.97 3.49 5.00 7.50 10.95

DB's prices for the same six items are Rs.1.35, Rs.2.89, Rs.3.19, Rs.4.98, Rs.7.59, and Rs.11.50. DB told the customer, "My and refers to a weighted average price of these items. Our average is lower because our sales of these items have been."

7 9 12 8 6 3

Is DB getting himself into or out of trouble by talking about weighted averages?

3. Ajanta Distribution Company, a subsidiary of a major appliance manufacturer, is forecasting regional sales for next year. The Ahmedabad, with current yearly sales of Rs.193.8 million, is expected to achieve a sales growth of 7.25 percent; the Vadodara branch, with current sales of Rs.79.3 million, is expected to grow by 8.20 percent; and the Anand branch, with sales of Rs.57.5 million, is expected to increase sales by 7.15 percent. What is the average rate of sales growth forecasted for next year?
4. The growth in bad-debt expense for Desktop Office Supply Company over the last few years is as follows. Calculate the average percentage increase in bad-debt expense over this time period. If this rate continues, estimate the percentage increase in bad debts for 1997, relative to 1995.

1989	1990	1991	1992	1993	1994	1995
0.11	0.09	0.075	0.08	0.095	0.108	0.120

5. rat ---??(PI Check) Marketing compares prices charged for identical items in all of its food stores. Here are the prices charged by each store for a pound of salt last week:

Rs.1.08 0.98 1.09 1.24 1.33 1.14 1.55 1.08 1.22 1.05

- Calculate the median price per pound.
 - Calculate the mean price per pound.
 - Which value is the better measure of the central tendency of these data?
6. For the following frequency distribution determine
- The median class.
 - The number of the item that represents the median.
 - The width of the equal steps in the median class.
 - The estimated value of the median for these data.

Class	Frequency	Class	Frequency
100 – 149.5	12	300 – 349.5	72
150 – 199.5	14	350 – 399.5	63
200 – 249.5	27	400 – 449.5	36
250 – 299.5	58	450 – 499.5	18

7. Here are the ages in years of the cars worked on by the Autocare Workshop last:

5 6 3 6 11 7 9 10 2 4 10 6 2 1 5

- Compute the mode for this data set.
- Compute the mean of the data set.
- Compare parts (a) and (b) and comment on which is the better measure of the central tendency of the data.

8. The age of a sample of the students attending, Veer Narmad Community College this semester are:

19 17 15 20 23 41 33 21 18 20
 18 33 32 29 24 19 18 20 17 22
 55 19 22 25 28 30 44 19 20 39

- Construct a frequency distribution with intervals 15-19, 20-24, 25-29, 30-34, and 35 and older.
 - Estimate the modal value
 - Now compute the mean of the raw data.
 - Compare your answers in parts (b) and (c) and comment on which of the two is the better measure of the central tendency of these data and why.
9. Here are student scores on a Principles of Valuation quiz. Find the 80th percentile.

95 81 59 68 100 92 75 67 85 79
 71 88 100 94 87 65 93 72 83 91

10. The IPCL Company is considering purchasing a new fleet of company cars. The financial department's director, Mr. Bharat Parikh, sampled 40 employees to determine the number of miles each drove over a 1-year period. The results of the study are as follow. Calculate the range and interquartile range.

3,600 4,200 4,700 4,900 5,300 5,700 6,700 7,300
 7,700 8,100 8,300 8,400 8,700 8,700 8,900 9,300
 9,500 9,500 9,700 10,000 10,300 10,500 10,700 10,800
 11,000 11,300 11,300 11,800 12,100 12,700 12,900 13,100
 13,500 13,800 14,600 14,900 16,300 17,200 18,500 20,300

11. The ABCL, Ltd., a Bollywood casting company, is selecting a group of extras for a movie. The ages of the first 20 men to be interviewed are

50 56 55 49 52 57 56 57 56 59
54 55 61 60 51 59 62 52 54 49

The director of the movie wants men whose ages are fairly tightly grouped around 55 years. Being a statistical buff of sorts, the director suggests that a standard deviation of 3 years would be acceptable. Does this group of extras qualify?

12. Bharat Electronics is considering employing, one of two training programs. Two groups were trained for the same task. Group 1 was trained by program A; group 2, by program B. For the first group, the times required to train the employees had an average of 32.11 hours and a variance of 68.09. In the second group, the average was 19.75 hours and the variance was 71.14. Which training program has less relative variability in its performance?

UNIT – 3

ELEMENTARY THEORY OF PROBABILITY AND PROBABILITY DISTRIBUTIONS, SAMPLING AND SAMPLING DISTRIBUTIONS, ESTIMATION

5. ELEMENTARY THEORY OF PROBABILITY

Suppose MGVCL is starting a project designed to increase the generating capacity of one of its Power plants in Gujarat. The project is divided into two sequential stages: stage-1 (design) and stage-2 (Construction). The management has to estimate the time required to complete each stage of the project depending on analysis of similar construction projects. Or if management set a goal of 1year for completion of the entire project, then one has to find the chances of completion of the project within the given time limit.

Probability theory plays a central role in dealing with problems involving such uncertainties.

As other illustrations, one would like to know the chances that a property will be sold at a price higher than the value fixed by the valuator?

Probability is a numerical measure of the likelihood that an event will occur or measure of the degree of uncertainty associated with an event.

A probability is a number which ranges from 0 (zero) to 1 (one) (in percentage 0% to 100%).

Assigning a probability of 'zero' means that something will happen, is unlikely and a probability of 1 indicates that something will almost certainly happen.

5.1 Experiments and Sample space

One of the approaches to define probability is the experimental approach, which is based on Experiments and their outcomes.

In probability theory, an event is one or more of the possible outcomes of doing something e.g. if we toss a coin, getting tail or head are events.

An Experiment is a process that generates well-defined outcomes. On any single repetition of an experiment, one and only one of the possible outcomes will occur. The Sample space for an experiment is the set of all experimental outcomes which are also called as Sample points. The following table gives few illustrations of some experiments and corresponding sample spaces:

Experiments	Sample Space
Toss a Coin	{ Head, Tail }
Roll a Die and observe a number on the Top face	{ 1, 2, 3, 4, 5, 6 }
Select a part for inspection	{ defective, non-defective }
Play a cricket match and note the result for your Team	{ win, Lose, Tie }
Toss two coins	{ (H, H), (H, T), (T, H), (T, T) }
Measure the height of any student in your class	Set of numbers representing Heights of the students.

5.2 Assigning Probabilities

Once all experimental outcomes (Sample space) are known, next task is to assign probability to each outcome (Sample point). When the Sample space is finite, this task can be done using one of the following three approaches.

- Classical
- Relative frequency
- Subjective method.

Whatever approach is used there are two basic requirements for assigning probabilities.

If the Sample space for an experiment is $S = \{ e_1, e_2, \dots, e_n \}$ and if $P(e_i)$ is the probability assigned to the outcome e_i then the requirements are:

- (i) $0 \leq P(e_i) \leq 1$ for all i . (ii) $P(e_1) + P(e_2) + \dots + P(e_n) = 1$

Classical Approach

This method is used when all the outcomes are equally likely and hence probability assigned to each outcome must be same. Thus if the Sample space is $S = \{ e_1, e_2, \dots, e_n \}$, then $P(e_i) = 1/n$, for all .

illustrations: 1.Tossing a fair coin experiment. Then $S = \{ H, T \}$ and $P(H) = P(T) = \frac{1}{2}$.

2. Rolling a fair die experiment. Then $S = \{1, 2, 3, 4, 5, 6\}$ and $P(1) = P(2) = P(3) = P(4) = P(5) = P(6) = 1/6$.

Relative Frequency Method

This method is used when data are available to estimate the proportion of times the experimental outcome will occur if the experiment is repeated large number of times.

Thus if the sample space is $S = \{ e_1, e_2, \dots, e_n \}$, then

$$P(e_i) = \frac{\text{Number of times } e_i \text{ occurs as per data}}{\text{Total number of times the experiment is repeated}} = \text{Relative frequency of } e_i.$$

Illustration: A toothpaste manufacturing company is studying five different package designs. In an actual experiment, 100 consumers were asked to pick up the design they preferred. The following data were obtained. Assign probability of preference to each of the five designs.

Design	No. of times preferred	Probability of preference
1	5	$5 / 100 = 0.05$
2	15	$15 / 100 = 0.15$
3	30	0.3
4	40	0.4
5	10	0.1

Subjective method

This method is used when experimental outcomes cannot be judged to be equally likely and little relevant data is available. Hence any other information available, such as previous experience or intuition, can be used to assign the probability. Thus,

$P(e_i)$ = degree of belief (on a scale from 0 to 1), on the bases of the available information, that e_i will occur.

It is subjective and depends on the person who is assigning the probability. Different persons may assign different probabilities to the same outcome.

Illustrations: 1. Whether it will rain on a cloudy day?

Two outcomes are possible { Yes, No }. Relevant data may or may not be available. A well experienced person in the region can predict the chances of rain which in turn will assign probabilities to these outcomes.

2. Whether a particular Stock will rise tomorrow?

Possible outcomes are { rise, fall, will not change}. An experienced player in the stock market can predict probabilities of all these outcomes.

5.3 Event and their Probabilities

Corresponding to any experiment, any subset of the Sample space is called an Event. Or Event is a collection of some Sample points

Illustrations: 1. Experiment: "Tossing of two coins".

Event E1: Getting at least one head = { (H, H), (H, T), (T, H) }.

2. Experiment: "Roll a Die"

Event E2: Getting an even number on Top = { 2, 4, 6 }

Probability of an event

It is equal to the sum of probabilities of the Sample points in the event.

Note that for any experiment, the Sample space S and empty set ϕ is itself an event and $P(S) = 1$ & $P(\phi) = 0$. For illustrations 1 and 2 above the probabilities are given by:

$$1. P(E1) = P((H, H)) + P((H, T)) + P((T, H)) = \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{3}{4}.$$

$$2. P(E2) = P(2) + P(4) + P(6) = \frac{1}{6} + \frac{1}{6} + \frac{1}{6} = \frac{1}{2}$$

3. Consider the experiment in the Relative Frequency illustration. Suppose event

$$E3 = \{\text{Design-2, Design-3}\}. \text{ Then } P(E3) = P(2) + P(3) = 0.15 + 0.3 = 0.45.$$

5.4 Basic laws of probability:

Complement of an Event:

Suppose a sample space of an experiment is S and A is an event (i. e. A is a subset of S). Then Complement event of A , denoted by A^c is the subset of S that contains all the sample points of S which are not in A . In any probability application, either event A or its complement A^c must occur. Hence $P(A) + P(A^c) = 1$ or $P(A^c) = 1 - P(A)$

illustration: Consider Experiment: "Roll a Die"

Event A = Getting an even number on Top = $\{ 2, 4, 6 \}$. Then $P(A) = \frac{1}{2}$

Now, A^c = Getting an odd number on Top = $\{ 1, 3, 5 \}$. Then Clearly,

$$P(A^c) = \frac{3}{6} = \frac{1}{2} = 1 - \frac{1}{2} = 1 - P(A).$$

Union of two events

Union of two events A and B is the event containing sample points that belong to A or B or both and is denoted by $A \cup B$.

Intersection of two events

Intersection of two events A and B: It is the event containing the sample points belonging to both A and B and is denoted by $A \cap B$.

1. Law of Addition

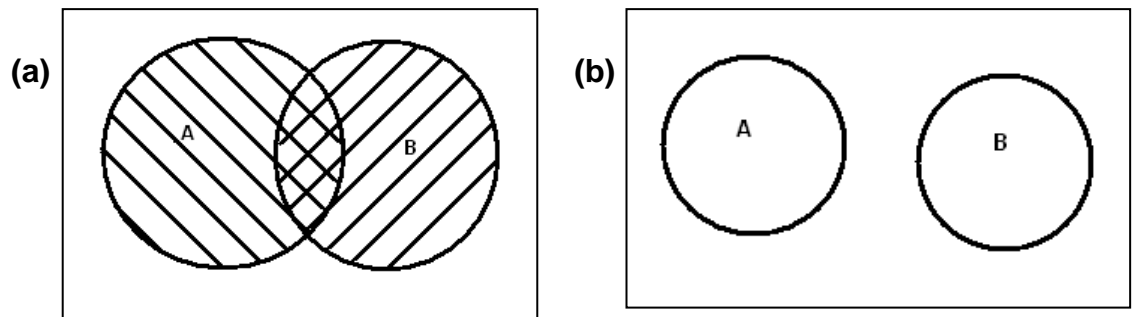


Figure 1: (a) Union and intersection of events (b) Mutually exclusive events

$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$

Event $(A \cap B)$ is contained in both A and B as well as in $A \cup B$. In order to calculate $P(A \cup B)$ when we add $P(A)$ and $P(B)$, $P(A \cap B)$ is added twice and hence we subtract once.

illustration: In a small Assembly plant with 50 workers, each worker is expected to complete work assignment on time in such a way that the assembled product will pass a final inspection. Some of the workers fail to meet the performance standards by completing work late or assembling a defective product. At the end of the performance evaluation period, production manager found that 5 workers completed work late, 6 workers assembled a defective product and 2 workers both completed work late, and assembled a defective product. What is the probability that the production manager decided to assign a worker a poor performance rating?

Event A = A Worker completed work late.

Event B = A worker assembled a defective product.

Event C = worker is assigned a poor performance rating by the production manager.

Clearly $C = A \cup B$. From given data,

$$P(A) = 5 / 50 = 0.1; \quad P(B) = 6 / 50 = 0.12 \quad \text{and} \quad P(A \cap B) = 2 / 50 = 0.04.$$

Therefore by Addition law,

$$P(C) = P(A \cup B) = P(A) + P(B) - P(A \cap B) = 0.1 + 0.12 - 0.04 = 0.18$$

Mutually exclusive events

Two events A and B are said to be Mutually exclusive if there is no sample point common to both A and B, i. e. $A \cap B = \phi$ and hence $P(A \cap B) = 0$. Hence the Addition law for Mutually exclusive events reduces to: $P(A \cup B) = P(A) + P(B)$.

illustration: Consider Experiment: "Roll a Die"

Event A = Getting an even number on Top = { 2, 4, 6 }. Then $P(A) = \frac{1}{2}$

Event B = Getting a number which is a multiple of 3 on Top = {3, 6 }. Then Clearly,

$P(B) = \frac{2}{6} = \frac{1}{3}$. Then $A \cap B = \{6\} \neq \phi$. Hence, A and B are not mutually exclusive.

Let event C = Getting a number which is divisible by 5. Then $A \cap C = \phi$ and hence, A and C are mutually exclusive. Observe that $A \cup C = \{2, 4, 5, 6\}$ Hence,

$$P(A \cup C) = \frac{4}{6} = \frac{2}{3} = \frac{1}{2} + \frac{1}{6} = P(A) + P(C).$$

A collectively exhaustive list

When a list of the possible events that can result from an experiment includes every possible outcome, the list is said to be collectively exhaustive.

Illustration: Consider the experiment: Tossing of two coins. Let A = Getting at least one head and B = Getting at least one Tail. Then $A = \{HH, HT, TH\}$ and $B = \{HT, TH, TT\}$. Then $A \cup B = \{HH, HT, TH, TT\} = S$. And hence events A and B are collectively exhaustive.

Here are few Examples.

Example 1:

Find out the probability of getting an ace in a single trial

$$P = \frac{4 \text{ ace}}{52} = \frac{4}{52}$$

Example 2:

Find out the probability of getting 53 Sundays in a leap year (366 days)

$$52 \text{ weeks} \times 7 = 364 \text{ days}$$

Remaining 2 days and probability of being Sunday on these 2 days is $\frac{2}{7} = 0.286$.

Example 3:

Find out the probability of getting 5 Sundays in a February month in a leap year (i.e. 29 days in February in a leap year)

$$4 \text{ week: } 4 \times 7 = 28 \text{ days}$$

The probability of remaining one day is Sunday = $\frac{1}{7} = 0.143$

Example 4:

Find out the probability of getting a sum of 9 on the top of two dice thrown together. Also find out the probability of getting a sum of 8 on the top of two dice thrown together.

A = Outcomes giving sum 9 are: {(6, 3), (3, 6), (5, 4), (4, 5)};

B = Outcomes giving sum 8 are: {(6, 2), (2, 6), (5, 3), (3, 5), (4, 4)}

Total outcomes = 36.

Hence $P(A) = 4 / 36 = 1 / 9 = 0.111$; and $P(B) = 5 / 36 = 0.139$.

6 PROBABILITY DISTRIBUTIONS

In an experimental approach probability assignment depends on the specific experiment and its Sample space. However, the concept of Random variable helps us to view Sample space of any experiment as well as any event associated with the experiment as a subset of set of all real numbers R.

Discrete and Continuous random variables.

Random variable is a Numerical description of the outcome of an experiment or it associates a numerical value with each possible experimental outcome. Thus, For an experiment with Sample space S, a random variable X is a function from S to R, the set of all real numbers and we write $X: S \rightarrow R$.

- A random variable that assumes either a finite or countably infinite number of values is called a Discrete Random variable (DRV).

e.g. (i) The month in which a person is born is a DRV which takes values 1, 2, ..., 12.

(ii) No. of persons working in an industry is a DRV which may take any positive integer value.

(iii) Number of customers arriving at the service counter is a DRV which may take any non-negative integer value.

➤ A random variable that assumes any numerical value in an interval or collection of intervals is called a Continuous Random variable.

e.g. (i) Pressure or temperature of steam in the boiler.

(ii) Time in minutes between two successive customers arriving at a service counter can take any real value $x \geq 0$.

(iii) Percentage of the Statistical methods course completed in 10 lectures is a continuous random variable taking any value x between 0 and 100.

Probability Distribution

If S is a sample space and X is a random variable the probability assignment can be done by assigning probabilities to subsets of $X(S)$. A Probability Distribution for a random variable describes how probabilities are distributed over the values of the random variable.

The distribution of discrete (continuous) random variable is called discrete (continuous) distribution.

Example 5: Suppose, in a clinic, the number of patients have been treated during last 100 days are recorded as under:

No. of patients treated: 100 105 110 112 115

Total Observations

Nos. of days: 10 20 40 20 10 100

Probability distribution and its graph for the discrete random variable 'Number of patients treated'

Number of patient treated (Value of random variable)	Probability that the random variable will take on this value
100	0.1
105	0.2
110	0.4
112	0.2
115	0.1

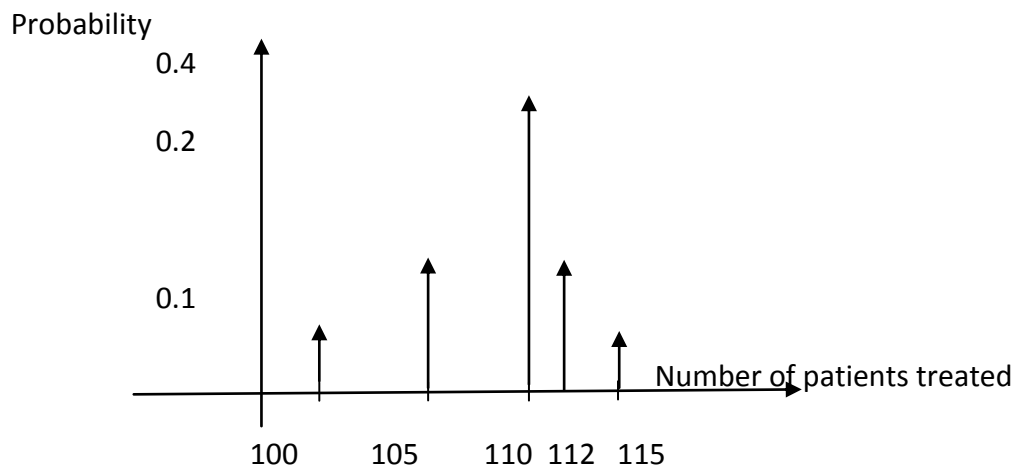


Figure 2: Graph of PD

For a Discrete Random variable X over a sample space S , $X(S)$ is either finite or an infinite sequence of real numbers. Thus, $X(S) = \{x_1, x_2, \dots, x_n\}$ or $\{x_1, x_2, \dots\}$. Equivalently, we may say that $X(S) = \{1, 2, \dots, n\}$ or $X(S) = \{1, 2, \dots, n, \dots\}$.

Discrete probability distribution on $X(S)$ is defined by a function $f: X(S) \rightarrow \mathbb{R}$, which is called as Probability (mass) function which provides the probability $f(x_i)$ for each x_i in $X(S)$, so that $f(x_i) \geq 0$ for all i & $\sum_i f(x_i) = 1$

Any event associated with a discrete random variable X on a sample space S can be viewed as a subset of $X(S)$. And hence, in the Discrete case an event $E = \{x_{i_1}, x_{i_2}, \dots, x_{i_k}\}$ where i_1, i_2, \dots are positive integers, so that x_{i_1}, x_{i_2}, \dots all are in $X(S)$. Then

$$P(E) = f(x_{i_1}) + f(x_{i_2}) + \dots + f(x_{i_k}), \text{ where } f \text{ is Probability mass function (Pmf).}$$

Example 6: The following data were collected by counting the number of operating rooms in use at Sayaji general Hospital in the month of jun, 2010.

No. of operating rooms in use	1	2	3	4	Total
No. of days. (frequency)	6	7	10	7	30

- Construct a PD for the number of operating rooms in use on any given day.
- Show that the PD is a valid DPD.
- Find the probability that on a given day, 2 or more rooms are in use.

Answer: (a) We can find Probability distribution by relative frequency method:

No. of operating rooms in use	1	2	3	4
Relative frequency (Probability)	6/30= 0.2	7/30= 0.234	10/30=0.33 3	7/30= 0.233

(b) Since $P(i) > 0$, for $i = 1, 2, 3, 4$ and $P(1) + P(2) + P(3) + P(4) = 1$, this is a valid Probability distribution.

(c) $P(2 \text{ or more rooms in use}) = P(\{2, 3, 4\}) = P(2) + P(3) + P(4) = 0.8$.

Distribution for a continuous random variable:

Let 'X' be a continuous random variable defined over an interval (a, b) i.e. $a \leq x \leq b$, or $(-\infty, \infty)$ then probability density function of the random variable X is defined by $f(x)$ satisfying the conditions.

(i) $f(x) \geq 0$ for any $a \leq x \leq b$ or $-\infty < x < \infty$

(ii) $\int_a^b f(x)dx = 1$ or $\int_{-\infty}^{\infty} f(x)dx = 1$

Probability density function $f(x)$ does not directly give probabilities. However, the area under the graph of $f(x)$ corresponding to a given interval gives the probability that CRV assumes a value in that interval.

Probability of any particular value of CRV must be zero. Since area under the graph of $f(x)$ at any particular point is 0.

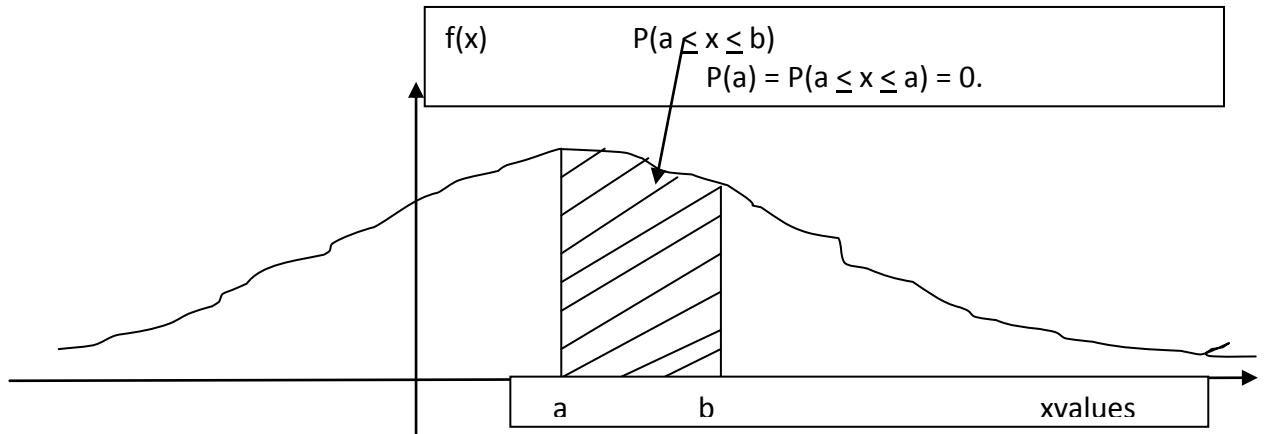


Figure 3: PDF of CRV

Some well known Probability Distributions:

In probability theory there are many theoretical Probability Distributions which are suitable for random variables associated with some specific experiments. In Statistical inference these distributions play a central role. Most commonly used distributions are discussed below.

The Binomial Distribution

The Binomial Distribution is the widely used probability distribution of a discrete random variable.

BPD is associated with a Binomial experiment having following Properties:

- It consists of a sequence of n identical trials.
- Two outcomes are possible on each trial. One of these outcomes is referred as Success and other as Failure.
- The probability of success, denoted by p (Consequently the probability of failure, $(1 - p)$ does not change from trial to trial.
- The trials are independent.

If properties 2, 3, 4 are present, we say that trials are generated by a Bernoulli Process. For a Binomial experiment, let x be a Discrete Random variable denoting number of successes in n trials. The PD associated with this Random variable is called the Binomial Probability Distribution.

Now, from combination formula, the number of outcomes providing exactly x successes in n trials is given by: $C_x^n = \frac{n!}{x!(n-x)!}$

Also, Probability of a particular sequence of n trials with x successes = $p^x (1-p)^{(n-x)}$

For a binomial experiment with n trials, the random variable x will take values $0, 1, 2, \dots, n$. Then from previous discussion it is clear that the BPD is given by the Binomial probability mass function f , given by

$$f(x) = C_x^n p^x (1-p)^{(n-x)}, \quad \text{for } x = 0, 1, \dots, n.$$

Where, n = number of trials and

p = Probability of success are called the parameters of the BPD and will assume particular values in any illustration.

Example 7: Forty percent of business travelers carry either a cell phone or a Laptop. For a sample of 15 business travelers, If x = number of travelers carrying either a cell phone or a Laptop, Compute the Probability that

(a) $x = 3$ (b) x is at least 3. (c) 12 of the travelers carry neither a cell phone nor a Laptop.

Answer: Here, the experiment can be regarded as a Binomial experiment with $n = 15$ and $p = 0.4$.

(a) $P(x = 3) = f(3) =$

$$= \frac{(15 \times 14 \times 13)}{(2 \times 3)} (0.4)^3 (0.6)^{12} = 0.063$$

(b) $P(x \geq 3) = f(3) + f(4) + \dots + f(12) = 1 - f(0) - f(1) - f(2)$

$$= 1 - (0.6)^{15} - 15(0.4)(0.6)^{14} - (15 \times 14 / 2)(0.4)^2 (0.6)^{13} = 0.973$$

(c) $P(12 \text{ of the travelers carry neither a cell phone nor a Laptop}) = P(x = 3) = 0.063.$

Computing Binomial probabilities $P(x)$ for any value of x (between 0 and n), for given n and p is usually time consuming and difficult. To avoid these difficulties, the readymade tables giving $P(x)$ for various values of parameters n and p and for all possible values of x for a specific values of n and p are available. Following is the sample of such a table:

n	x	p	0.05	0.15	0.25	0.40
9	0		0.6302	0.2316	0.0751	0.101
	5		0.0000	0.0050	0.0389	0.1672
	9		0.0000	0.0000	0.0000	0.0003
10	7		0.0000	0.0001	0.0031	0.0425
	10		0.0000	0.0000	0.0000	0.0001

We may use these tables for computing $P(x)$.

For example if $n = 10$ and $p = 0.15$, $P(7) = 0.0001$

For $n = 9$, $p = 0.4$, $P(5) = 0.1672$.

For $n = 9$, $p = 0.25$, $f(5) = ?$; For $n = 10$, $p = 0.4$, $f(7) = ?$

Software packages like EXCEL, SPSS, SAS, MINITAB, also provide a capability to compute Binomial probabilities.

The Poisson Distribution

Consider the Discrete Random Variable x representing number of occurrences of an event over a specified interval of time or space. For example,

The arrivals of trucks and cars at a toll booth; number of customers arriving at a service counter in a day;

- Number of cars on express way between Vadodara and Ahmedabad at 9 am;
- Number of leaks in 100 miles of pipeline, etc., In each of these cases the values x can take are 0,1, 2, . .

Such experiments are called Poisson experiments and their Probabilities are described by Poisson Probability Distribution.

Properties of a Poisson Experiments:

1. The probability of occurrence is the same for any two intervals of equal length.
2. The occurrence or non-occurrence in any interval is independent of the occurrence or non-occurrence in any other interval.

Poisson Probability function: PPD is defined through the following PDF. For any $x \geq 0$, the probability of x occurrences in an interval,

$$f(x) = \frac{\mu^x e^{-\mu}}{x!}, \text{ where } \mu \text{ is the parameter which represents Mean arrival rate and } e = 2.711828.$$

Example 8: Consider a Poisson distribution with a mean of two occurrences per time period.

- a) Write the appropriate PPF and compute probability of 2 occurrences in one time period.
- b) Write PPF to determine the probability of x occurrences in 3 time period and Compute probability of 5 occurrences in 3 time period.

Answer: (a) Since parameter gives mean occurrences in time period which is given to be 2, the PPF is given by

$$f(x) = \frac{2^x e^{-2}}{x!}$$

and hence, $f(2) = (2^2 e^{-2})/2! = 2 e^{-2}$.

(b) Mean arrivals in 3 time periods is 6, PPF is

$$f(x) = \frac{6^x e^{-6}}{x!}$$

and $f(5) = (6^5 x e^{-6})/5!$.

Tables giving Poisson probabilities for any $x \geq 0$ for various values of parameter μ are available. A part of which is given below:

μ	9.1	9.4	9.7	10
x				
0	0.0001	0.0001	0.0001	0.0000
5	0.0581	0.0506	0.0439	0.0378
10	0.1198	0.1228	0.1245	0.1251
15	0.0208	0.0250	0.0297	0.0347
15	0.0208	0.0250	0.0297	0.0347
15	0.0208	0.0250	0.0297	0.0347
20	0.0007	0.0010	0.0014	0.0019

Thus, for $\mu = 9.4$, $f(10) = 0.1228$; For $\mu = 10$, $f(15) = 0.0347$; For $\mu = 9.7$, $f(5) = 0.0439$.

Poisson Distribution as an Approximation of the Binomial Distribution

The Poisson distribution can be a reasonable approximation of the Binomial under conditions: When n is large and p is small, Where, n is number of trials and p is the binomial probability of success.

The Normal Distribution

A very important continuous probability distribution is Normal Distribution. Many natural phenomena follow a Normal PD.

For example, CRVs representing heights and weights of people, test scores, amounts of rainfall, etc. do follow NPD.

The PDF defining a NPD, is defined in terms of mean and standard deviation of the corresponding CRV values. In general PDF for a NPD is given by

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{(x-\mu)^2}{2\sigma^2}} \quad \mu$$

where μ = Mean, σ = Standard deviation; $\pi = 3.14159$; & $e = 2.71828$.

The NPD is a symmetric distribution and its shape is Bell shape. NPD is identified by two parameters μ and σ and is denoted by $N(\mu, \sigma)$.

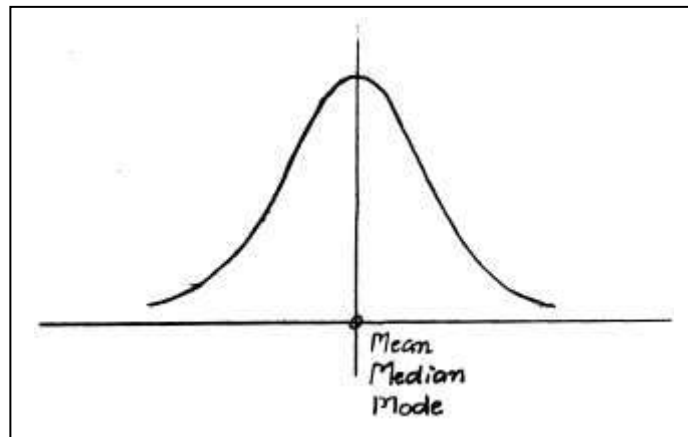


Figure 4: Bell-shape curve

Most of the real-life populations do not extend forever in both directions, but for such populations the normal distribution is a convenient approximation.

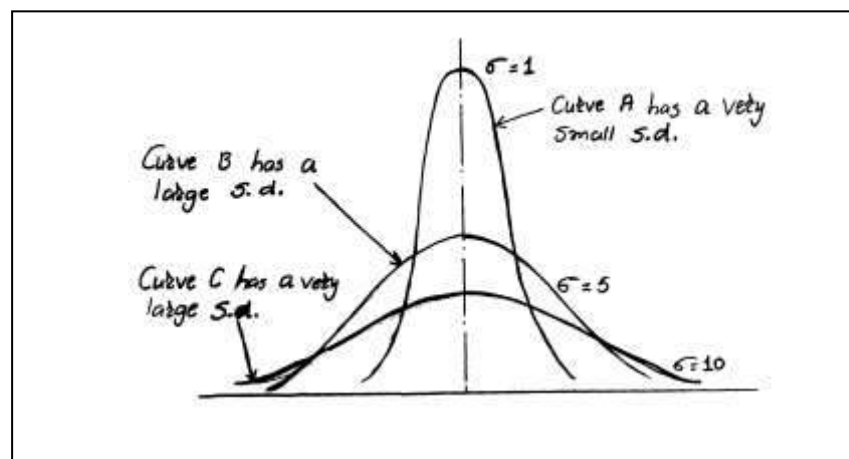
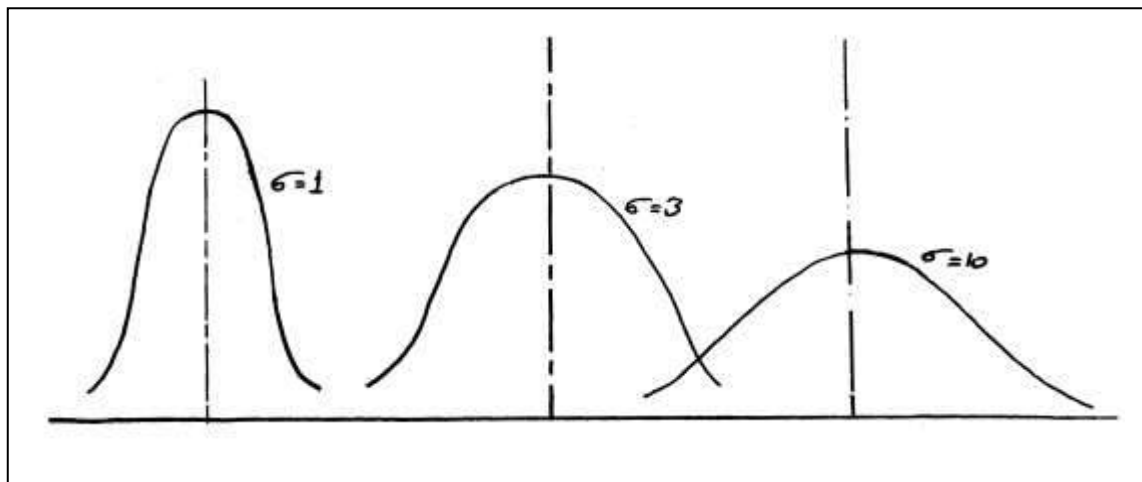
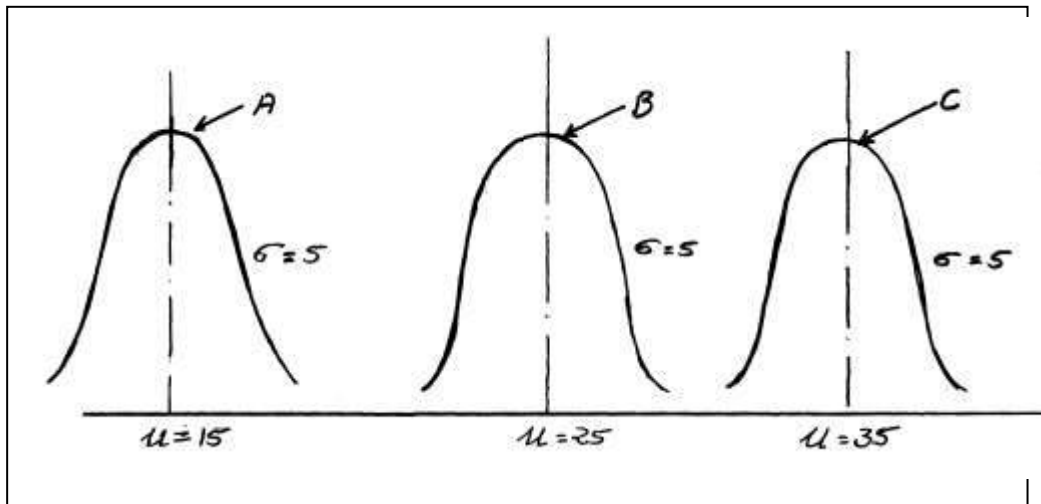


Figure – 5: NPDs with same Mean & different values of σ



1. The highest point on the Normal curve is at the mean which is also the Median and Mode of the distribution.
2. The mean of the NPD can be any numerical value: Negative, zero, or positive. The Bell shape of the NPDs with same standard deviation are same and the position of the curve depends on the value of the mean.
3. The NPD is symmetric, with the shape of the curve to the left of the mean a mirror image of the shape to the right of the mean. The tails of the curve extend to infinity asymptotically in both directions. Because of symmetry skewness measure of the NPD is 0.
4. The Standard deviation determines how flat and wide the curve is. Larger value of s. d. result in wider, flatter curves, showing more variability in the data.
5. Probabilities for NRV are given by areas under the curve. Total area under the curve for NPD is 1. Because of symmetry the areas under the curve to the right and to the left of the mean are both 0.5.
6. No matter what the values of μ and σ are for a normal probability distribution, the total area under the normal curve is 1.00, so that we may think of areas under the curve as probabilities. To compute Probability that a CRV is within any specific interval, we must compute area under the normal curve over that interval.
7. The percentage of values in some commonly used intervals are:
 - 68.3% values lie in the interval $[\mu - \sigma, \mu + \sigma]$
 - 95.4% values lie in the interval $[\mu - 2\sigma, \mu + 2\sigma]$
 - 99.7% values lie in the interval $[\mu - 3\sigma, \mu + 3\sigma]$
 - That is $P(\mu - 3\sigma \leq x \leq \mu + 3\sigma) = 0.997$.

Standard Normal Distribution

A Normal probability distribution with mean 0 and standard deviation 1 is called the standard Normal distribution (SND). Thus SND is $N(0, 1)$.

If a continuous random variable X follows a normal distribution $N(\mu, \sigma)$ then $Z = \frac{X - \mu}{\sigma}$ follows standard Normal distribution $N(0, 1)$.

For the standard NPD these areas have been computed and are available in the form of a table as given below. Since the NPD is symmetric the table gives probabilities of z

being in the interval $[0, z]$ which is:

where

$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-x^2/2}$$

$$\int_0^z f(x) dx$$

z	0.0	0.02	0.04	0.06	0.08
0.0	0.0000	0.0080	0.0160	0.0239	0.0319
0.5	0.1915	0.1985	0.2054	0.2123	0.2190
1.0	0.3413	0.3461	0.3508	0.3554	0.3599
1.5	0.4332	0.4357	0.4382	0.4406	0.4429
2.0	0.4772	0.4783	0.4793	0.4803	0.4812
2.5	0.4938	0.4941	0.4945	0.4948	0.4951

The z is the standard Normal variable and from the table, we get the probability

$$P(0.0 \leq z \leq 1.0) = 0.3413; \text{ Then by symmetry } P(-1.0 \leq z \leq 0.0) = 0.3413;$$

$$P(-1.0 \leq z \leq 1.0) = P(-1.0 \leq z \leq 0.0) + P(0.0 \leq z \leq 1.0) = 0.3413 + 0.3413 = 0.6826;$$

Using properties of Normal distribution, we can compute $P(a \leq z \leq b)$, the probability for z in any interval [a, b]. And for any continuous random variable following normal distribution $N(\mu, \sigma)$, using the fact that $Z = \frac{X - \mu}{\sigma}$ follows $N(0, 1)$ we can compute probability $P(a \leq x \leq b) = P\left(\frac{a - \mu}{\sigma} \leq Z \leq \frac{b - \mu}{\sigma}\right)$ which can be computed from the table.

7.0 SAMPLING AND SAMPLING DISTRIBUTIONS

A Population is the set of elements of interest in any study and a Sample is a subset of population.

For example, if we are interested in knowing the students from Vadodara, who will be interested in taking a training for valuation at the centre for valuation studies. Then Population is the set of all students from Vadodara, who are eligible to take such training. In order to compute number of such students, it may be infeasible to ask every student about his interest. What normally we do is select few students randomly from various sections from Vadodara and ask them about their interest, and from that estimate the required number. The set of students whom we select is the sample.

The accuracy of such estimates will depend on whether the selected sample appropriately represents the population or not. And this will depend on nature of the population and method of selecting a sample. The Sampling methods can be classified as Probability (Random) sampling method and Non-probability (Non-random or Biased) Sampling methods.

7.1 Probability (Random) sampling methods:

Elements selected in the sample have a known probability of being selected. Advantage of probability sampling is that the Sampling distribution of the appropriate sample Statistic generally can be identified and used to make a probability statement about the error associated with the sample results. Methods included are: (i) Simple Random Sampling (ii) systematic sampling.(iii) Stratified Random Sampling (iv) Cluster sampling.

Simple Random Sampling

The process of selecting a Simple Random Sample depends on whether the population is finite or infinite.

Sampling from a finite population:

A SRS of size n from a Finite Population of size N is a sample selected such that each possible sample of size n has the same probability of being selected.

Procedure: Choose the elements for the sample one at a time in such a way that, at each step, each of the remaining elements in the population has equal chance of being selected.

To ensure randomness in the selection we use table of random numbers as given below

63271	59986	71744	51102	15141	80714	58683	93108
88547	09889	95436	79115	08303	01041	20030	63754
55957	57243	83865	09911	19761	66535	40102	26646
46276	87453	44790	67122	45573	84358	21625	16999
20711	55609	36100	29430	70165	02421	32001	15987

Selection procedure using Table of Random numbers:

- Assign the numbers 1 to N to every element of the population. Let $k =$ Minimum digits required to store N.
- Start from any cell in the table and select the numbers in forward or backward direction. The digits of the numbers selected are regrouped to form numbers of k digits.
- If a number in this list is within 1 to N, the corresponding element from the population is selected in the Sample, otherwise the number is ignored. The process continues till all n elements are selected.

Sampling from an Infinite Population

In Practice, a population being studied is usually considered Infinite if it involves on going process that makes listing or counting every element in the population impossible. For example:

- All order that could be processed by a mail-order firm.
- All emergency phone calls that could come into a Police Station.

A simple Random Sample from an infinite population is the Sample selected such that the following conditions are satisfied: (1) Each element selected comes from the population. (2) Each element is selected independently.

Systematic sampling

In case of a large population taking a SRS is time consuming and systematic sampling provides a good alternative to SRS. If sample of size n is required from a population of size N , we may sample one element for every N/n elements in the population. A systematic sample in this case involves selecting randomly one of the first N/n elements of the population list. The other elements in the sample are identified by moving systematically through the population list and identifying every (N/n) th element after the first randomly selected element. Since first element is selected randomly, a systematic sample is usually assumed to have properties of a SRS. The assumption is more valid if elements in the population are randomly ordered.

Stratified sampling

To use stratified sampling, we divide the population into relatively homogeneous groups, called STRATA. Then we use one of two approaches. Either we select at random from each stratum a specified number of elements corresponding to the proportion of that stratum in the population as a whole or we draw an equal number of elements from each stratum and give weight to the results according to the stratum's proportion of total population. With either approach, stratified sampling guarantees that every element in the population has a chance of being selected.

Stratified sampling is appropriate when the population is already divided into groups of different sizes. The advantage of stratified samples is that when they are properly designed, they more accurately reflect characteristics of the population from which they were chosen than do other kinds of samples.

Cluster sampling

In cluster sampling The elements of the population are divided into separate groups called clusters. Each element of the population lies into one and only one cluster. A Simple random sample of clusters is then taken. All elements within each sampled cluster form the sample.

Cluster sampling works best when each cluster provides a small scale representation of the population. If all clusters are alike in this regards, sampling a small number of clusters will provide a good estimate of the population parameter. One of the primary application is Area sampling, where clusters are city blocs or well defined areas. Cluster sampling generally requires a large sample, however it requires lower operational cost.

7.2 Non-probability (Non-random or Biased) Sampling methods:

Elements are selected as per convenience or Judgment of the designer. Methods in this class are: (i) Convenience sampling (ii) Judgment sampling.

Convenience sampling

Convenience sampling is a non-probability sampling technique, in which the sample is identified primarily by convenience. Elements are selected without pre-specified probabilities of being selected. It has an advantage of relatively easy sample selection and data collection. However, it is impossible to evaluate the “goodness” of the sample in terms of the representativeness of the population. No statistically justified procedure allows a probability analysis and inference about the quality of the sample results. Example of convenience sampling are: a professor conducting research at the university may use his students as sample elements; an inspector may sample a shipment of oranges by selecting oranges haphazardly from among several crates; wild life captures, etc.

Judgment sampling

This is also a non-probability sampling technique in which the person most knowledgeable in the subject of the study selects elements of the population that he or she feels are most representative of the population. Often this method is a relatively easy way of selecting a sample. A reporter may select two or three MPS, judging that these MPS reflect the general opinion of the parliament. However, the quality of the sample results depends on judgment of the person selecting the sample. We should be cautious in drawing conclusions based on judgment samples used to make inferences about populations.

7.3 Sampling Distribution:

point estimates of the population parameters depends on the SRS used for finding the estimates. If the sample changes then estimates also change. If we consider the Process of selecting a SRS as an experiment, the sample mean \bar{x} is the numerical description of the experiment and hence a random variable. So, \bar{x} has a mean, standard deviation and a probability distribution, called a Sampling distribution of,

The Mean or Expected value of \bar{x} , $E(\bar{x}) = \mu$ the population mean.

The Standard deviation $\sigma_{\bar{x}}$ of \bar{x} (Standard error of mean) is given by:

$$\sigma_{\bar{x}}$$

$$\sigma_{\bar{x}} = \sqrt{\frac{N-n}{N-1}} \left(\frac{\sigma}{\sqrt{n}} \right) \text{ For a Finite Population and } \sigma_{\bar{x}} = \left(\frac{\sigma}{\sqrt{n}} \right) \text{ for an Infinite Population.}$$

In case when Population is “large” and sample is relatively “small”, that is $n/N \leq 0.05$, i.

e. sample size is < 5% of Population size, then also, $\sigma_{\bar{x}} = \left(\frac{\sigma}{\sqrt{n}} \right)$.

Form of the sampling distribution \bar{x} , is normal for any sample size if the population has a Normal or nearly Normal distribution.

If the population has any other distribution, by Central Limit theorem, the Sampling distribution of \bar{x} can be approximated by a Normal distribution as the Sample size n becomes large.

General Statistical practice is to assume that for most applications, the Sampling distribution of \bar{x} can be approximated by a Normal distribution whenever the sample size n is ≥ 30 .

Similarly we have Sds for other population parameters like μ and p . These Sds help us make probability statement about how “good” the point estimate of respective population parameter is.

8.0 PARAMETER ESTIMATION

A sample statistic (various Statistical measures for sample) are used to estimate a population parameter. An estimator is a sample statistic used to estimate a population parameter. There are two types of estimates (1) Point Estimate (2) Interval Estimate.

8.1 Point Estimate

A point estimate is a single number that is used to estimate an unknown population parameter e.g. A firm estimates the next year’s average profit as :25 Lakhs.

Population parameter	Point Estimate (Sample Statistics)
Population Mean	Sample Mean
Population Standard deviation	Sample SD
Population Proportion p	Sample proportion = x / n x = No. of samples with a specific property

Note that if sample changes the point estimates will also change and hence point estimates are not reliable.

8.2 Interval Estimates and Confidence Intervals

An interval estimate is a range of values used to estimate a population parameter. That is one finds an interval around a point estimator in which a population parameter is expected to lie. e.g. A firm estimate its next year’s profit as : Between 20 and 30 Lakhs. It indicates the error in two ways: (i) By the extent of its range and (ii) By the probability of the true population parameter lying within that range.

General form of Interval estimate is: Point Estimate + Margin of error. The purpose of Interval estimate is to provide information about how close the point estimate to the value of Population parameter. We also, compute a confidence or probability with which we can say that the population parameter will lie in the estimated Interval. In fact, given a confidence level L, we find the Interval estimate which is called L% confidence Interval. In estimation, the most commonly used confidence levels are 90%, 95%, and 99%. But we are free to apply any confidence level. We illustrate the computation of Confidence Interval for population Mean when population standard deviation is known.

In order to develop Interval estimate of the Population Mean, either Population σ SD or

Sample SD s must be used to compute the margin of error. Although σ is rarely known exactly, from historical data or other information we can obtain a good estimate of σ prior to sampling. In such a case we consider that σ is known. Earlier we have computed the probability L that the estimate of population mean \bar{x} will be within a given distance of μ . In the Interval estimate for \bar{x} given probability L we compute Margin of error, so that \bar{x} lies in the Interval $[\bar{x} - \text{Margin of error}, \bar{x} + \text{Margin of error}]$ with the given probability L . We compute the margin of error using the fact that the Sampling distribution of \bar{x} is Normal with mean μ & SD σ/\sqrt{n} .

Procedure for determination of the \bar{x} Confidence Interval (Interval estimate with confidence level L) for μ :

- i. Choose Confidence level (90%, 95% or 99%) that is take $L = 0.9, 0.95$ or 0.99 .
- ii. Determine c such that $Z(c) = L/2$, from the standard Normal distribution table.
- iii. Compute Sample mean \bar{x} .
- iv. Sampling distribution of \bar{x} is Normal distribution with mean μ and SD σ/\sqrt{n} and $\frac{\bar{x} - \mu}{\sigma/\sqrt{n}}$

$Z = \frac{\bar{x} - \mu}{\sigma/\sqrt{n}}$ as standard Normal distribution where σ is known SD of the population.

- v. $Z(c) = L/2$ means $\text{Prob}(-c \leq Z \leq c) = L$. That is, $\text{Prob}\left(-\frac{c\sigma}{\sqrt{n}} \leq \bar{x} - \mu \leq \frac{c\sigma}{\sqrt{n}}\right) = L$.

Thus, $\text{Prob}\left(\bar{x} - \frac{c\sigma}{\sqrt{n}} \leq \mu \leq \bar{x} + \frac{c\sigma}{\sqrt{n}}\right) = L$ is the desired confidence interval. This means

for any sample with mean \bar{x} lies in the confidence interval $\left[\bar{x} - \frac{c\sigma}{\sqrt{n}}, \bar{x} + \frac{c\sigma}{\sqrt{n}}\right]$

with probability L . Since Z follows the standard Normal distribution, the value of c for different values of L is given in the following table.

L%	L/2	c
90	0.45	1.645
95	0.475	1.96
99	0.495	2.576

Example 9: For a random sample of 36 items and a sample mean of $\bar{x} = 211$, compute a 95% confidence interval for μ if the population standard deviation is 23.

By above formula the 95% confidence interval for μ is

$$\left[\bar{x} - \frac{c\sigma}{\sqrt{n}}, \bar{x} + \frac{c\sigma}{\sqrt{n}} \right] = \left[211 - \frac{1.96 \times 23}{\sqrt{36}}, 211 + \frac{1.96 \times 23}{\sqrt{36}} \right] = [203.487, 218.513].$$

In computing confidence intervals for μ when \bar{x} is not known or for population standard deviation or other population parameters one has to use other probability distributions like Student's t distribution, Chi-Square Distribution, F Distribution etc., however the procedure remains same.

UNIT – 4

SIMPLE TEST OF SIGNIFICANCE, REGRESSION AND CORRELATION, MULTIPLE CORRELATION COEFFICIENT

9.0 SIMPLE REGRESSION AND CORRELATION

In business, the key to decision making often lies in the understanding of the relationships between two or more variables. For example, a company in the distribution business may determine that there is a relationship between the price of crude oil and their own transportation costs. Or a valuator may like to know relationship between the value of an asset in a specific locality and the average family income in that locality. Regression analysis shows us how to determine nature and correlation analysis shows how to determine the strength of a relationship between two variables.

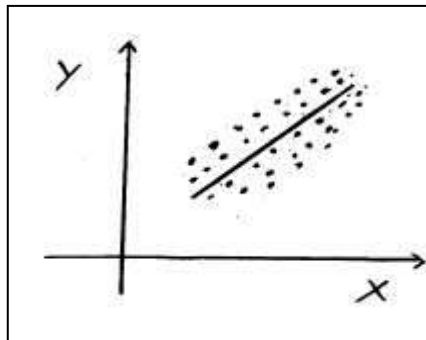
9.1 REGRESSION ANALYSIS

Regression analysis is the process of constructing a mathematical model or function that can be used to predict or determine one variable by another variable or other variables. The most elementary regression model is called **simple regression** or **bivariate regression** involving two variables in which one variable is predicted by another variable. In simple regression, the variable to be predicted is called the **dependent variable** and is designated as y . The predictor is called the **independent variable**, and is designated as x . In simple regression analysis, only a straight-line relationship between two variables is examined.

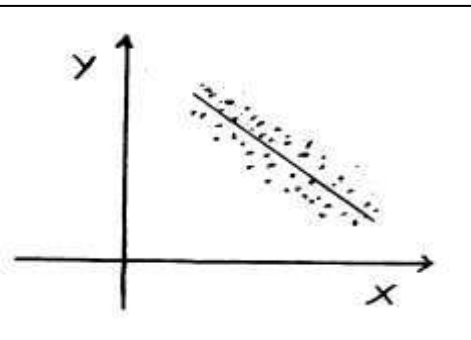
Usually, the first step in simple regression analysis is to construct a **scatter plot** (or scatter diagram), i. e. Plotting the data points $\{(x_i, y_i) \mid i = 1, 2, \dots, n\}$ on XY plane. This yields preliminary information about the shape and spread of the data and will help us in deciding whether a line or some other curve will fit the data better.

Possible relationships between X and Y which can be inferred from scatter diagram are as indicated below:

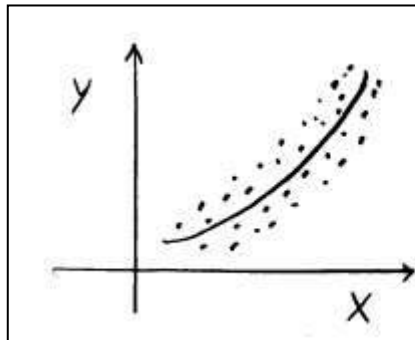
(a) Direct Linear



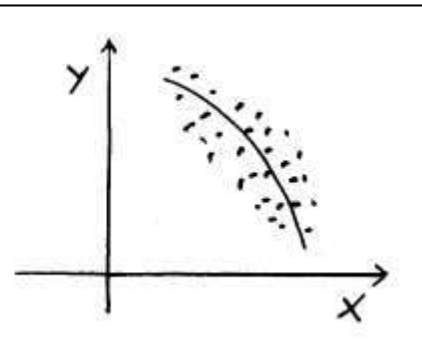
(b) Inverse Linear



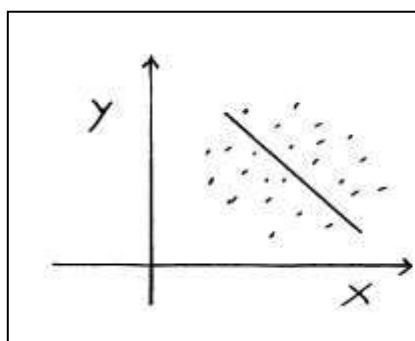
(c) Direct Curvilinear



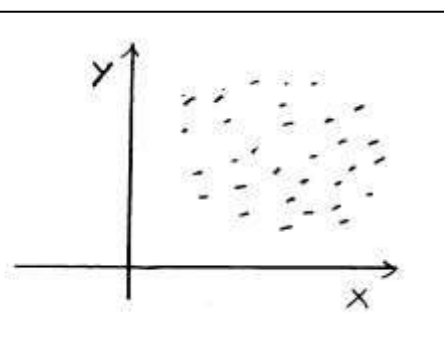
(d) Inverse Curvilinear



(e) Inverse Linear with more scattering



(f) No Relationship



Graph (e) illustrates an inverse linear relationship with a widely scattered pattern of points. The wider scattering indicates that there is a lower degree of linear association between the independent and dependent variable than there is in graph (b). The pattern of points in graph (f) seems to indicate that there is no linear relationship between the two variables, therefore, knowledge of the past concerning one variable does not allow us to predict future occurrences of the other. We shall restrict our study to linear regression only.

Next step is to determine the straight line having equation in the form $\hat{y} = b_0 + b_1x$ where \hat{y} = the predicted value of y ; b_0 = the population y intercept; b_1 = the population slope.

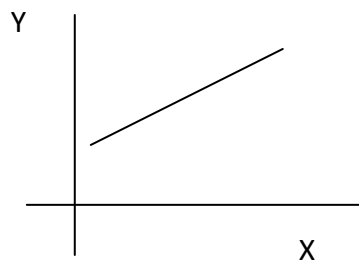
To determine the equation of the regression line of y on x , for a sample of data, one must determine the values for b_0 and b_1 , so that sum of the squared error, namely, $\sum_{i=1}^n (\hat{y}_i - y_i)^2$ is minimum. It can be shown by using Calculus that:

$$b_1 = \frac{\sum_{i=1}^n (y_i - \bar{y})(x_i - \bar{x})}{\sum_{i=1}^n (x_i - \bar{x})^2} \text{ and } b_0 = \bar{y} - b_1\bar{x},$$

Where \bar{x} and \bar{y} are respectively the Means of x values and y values, gives the desired minimum squared error.

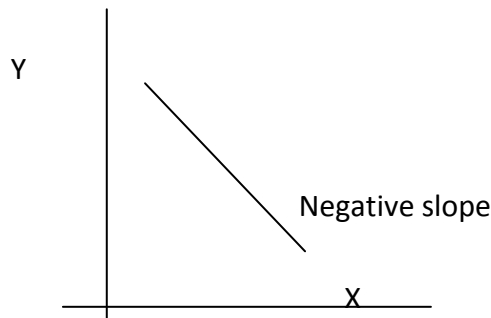
Type of relationship are as discussed below

(1) Direct (positive) Linear relationship



Plotting the independent variable on the X-axis and the dependent variable on the Y-axis, the above graph shows a direct Linear relationship. The slope of this line is positive because Y increases as X increases.

(2) Inverse (negative) Linear relationship



In the above graph, the dependent variable Y decreases (increases) as the independent variable X increases (decreases). This relationship is characterized by Negative Slope. This represents inverse relationship between X and Y.

9.2 CORRELATION ANALYSIS

Correlation analysis is the statistical tool that can be used to describe the degree to which one variable is linearly related to another.

Often, correlation analysis is used in conjunction with regression analysis to measure how well the regression line explains the variation of the dependent variable Y.

Correlation can also be used to measure the degree of association between two variables and is measured in terms of a widely used sample Karl-Pearson coefficient of correlation, r . For the sample data set $\{(x_i, y_i) \mid i = 1, 2, \dots, n\}$,

Coefficient of correlation r is given by,
$$r = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\left[\sum_{i=1}^n (x_i - \bar{x})^2 \right] \left[\sum_{i=1}^n (y_i - \bar{y})^2 \right]}}$$

The formula indicates that r is a number that ranges from -1 to 0 to +1, representing the strength of the relationship between the variables. An r value of +1 denotes a perfect positive relationship between two sets of numbers. An r value of -1 denotes a perfect negative correlation, which indicates an inverse relationship between two variables: as one variable gets larger, the other gets smaller. An r value of 0 means no linear relationship is present between the two variables.

Example 10: Determine the value of the coefficient of correlation, r and the equation regression line for the following data.

X	4	6	7	11	14	17	21
Y	18	12	13	8	7	7	5

Answer:

x_i	y_i	$U_i = x_i - \bar{x}$	$V_i = y_i - \bar{y}$	U_i^2	V_i^2	$U_i V_i$
4	18	-6	9.25	36	85.56	-55.5
6	12	-4	3.25	16	10.56	-13
7	13	-3	4.25	9	18.06	-12.75
11	8	1	-0.75	1	0.56	-0.75
14	7	4	-1.75	16	3.06	-7
17	7	7	-1.75	49	3.06	-12.25
21	5	11	-3.75	121	14.06	-41.25
$\sum x_i = 80$ $\bar{x} = 10$	$\sum y_i = 70$ $\bar{y} = 8.75$			$\sum U_i^2 = 248$	$\sum V_i^2 = 134.92$	$\sum U_i V_i = -142.5$

$r = \frac{-142.5}{\sqrt{248 \times 134.92}} = \frac{-142.5}{182.92} = -0.78$ which indicates almost perfect negative relationship.

Now, $b_1 = \frac{-142.5}{248} = -0.57$ and $b_0 = \bar{y} - b_1 \bar{x} = 8.75 + 0.57 \times 10 = 3.05$.

Hence Regression line of y on x is given by $\hat{y} = 3.05 - 0.57x$.

9.3 MULTIPLE REGRESSION AND CORRELATION ANALYSIS

We can use more than one independent variable to estimate the dependent variable to increase the accuracy of the estimate. This process is called multiple regression and correlation analysis.

e.g. Suppose the real estate agent who wishes to relate the number of houses and the number of firm sold in a month to the amount of his monthly advertising. Certainly, we can find a simple estimating equation that relates these three variables.

UNIT – 5

TIME SERIES

10.0 TIME SERIES

Time-series analysis is one quantitative method we use to determine PATTERNS in data collected over time.

Time-series analysis is used to detect patterns of change in statistical information over regular intervals of time. We project these patterns to arrive at an estimate for the future.

Thus, time-series analysis helps us to cope up with uncertainty about the future.

We use the term time series to refer to any group of statistical information accumulated at regular intervals. There are four kinds of change, or variation, involved in time-series analysis:

1. Secular trend
2. Cyclical fluctuation
3. Seasonal variation
4. Irregular variation

Secular trend

The value of the variable trends to increase or decrease over a long period of time.

Cyclical fluctuation

The most common example of cyclical fluctuation is the business cycle. Over the time, there are years when the business cycle hits a peak above the trend line. At other times, business activity is likely to slump, hitting a low point below the trend line. The time between hitting peaks or falling to low points is at least 1 year and it can be as many as 15 or 20 years.

Seasonal variation

The seasonal variation involves patterns of change within a year that trend to be repeated from year to year.

Irregular variation

In many situations, the value of a variable may be completely unpredictable, changing in a random manner.

Trend Analysis :

Of the four components of a time series, secular trend represents the long-term direction of the trend component is to fit a line visually to a set of points on a graph.

UNIT – 6

INDEX NUMBERS

11.0 INDEX NUMBERS

An index number measures how much a variable changes over time. We calculate an index number by finding the ratio of the current value to a base value. Then we multiply the resulting number by 100 to express the index as a percentage. This final value is the percentage relative. Note that the index number for the base point in time is always 100.

11.1 TYPES OF INDEX NUMBERS

There are three principal types of indices: the price index, the quantity index, and the value index. A price index is the one most frequently used. It compares levels of prices from one period to another. The familiar Consumer Price Index (CPI), measures overall price changes of a variety of consumer goods and services and is used to define the cost of living.

A quantity index measures how much the number or quantity of a variable changes over time.

The last type of index, the value index, measures changes in total monetary worth. That is, it measures changes in the Rupee value of a variable. In effect, the value index combines price and quantity changes to present a more informative index. Usually, an index measures change in a variable over a period of time, such as in a time series. However, it can also be used to measure differences in a given variable in different locations. This is done by simultaneously collecting data in different locations and then comparing the data. The comparative cost-of-living index, for example, shows that in terms of the cost of goods and services, it is cheaper to live in Anand, than in Mumbai.

A single index may reflect a composite, or group, of changing variables. The Consumer Price Index measures the general price level for specific goods and services in the economy. It combines the individual prices of the goods and services to form a composite price index number.

Uses of Index Numbers

Index numbers such as the Consumer Price Index are often cited in news reports as general indicators of the nation's economic condition. Management uses index numbers as part of an intermediate computation to understand other information better. Seasonal indices were used to modify and improve estimates of the future. The use of the Consumer Price Index to determine the real buying power of money is another example of how index numbers help increase knowledge of other factors.

Sources of Index Numbers

Almost all government agencies distribute data about their activities, from which index numbers can be computed. Many financial newspapers and magazines provide information from which index numbers can be computed. When you read these sources you will find that many of them use index numbers themselves. In India, R.B.I. publishes indices.

11.2 UNWEIGHTED AGGREGATES INDEX

The simplest form of a composite index is an unweighted aggregates index. Unweighted means that all the values considered in calculating the index are of equal importance. Aggregate means that we add, or sum, all the values.

An unweighted aggregates index is calculated by adding all the elements in the composite for the given time period and then dividing this result by the sum of the same elements during the base period. The formula for this index is:

$$\frac{\sum Q_i}{\sum Q_0} \times 100$$

Where,

Q_i = quantity of each element in the composite for the year in which we want the index

Q_0 = quantity of each element in the composite for the base year

11.3 WEIGHTED AGGREGATES INDEX

This weighting allows us to include more information than just the change in price over time. It also lets us improve the accuracy of the general price level estimate based on our sample. The problem is to decide how much weight to attach to each of the variables in the sample.

The formula for this index is:

$$\frac{\sum P_i Q}{\sum P_0 Q} \times 100$$

where

- P_i = price of each element in the composite in the current year.
- P_0 = price of each element in the composite in the base year.
- Q = quantity weighting factor chosen

11.4 LASPEYRES METHOD

The Laspeyres method, which uses quantities consumed during the base period, is the method most commonly used because it requires quantity measures for only one period. Because each index number depends on the same base price and quantity, management can compare the index of one period directly with the index of another.

Laspeyres formula is given by

$$\frac{\sum P_i Q_0}{\sum P_0 Q_0} \times 100$$

Where,

- P_i = prices in the current year
- P_0 = prices in the base year.
- Q_0 = quantities sold in the base year

11.5 PAASCHE METHOD

The second way to compute a weighted aggregates price index is the Paasche method. Finding a Paasche index is similar to finding a Laspeyres index. The difference is that the weights used in the Paasche method are the quantity measures for the current period rather than for the base period.

Paasche's formula is given by

$$\frac{\sum P_i Q_i}{\sum P_0 Q_i} \times 100$$

Where,

P_i = current-period prices

P_0 = base-period prices

Q_i = current-period quantities

11.6 FIXED-WEIGHT AGGREGATES METHOD

The third technique used to assign weights to elements in a composite is the fixed-weight aggregates method. It is similar to both the Laspeyres and Paasche methods. However, instead of using base-period or current-period weights (quantities), it uses weights from a representative period. The representative weights are referred to as fixed weights. The fixed weights and the base prices do not have to come from the same period.

The formula for this index is:

$$\frac{\sum P_i Q_2}{\sum P_0 Q_2} \times 100$$

where

P_i = current-period prices

P_0 = base-period prices

Q_2 = fixed weights.

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ENVIRONMENTAL ISSUES IN VALUATION

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MODULE-1

ENVIRONMENTAL ISSUES AND POLLUTION

As stated in Professional Standards (PS2) of the Royal Institution of Chartered Surveyors' (RICS) Valuation Global Standards 2017, if the valuer does not have the required level of expertise to deal with some aspect of the valuation assignment properly, then he/she should decide what assistance is needed. With the express agreement of the client where appropriate, the valuer should then commission, assemble and interpret relevant information from other professionals, such as specialist valuers, environmental surveyors, accountants and lawyers.

However, para 10.7 of General Standards IVS 105 (Valuation Approaches and Methods) of International Valuation Standards 2017 stipulates that regardless of the source of the inputs and assumptions used in a valuation, a **valuer must** perform appropriate analysis to evaluate those inputs and assumptions and their appropriateness for the *valuation purpose*.

Asset Standard IVS 300 – Plant and Equipment (under IVS 2017) illustrates environment-related factors that may need to be considered for valuation of plant and machinery.

Asset Standard IVS 400 – Real Property Interests (under IVS 2017) requires that the responsibility for identification of actual or potential environmental risks should be stated in the Scope of Work (refer IVS 101) and Investigations and Compliance (refer IVS 102). Else if the client agrees, a typical special assumption that 'the property is free from contamination or other environmental risks' should be incorporated in the valuation report only for certain purposes.

Valuation Practice Guidance Application VPGA 8 - Valuation of Real Property Interests of RICS (2017) discusses environmental matters in three parts : (a) Natural environmental constraints, (b) Non-natural constraints, and (c) Sustainability. As the valuers may not have specialised knowledge and experience required to comment on environmental factors, it may be appropriate to recommend that an advice of environmental expert be obtained when the potential presence of these factors can be established in the course of a valuation inspection through normal enquiries or by local knowledge.

Judicious juxtaposition of the above guidelines of the RICS and IVS 2017 implies that though valuers themselves need not be environmental experts, it is imperative for the valuers to have fundamental knowledge about environmental issues and to scrutinize the data provided by environmental experts prior to their application for valuation of such affected properties.

1.0 INTRODUCTION

Environment means water, air and land and the interrelationship that exists as between and amongst these media (water, air and land) and human beings, other living beings including micro-organisms and property. Humans continuously interact with the environment and alter the environment by various activities like:

- Rapid Industrialization;
- Urbanization;
- Population explosion; and
- Modern life styles.

But the interaction results into environmental pollution. Thus, environmental pollution means alteration of the composition of the environment which will have deleterious effect on human health or quality of life.

Environmental pollution also means “the presence of any pollutant in the environment which imparts adverse effect on the marketability of an asset.”

Environmental pollutant may be defined as “Any solid, liquid, gaseous or other substance present in such concentration which may be or tend to be injurious to the environment giving rise to adverse effect on the marketability of asset.”

Whenever the quality of environment is deteriorated due to presence of any foreign matter, environmental pollution is said to have occurred. The ‘foreign matter’ is a “pollutant”. A pollutant can be a substance which when enters in the environment either purposefully or through some act of nature, it significantly changes the composition of the environment and shows adverse effect on human health.

Contamination is defined as alteration of physical, chemical and/or biological characteristics of the environment which may not necessarily create deleterious effect due to lesser concentration but contaminant(s) in higher concentration become pollutants that may ultimately lead to degradation or deterioration of the value of assets.

Thus, there can be a contaminated environment without it being polluted but there cannot be a polluted environment without it being contaminated.

Environmental quality standards have been established focusing on humans as opposed to the ecosystem at large. Such standards are extremely difficult to specify.

1.1. TYPES OF ENVIRONMENTAL POLLUTION

Environmental pollution can be broadly classified based on any given compartment or region of the environment which they negatively impact, contributing to the multiple causes of pollution. The various components of environment are air, water, noise and land, and correspondingly the environmental pollution is classified as air pollution, water pollution, noise pollution and land (and soil) pollution. Some of the pollutants include gases, metals and their salts, agro-chemicals including pesticides, biomedical waste, heat, vibration and plastic.

Every type of pollution (air, water, noise, land, industrial, soil, light, thermal, etc.) has its own distinguishing causes and environmental effects. Understanding pollution and its various causes can help address the various concerns linked to environmental degradation and destruction, and the dangers it brings to human health.

Air Pollution

Any deleterious change in the composition of the clean atmospheric air is known as air pollution.

Air pollution means presence of one or more contaminants in the atmosphere such that the contaminant's concentration, characteristics and exposure is injurious to public health or welfare.

According to the definitions under Section 2(b) of the Air (Prevention and Control of Pollution) Act-1981, 'air pollution' means the presence in the atmosphere of any air pollutant. Under Section 2(a) of the Act, 'air pollutant' means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

The sources of anthropogenic air pollution are (i) Stationary sources like mining and quarrying, refineries and chemical factories, power plants, industrial facilities, sewage and waste treatment, (ii) Community sources like heating of homes and buildings, laundry services, (iii) Mobile sources like diesel and gasoline-powered automobiles, trains, marine vehicles, aeroplanes, and (iv) Indoor sources like tobacco smoking, combustion emissions, asbestos and Volatile Organic Compounds (VOCs).

Thus, air contaminants include suspended particulate matter (dusts, fumes, mists, and smokes), gaseous pollutants (gases and vapours), odours, radio-active materials, noxious chemicals or any other material in the outdoor atmosphere.

Out of the various air contaminants, the **Criteria Air Pollutants** are the only air pollutants with national ambient air quality standards that define allowable concentrations of these substances in **ambient air**. The criteria air pollutants are six common air pollutants defined by the United States Environment Protection Agency (USEPA) and World Health Organization (W.H.O) as these pollutants are found causing harm to health, environment and damage to property thereby affecting adversely the property valuation. These criteria air pollutants also prescribed by the Central Pollution Control Board (CPCB) of India include Carbon Monoxide (CO), Nitrogen Dioxide (NO₂), Sulphur Dioxide (SO₂), Particulate Matter (PM₁₀), Lead (Pb) and ground level Ozone (O₃). The National Air Quality Standards are given in Table 1 below.

Table 1 : National Ambient Air Quality Standards for Criteria Air Pollutants

Pollutant	Time Weighted Average	Concentration in Ambient Air	
		Industrial, Residential, Rural and Other Areas	Ecologically Sensitive Area (notified by Central Government)
Sulphur Dioxide (SO ₂), µg/m ³	Annual*	50	20
	24 hours**	80	80
Nitrogen Dioxide (NO ₂), µg/m ³	Annual*	40	30
	24 hours**	80	80
Particulate Matter (size less than 10 µm) or PM ₁₀ , µg/m ³	Annual*	60	60
	24 hours**	100	100
Ozone (O ₃), µg/m ³	8 hours*	100	100
	1 hour**	180	180
Lead (Pb) , µg/m ³	Annual*	0.50	0.50
	24 hours**	1.0	1.0
Carbon Monoxide (CO), mg/m ³	8 hours*	02	02
	1 hour**	04	04

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 8 hourly or 1 hourly monitored values, as applicable, shall be complied with 98% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Source: National Ambient Air Quality Standards, Central Pollution Control Board Notification in the Gazette of India, Extraordinary, New Delhi, 18th November 2009.

The valuers are concerned due to damage caused to the property by increasing levels of air pollutants. The property essentially consists of variety of elements including buildings made of masonry and concrete, ceramics and glass used for decorative finishes, paints used to adorn wall surfaces, curtains and other furnishes made from fabrics. On account of air pollution, the frequency of painting of the property increases leading to an additional cost and reducing the value of such property. The determination of damage by air pollution and its impact on valuation of the assets is extremely complex.

1.1.1. WATER POLLUTION

When the level of pollutants in water is more than their prescribed standards, water is said to be polluted. Under Section 2(e) of the Water (Prevention and Control of Pollution) Act-1974, 'water pollution' means such contamination of water or such alteration of physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or any other liquid, gaseous or solid substance into water(whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or aquatic organisms.

The main pollutants in water include various chemical compounds (organic and inorganic), oils and grease, silt, heated water from thermal power plants, fertilizers and pesticides, pathogens present in the domestic wastewater and gases dissolved in rain water.

The water supplies from natural and anthropogenic sources are contaminated by sewage, storm water, direct discharge of effluents from industries, pesticides brought through agricultural runoff, runoff from the solid waste disposal sites, corrosion of material used in distribution of water including plumbing systems, oil spills, development of algae in rivers due to presence of nutrients and sunlight, application of certain chemical agents such as chlorine and aluminium in water treatment processes, discharge of toxic substances, discharge / dumping of waste materials into water bodies, sediments from soil erosion, surface runoff from contaminated land and leaching from landfill sites.

Pollutants from the solid wastes dissolve in rain water and ultimately get mixed with underground water through percolation in the soil system (referred to as ground water pollution). Groundwater contamination by contact with toxins contained in the ground is a serious concern as this water may flow downstream and thus carry contamination to considerable distances.

All the pollutants have adverse impact for human, animal or plant life. The impact depends upon the type of the pollutants and their concentration.

Valuer always takes into consideration the source of the water supply and the water quality characteristics while determining the value of the real estate. Valuers have to make a broad assessment of the water resource, potential assessment of treatment of water for the individual estate or assessment of quality of water supplied by municipal transmission for the given estate.

Thermal Pollution

Thermal pollution occurs when water bodies are degraded in terms of altering their temperatures. It commonly happens when people or industries undertake activities that suddenly decrease or increase the temperature of a natural water body which may include lakes, rivers, oceans or ponds.

Thermal pollution is a huge menace and is mainly influenced by power plants and industrial manufacturers that use water as a coolant. Urban stormwater runoff from parking lots and roads also discharges water of elevated temperatures into adjacent water bodies.

When water is either used as a coolant, discharged from stormwater runoff at elevated temperatures, or released from reservoirs with unnaturally cold temperatures, it changes the natural temperature of water bodies. Therefore, thermal pollution is one aspect of the wider subject of water pollution. The alterations of natural water resource temperatures can have dire consequences on aquatic life and the local ecosystems.

1.1.2. NOISE POLLUTION

Noise pollution is an environmental phenomenon but a non-physical contamination as it does not directly affect the various media like air-water-land. Noise is undesired sound and an unwanted disturbance. Transmission of noise which is capable of producing physiological impact in an individual is defined as noise pollution. Noise pollution may interface with various activities of humans like work, recreation, communication and rest/sleep. It may create annoyance and stress.

On account of urbanization, the demand of transport facilities has increased. Due to the power-driven vehicles and jet aircrafts, the problem of noise has become substantially serious. At some locations, noise levels are much above the acceptable level. 'Hearing loss' is becoming frequent phenomenon in many of urban centres of our nation.

Valuation of property is dictated by its location. For illustration, an apartment located close to a cricket stadium or a school will be valued less than properties not affected by the noise emanating from these facilities. This is because too much noise adding to the nuisance value will have a negative impact on pricing.

1.1.3. LAND POLLUTION

Land pollution is the destruction or decline in quality of the earth's land surfaces in term of use, landscape and ability to support life forms. Many times, it is directly and indirectly caused by human activities and abuse of land resources. Land pollution takes place when waste and garbage is not disposed off in the right manner and as such, introduces toxins and chemicals on land.

Land pollution can be broadly classified as:

- Contamination of land due to uncontrolled storage & disposal/dumping of solid and hazardous chemicals/wastes onto soils in the form of herbicides, fertilizers, pesticides, or any other form of the consumer by-products. e.g. the past use of site for storing chemicals might have resulted in contamination of soils and groundwater with arsenic and organo-chlorine compounds.
- Alteration of land due to land uses like deforestation, farming, mining, developmental works like transport and communication.

Acid rain, construction sites, solid waste, mineral exploitation, agricultural chemicals and deforestation are the primary causes of land pollution.

Contaminated Sites

Environment Protection Policy of Australian Capital Territory Government (2000) has discussed land contamination as under:

Land contamination can arise from a range of commercial, industrial, or agricultural land uses and activities, particularly when the land use has involved hazardous materials. These substances if not managed properly may threaten human health or the environment or may affect the current or future land use.

The activities which have potential to adversely impact on human health and the environment are many. Some of them are given below:

- commercial incineration of wastes (including medical, chemical and municipal wastes)
- commercial landfills
- sewage and industrial effluent treatment plants
- petroleum storage tanks
- electricity generation
- commercial use of chemicals
- preservation of timber

It is therefore necessary to ensure an integrated approach considering public health, planning, occupational health and safety, hazardous and toxic waste management for addressing contamination.

The U.K. Environment Act states that:

“Contaminated land is any land which appears to the local authority in whose area it is situated to be in such a condition by reason of substance in, on or under the land that:

- (a) significant harm is being caused
- Or**
- (b) there is a significant possibility of such harm
- Or**
- (c) pollution of controlled waters is being caused
- Or**
- (d) is likely to be caused”

The question therefore is “What is significant?” In other words, what level of contamination is acceptable and at what point is it unacceptable? An explanation by the Department of Environment on the basis of harm caused, is as under:

- Chronic or acute toxic effect, i.e. serious injury or death to humans
- Irreversible or other adverse change in functioning of an ecological system
- Substantial damage to or failure of building
- Disease or other physical damage or death of livestock or crops kept, reared or grown on the land in question or adjacent land such that there is a substantial loss in their value.

Thus the effect of contamination on human health, certain protected ecological systems, property in the form of crops-livestock-buildings-plant & machinery and controlled waters must be considered.

The principal causes of contamination of land include:

- (1) uncontrolled disposal of industrial, solid and hazardous wastes on land
- (2) uncontrolled burning of solid waste on land
- (3) improper storing either temporarily or permanently of toxic substances/wastes, discarded chemicals, industrial reject materials
- (4) deposition of stack emissions and toxic substances during transfer via atmosphere
- (5) soil pollution caused by industrial effluents running uncontrolled over the land.

1.2 ENVIRONMENTAL DEGRADATION AND STEPS TO RESTORE ENVIRONMENTAL DAMAGE

Our environment is deteriorating for the last two centuries and almost every part of the planet has been touched by it in one way or the other. Environmental pollution refers to the degradation of quality and quantity of natural resources. The primary cause of environmental degradation is human disturbance.

The industrial revolution of 19th century mechanized the production and manufacturing of goods and introduced the use of machinery and other heavy equipments-which in turn, used fuels as source of energy, which deteriorate the environment. The modern technological progress is actually the root cause of the environmental deterioration.

1.2.1 CAUSES OF ENVIRONMENTAL DEGRADATION

Different kinds of human activities are the main reasons of environmental degradation. These have led to environment changes that have become harmful to all living beings. The waste products, smoke emitted by vehicles and industries increase the amount of poisonous gases in the air. Unplanned urbanization and industrialization help to increase pollution of the sources of water and have also caused air and sound pollution.

Environmental changes are based on many factors including:

- Urbanization
- Industrialization
- Over-population
- Economic growth
- Deforestation
- Intensification of agriculture
- Increase in energy use
- Increase in transportation.

1.2.2 STEPS TO RESTORE ENVIRONMENTAL DEGRADATION

The degradation has adverse impacts on humans, plants, animals and micro-organisms. To cope up with the critical situation, we need to make optimum use and management of resources, sustainable development, adoption of green concept and above all community participation in all developmental activities.

1. **Reform Current Systems : Reformation of the current system with more strict laws towards environmental pollution and degradation must be implemented.**
2. **Promote Green Jobs : Lift people out of poverty and reduce environmental impact at the same time.**
3. **Televised Real-Time Debates and Discussions Among Environmental Experts and Representatives from Other Sectors :** Millions of people are working to solve various environmental crises. They should be heard and others should learn more about the issues from them. TV and internet videos can help reach a wide audience and get people involved. To get the most out of it, these forums would need to be live, unscripted and open to people of diverse backgrounds and opinions.
4. **Abandon 'Cap and Trade' System :** The global cap and trade system sets limits on carbon emissions for businesses around the world. It is set up so that the worst polluters can buy "pollution credits" from those who stay under the limit and pollute less. Supporters argue that this not only sets realistic goals to decrease pollution, but economically incentivizes businesses to pollute less. It may sound like a good idea, but there are serious negative consequences to cap and trade.

Another way to deal with pollution would be to hold polluters criminally liable through the justice system for violation of other's property. We each own our lungs and air pollution violates those boundaries. Sufficient penalties make polluting prohibitive so it is phased out and the real costs of healthy goods will become apparent.

5. **Account for Externalized Costs** : Humans rely on nature for their survival. We are threatening all life on this planet without accounting for our impact along the way and tracking how well forests are regenerating, other species are surviving, and water systems are maintaining themselves.
6. **Label Genetically Modified Foods** : There is currently no way to know if your food is genetically-modified despite the fact that there are significant environmental and health hazards associated with GMO's (Genetically Modified Organisms).
7. **Promote Renewable Energy and "New Energy" Technology** : The burning of fossil fuels is polluting the air, fueling war and global conflict, and breeding dependence on oil-rich countries. But efficient, sustainable alternatives exist that can revolutionize the energy industry. Exciting innovations in the solar and wind industries have been emerging in recent years – prices are more competitive; energy generation is more efficient; and adoption is more common worldwide.
Some of such established strategies include:
 - **Decrease our reliance on oil** and use it to make the transition to renewable alternatives.
 - **Employ alternative energy sources** including wind and solar to power a large portion of the world.
 - **Stop suppressing and further develop "New Energy" resonant technology devices** to make clean, abundant power accessible everywhere.
8. **Phase out, stop or shifting environmentally harmful subsidies: Government should develop strategy for removal of subsidies that are directly or indirectly causing harm to the environment.**

Each year the world's taxpayers provide billions of dollars in subsidies for environmentally destructive activities, such as fossil fuel burning, over-pumping aquifers, clear-cutting forests, and overfishing. This essentially implies that the world is spending lot of money annually to subsidize its own destruction.

One way to correct the situation is **tax shifting** - raising taxes on activities that harm the environment so that their prices begin to reflect their true cost and offsetting this with a reduction in income taxes. A complementary way to achieve this goal is subsidy shifting.

A world facing economically disruptive climate change can no longer justify subsidies to expand the burning of coal and oil. Shifting these subsidies to the development of climate-benign energy sources such as wind, solar, biomass, and geothermal power will help stabilize the earth's climate. Shifting subsidies from road construction to rail construction could increase mobility in many situations while reducing carbon emissions.

In a troubled world economy where many governments are facing fiscal deficits, the tax and subsidy shifts can help balance the books, create additional jobs, and save the economy's eco-supports. Tax and subsidy shifting promise greater energy efficiency, cuts in carbon emissions, and reductions in environmental destruction.

9. **Trusts – A Tool to Manage the Commons** : Land or resources belonging to or affecting the whole of a community are generally referred to as the 'commons'. One compelling way to deal with management of the commons is to create trusts that are designed to protect natural resources for present and future generations. This is already being done in many countries with considerable success. e.g. the Pacific Forest Trust, the Marin Agricultural Land Trust, the Oregon Water Trust.

10. **Set up Systems for Voluntary Co-operation** : The environment varies so much from place to place that it doesn't make sense to have sweeping national solutions to environmental crises. Rather, people should have a say within their community about how to deal with local environmental issues.

1.3 REVIEW YOUR UNDERSTANDING

1. Water pollution means
 - A. Level of pollutant is more than the prescribed standard
 - B. Contamination of water
 - C. Alteration of physical, chemical or biological properties of water
 - D. All the above

2. Environmental pollution means
 - A. Presence of any pollutant in environment which causes adverse impact on human health and ecosystem
 - B. Alteration of characteristics leading to degradation of quality of environment
 - C. Presence of pollutants in any form but in such concentration which may tend to be injurious to environment giving rise to adverse effect on marketability of assets
 - D. All of the above

3. Air pollution means
 - A. Level of pollutant is more than the prescribed standard
 - B. Contamination of water
 - C. Alteration of physical chemical or biological properties of water
 - D. None of the above

4. In which type of contaminant, Noise Pollution is categorized?
 - A. Hazardous and toxic material
 - B. Industrial wastewater
 - C. Physical contamination
 - D. Non-physical contamination

5. State the principal causes of contamination of land.

MODULE-2

OUTLINE OF ENVIRONMENTAL LEGISLATIONS

2.0. INTRODUCTION

Even before India's independence in 1947, several environmental legislations existed but the real impetus for bringing about a well-developed framework came only after the UN Conference on the Human Environment (Stockholm, 1972). The UN Conference on Human Environment at Stockholm in 1972 influenced the need for integrated legal mechanism to conserve the natural resources, protect the environment and ensure healthy human life. Under the influence of this Stockholm Declaration, the National Council for Environmental Policy and Planning within the Department of Science and Technology was set up in 1972. This Council later evolved into a full-fledged Ministry of Environment and Forests (MoEF) in 1985 which today is the apex administrative body in the country for regulating and ensuring environmental protection.

Climate change was also an agenda in the ministry (MoEF) but it was explicitly made a priority in 2014 and the ministry was renamed as Ministry of Environment, Forest and Climate Change (MOEFCC) in May 2014.

After the Stockholm Conference, constitutional sanction was given to environmental concerns in 1976 through the 42nd Amendment, which incorporated them into the Directive Principles of State Policy and Fundamental Rights and Duties.

Constitutional Provisions related to Environment

Article 21 – Right to pollution free environment

Article 48A - imposes a duty on the State to protect and improve the environment, and to safeguard the forests and wild life of the country.

Article 51A(g) - imposes duty on every citizen to protect and improve the natural environment including forests, lakes, rivers and wild life and to have compassion for living creatures.

Since the 1970s, an extensive network of environmental legislation has grown in the country. The MoEF and the pollution control boards (CPCB i.e. Central Pollution Control Board and SPCBs i.e. State Pollution Control Boards) together form the regulatory and administrative core of the sector.

The major legislative measures brought about in India for protection of environment and human health can be broadly grouped into the following categories:

- (i) Water
- (ii) Air
- (iii) General (Environment Protection)
- (iv) Forest and Wildlife
- (v) Industrial Health and Safety.

Some of the major legislations emphasised in this study material include:

1. The Water (Prevention and Control of Pollution) Act, 1974
2. The Water (Prevention and Control of Pollution) Cess Act, 1977
3. The Air (Prevention and Control of Pollution) Act, 1981
4. The Environment (Protection) Act, 1986.

The Water Act provides for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water. Apart from the Water Act which deals with the prevention & control of water pollution and the Air Act which is concerned with the prevention-control-abatement of air pollution, the Environment (Protection) Act-1986 was enacted to be a comprehensive legislation for the protection and improvement of environment and for matters connected therewith. The scope and definition of 'Environment' was expanded to include water, air and land and the interrelationship which exists among and between water, air and land, and human beings, other living creatures, plants, microorganisms and property. The Environment Protection Act also provides for handling of hazardous substances. Under this Act, the statutory powers are mostly conferred on the Central Government. However, the Central Government is vested with the power of delegating the powers under the provisions of the Act to an Authority constituted or to the Authorities to be specified with the residuary power retained in them.

The Water (Prevention and Control of Pollution) Cess Act, 1977 was passed by Parliament to provide for the levy and collection of cess on water consumed by persons with a view to augment the resources of the CPCB and the State Pollution Control Boards. This Act by giving 70% rebate to the scheduled industries encourages the industries to take up serious measures to control pollution in accordance with the conditions laid down under the Water Act, 1974.

This financial incentive is in addition to the already existing financial incentives given to the industries under the Income Tax Act as well as subsidies on clean manufacturing technology and pollution control given by certain State Governments. These incentives vary across States depending on their respective industrial policies. Earlier, service tax exemption was given on services provided by way of construction, erection, installation, commissioning, completion, fitting out, repair, maintenance, renovation or alteration of pollution control or effluent treatment plant *except when located in a factory*.

2.1 THE WATER(PREVENTION AND CONTROL OF POLLUTION) ACT, 1974

This Act provides for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water. For carrying out above objects, the Act contemplates the constitution of Central Pollution Control Board (CPCB) at the National level and State Pollution Control Boards at State level. The CPCB apart from functioning as a coordinating national level body, also acts as a State Board in respect of the Union Territories. These have since been constituted. This Water Act defines water pollution and prescribes penalties besides establishing administrative machinery like CPCB and SPCB. The Boards are given comprehensive powers to advise, coordinate and provide technical assistance in the prevention & control and abatement of water pollution. These Boards are entrusted with the task of monitoring the state of water pollution in the country and laying down standards of permissible level of pollution.

Any person who wants to locate an industry has to check whether the area in which he wants to locate an industry is in the areas declared under Section 19 of the Water Act or not. In the absence of any notification excluding that area, the Water Act applies throughout the State and therefore the proponent has to conform to the provisions of the Act. In so far as the Union Territory of Delhi is concerned, there is no such exclusion and therefore the Water Act can be enforced in the whole of the Union Territory of Delhi.

Further, under the amended Section 25 of the Water Act read with Section 26, unlike the non-amended sections, it requires previous consent of the State Board to establish or to take any steps to establish any industry. The Boards control sewage and industrial effluent discharges by approving, rejecting or conditioning (like the location, construction and use of the outlets as well as nature and composition of new discharges) the application seeking consent to discharge.

The State Board must maintain and make public a register containing particulars of Consent Order. The Act empowers a State Board, upon 30 days of notice to a polluter, to execute any work required under a consent order which has not been executed. The Board may recover the expenses for such work from the polluter. The students are advised to read Section 25 of the Act. This Act prohibits dumping of poisonous, noxious or polluting matter into the streams and wells, as well as any activity which impedes the flow of the water of a stream. The boards are authorized to take action against polluters by imposing conditions aimed at discouraging pollution and can prosecute the polluter.

It is the duty of valuer to ensure that the occupier of the industry has fulfilled all the obligations under this Act before he makes any transaction of buying or selling of the industrial property under your advice.

This Act was amended in 1988.

2.1.1 THE WATER(PREVENTION AND CONTROL OF POLLUTION) RULES 1975 and Amendment Rules 2011 regulate the qualifications and other terms & conditions of the service of the members of the Central Pollution Control Board.

2.1.2 THE WATER(PREVENTION AND CONTROL OF POLLUTION) CESS ACT 1977 provides for the levy and collection of cess or fees on water consuming industries and local authorities. This cess is collected with a view to augment the resources of the Central Board and the State Boards for the prevention and control of water pollution constituted under the Water Act, 1974. The Act was last amended in 2003.

2.1.3 THE WATER(PREVENTION AND CONTROL OF POLLUTION) CESS RULES 1978 contains the standard definitions and indicate the kind of and location of meters that every consumer of water is required to affix.

2.2 THE AIR (PREVENTION AND CONTROL OF POLLUTION) ACT, 1981

This Act provides for the prevention, control and abatement of air pollution in the nation. This Act mainly regulates and control emissions from automobiles and industrial plants. Under the Air Act, all industries operating within designated air pollution control areas must obtain consent from the State Boards.

The States are required to prescribe emission standards for industry and automobiles after consulting the Central Board as regards the ambient air quality standards. The Central Board for the prevention and control of water pollution is also authorized to implement and enforce the Air Act as well. This body lays down standards for the quality of the air.

Under Section 19, the Central Board is given powers mainly to coordinate the activities of State Boards. Section 19 of the Act contemplates declaration of air pollution control areas. The State Government may, after consultation with the State Board, by notification in the Official Gazette declare any such area for the purposes of the Act. For example, the entire Union Territory of Delhi having been so declared, is in air pollution control area for the purposes of this Act. The Board may prohibit the use of any fuel other than approved fuel in the area causing air pollution.

Under Section 21 of the Air Act, only with the previous consent of the State Board a person shall establish or operate any industrial plant in air pollution control area.

Under Section 22 of the Air Act, any person carrying on any industry or operating any industrial plant in any air pollution control area is prohibited from discharging or causing or permitting to be discharged the emission of any air pollutants in excess of the standards laid down by the State Board.

Further, no person shall, without the consent of the State Board, operate an industrial plant involving industries specified in schedule in air pollution control area.

Under Chapter VI of the Act, the penalties in case of failure in complying with the directions issued under Section 21 or Section 22, is imprisonment for a term which shall not be less than one year and six months but which may extend to six years and with fine, and in case the failure continues, with an additional fine which may extend to five thousand rupees for every day during which such failure continues even after the conviction for the first such failure.

2.2.1 THE AIR (PREVENTION AND CONTROL OF POLLUTION) RULES, 1982 define the procedures of the meetings of the Boards and the powers entrusted to them.

2.2.2 THE AIR (PREVENTION AND CONTROL OF POLLUTION) AMENDMENT ACT, 1987 empowers the central and state pollution control boards to meet with grave emergencies of air pollution.

2.3 THE ENVIRONMENT (PROTECTION) ACT, 1986

This Act passed by Parliament on 23rd May, 1986 authorizes the central government to protect and improve environmental quality, control and reduce pollution from all sources, and prohibit or restrict the setting and/or operation of any industrial facility on environmental grounds. It also provides for taking appropriate steps for the protection and improvement of human environment, the decisions of which were taken at the United Nations Conference on the Human Environment held at Stockholm in June 1972 in which India also participated. This Act further aims at implementing the decision aforesaid in so far as they relate to protection and improvement of environment and the prevention of hazards to human beings, other living creatures, plants and property.

Section 3(2)(v) confers powers on the Central Government to restrict the area in which any industry, operation or process or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards. By virtue of this Act, the Central Government is empowered to take all needful actions for prevention, control and abatement of environmental pollution. The powers include coordination of actions by states, planning and execution of nationwide programmes and laying down environmental quality standards. The Central Government is also empowered to make rules which may provide for the prohibition and restrictions on the location of industries and carrying on the processes and operations in the different areas.

Section 8 of the Act clearly provides that no person shall handle or cause to handle any hazardous substance except in accordance with such procedure and after complying with such safeguards as may be prescribed.

This Act also includes the power of handling hazardous substances, prevention of environmental accidents, research, inspection of polluting units, establishment of laboratories, dissemination of information etc. A complete set of administration procedure and organization structures are also envisaged under the Act.

Penalty for each contravention of the provision of this Act is imprisonment for a term which may extend to five years or with a fine which may extend to one lakh rupees or with both, and in case the failure or contravention continues, with additional fine which may extend to five thousand rupees for every day during which such failure or contravention continues after the conviction for the first such failure or contravention. If the failure or contravention continues beyond a period of one year after the date of conviction, the offenders shall be punishable with imprisonment for a term which may extend to seven years.

This Act was last amended in 1991.

2.3.1 THE ENVIRONMENT (PROTECTION) RULES, 1986 and subsequent amendments lay down the procedures for setting standards of emission or discharge of environmental pollutants. The Rules prescribe the parameters for the Central Government, under which it can issue orders of prohibition and restrictions on the location and operation of industries in different areas. The Rules lay down the procedure for taking samples, serving notice, submitting samples for analysis and laboratory reports. The functions of the laboratories are also described under the Rules along with the qualifications of the concerned analysts.

2.3.2 HAZARDOUS WASTE (MANAGEMENT AND HANDLING) RULES, 1989 are framed with the objective to control the generation, collection, treatment, import, storage, and handling of hazardous waste.

Some of the other Rules for hazardous substances management notified by MOEF / MOEFCC include:

- The Chemical Accidents (Emergency Planning, Preparedness and Response) Rules 1996 and Amendment Rules 2015
- The Rules for Manufacture, Use, Import, Export and Storage of Hazardous Micro-organism, Genetically Engineered Organisms or Cells, 1989 (amended 2010)
- Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 (and Amendment Rules 2000)
- The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016
- The Bio-Medical Waste (Management and Handling) Rules, 1998 and (Amendment) Rules, 2003
- Plastic Waste (Management & Handling) Rules, 2011
- Several other Rules notified by the MoEF (*refer* www.moef.nic.in)

2.3.3 THE PUBLIC LIABILITY INSURANCE ACT, 1991 (amended 1992) and The Public Liability Insurance Rules, 1991 (amended 1993) - The main objective of these legislations is to provide for damages to victims of an accident which occurs as a result of handling any hazardous substance. The Act applies to all owners associated with the production or handling of any hazardous chemicals.

2.3.4 THE BIOMEDICAL WASTE (MANAGEMENT AND HANDLING) RULES, 1998 is a legal binding on the health care institutions to streamline the process of proper handling of hospital waste such as segregation, disposal, collection, and treatment.

2.3.5 THE SOLID WASTE MANAGEMENT RULES, 2016 apply to every urban local body, outgrowths in urban agglomerations, census towns, notified areas, notified industrial townships, areas under the control of Indian Railways, airports, airbases, ports and harbours, defence establishments, special economic zones, State and Central government organisations, places of pilgrims, religious and historical importance as may be notified by respective State government from time to time and to every domestic, institutional, commercial and any other non residential solid waste generator situated in the areas **except** industrial waste, hazardous waste, hazardous chemicals, bio medical wastes, e-waste, lead acid batteries and radio-active waste, **that are covered under separate rules framed under the Environment (Protection) Act, 1986.**

These rules lay down the duties of waste generators and authorities and the frequency of review of implementation of these Rules at various levels.

2.3.6 THE CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT RULES, 2016
The rules shall apply to every waste resulting from construction, re-modeling, repair and demolition of any civil structure of individual or organisation or authority who generates construction and demolition waste such as building materials, debris, rubble.

Every waste generator shall prima-facie be responsible for collection, segregation of concrete, soil and others and storage of construction and demolition waste generated.

Local authority shall be responsible for proper management of construction and demolition waste within its jurisdiction including placing appropriate containers for collection of waste, removal at regular intervals, transportation to appropriate sites for processing and disposal.

2.3.7 THE NOISE POLLUTION (REGULATION AND CONTROL) AMENDMENT RULES, 2002 lay down such terms and conditions as are necessary to reduce noise pollution, permit use of loud speakers or public address systems during night hours on or during any cultural or religious festive occasion.

2.3.8 WETLAND (CONSERVATION AND MANAGEMENT) RULES, 2010 are notified to ensure better management, conservation and prevention of degradation of existing wetlands.

The **Wetlands (Conservation and Management) Amendment Rules, 2016** decentralise wetlands management by giving states powers to not only identify and notify wetlands within their jurisdictions but also keep a watch on prohibited activities.

2.3.9 MISCELLANEOUS NOTIFICATIONS

- The Ozone Depleting Substances (Regulation and Control) Rules, 2000
- Noise Pollution (Regulation and Control) Rules, 2000 as amended till 2010
- Coastal Regulation Zone notifications
- Environmental Clearance and Environmental Impact Assessment notifications (1994 to 2016)
- Environment Standards - industry specific (*refer* www.moef.nic.in)

2.4 THE NATIONAL GREEN TRIBUNAL ACT, 2010

This Act provides for the establishment of National Green Tribunal (NGT) for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters.

Both the National Environment Tribunal Act 1995 and the National Environment Appellate Authority Act 1997 were repealed by the enactment of the NGT Act in 2010.

As per the provisions of the NGT Act 2010, the National Environment Appellate Authority (NEAA) established under the NEAA Act 1997 stands dissolved and the cases pending before the NEAA stand transferred to the NGT.

2.5 FOREST AND WILDLIFE

2.5.1 THE INDIAN FOREST ACT 1927

It is one of the many surviving colonial statutes. It was enacted to 'consolidate the previous laws relating to forests that were passed before the 1920s, the transit of forest produce, and the duty leviable on timber and other forest produce'.

The Act gave the State Government the power to create Reserved Forests, and the right to use Reserved Forests for Government use alone. It also created Protected Forests, in which the use of resources by local people was controlled. Some forests were to be controlled by the village community, and these were called village Forests. The Act remained in force till the 1980s when it was realized that protecting forests for timber production alone was not acceptable. The other values of protecting the services that forests provide and its valuable assets such as biodiversity began to overshadow the importance of their revenue earnings from timber.

This led to the Forest Conservation Act of 1980 and its amendment 1988.

2.5.2 THE FOREST (CONSERVATION) ACT 1980 and Rules 1981

The principal objective of this Act is protection of and the conservation of the forests. It strictly restricts and regulates the de-reservation of forests or use of forest land for non-forest purposes without the prior approval of Central Government. To this end, the Act lays down the pre-requisites for the diversion of forest land for non-forest purposes.

The Act was amended in 1988 and Rules were amended in 1992.

Forest conservation is the planned management of the forest environment to prevent its exploitation, destruction or neglect. There is a need for conservation of forests as population increases rapidly, resources are constantly exploited, pollution is dramatically increasing with respect to time and damages caused by the development activities are irreversible.

Section 2 of this Act requires the approval of Central Government before a State Government “de-reserves” a reserved forest, uses forest land for non-forest purposes, assigns land to private person or corporation or clears forest land for the purpose of reafforestation. In other words, the Act provides restriction on the de-reservation of forest or use of forest land for non-forest purpose. Here, non-forest purpose means breaking up or clearing of any forest land or portion thereof for cultivation of tea, coffee, spices, rubber, palms, oil bearing plant, horticultural crops or medicinal plants or for any purpose other than reafforestation.

But non-forest purpose does not include any work relating to conservation, development and management of forests and wildlife e.g. establishment of check-posts, fire-lines, construction of fencing, bridges, culverts, dams, pipelines, waterholes, pipelines etc.

An Advisory Committee constituted under section 3 of this Act advises the Government with regard to the grant of approval under Section 2 and any other matter connected with conservation of forests.

Whoever contravenes or abets the contravention of any of the provisions of section 2 of this Act, shall be punishable under Section 3A with simple imprisonment for a period which may extend to fifteen days.

Section 4 empowers the Central Government to make rules for carrying out the provisions of this Act by notification in the official gazette.

2.5.3 THE WILDLIFE (PROTECTION) ACT 1972, Amendment 1993 and Rules 1995 were framed with the objective of effectively protecting the wild life of this country and to control poaching, smuggling and illegal trade in wildlife and its derivatives. The Wild Life (Protection) Amendment Act, 2002 was enacted in January 2003 and punishment and penalty for offences under the Act have been made more stringent.

2.5.4 THE BIOLOGICAL DIVERSITY ACT 2002 and Biological Diversity Rules 2004 are framed to provide for the conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of the benefits arising out of the use of biological resources and knowledge associated with it.

2.6 INDUSTRIAL SAFETY AND OCCUPATIONAL HEALTH LAWS

The basic aim of the concerned law making and amending authorities is to devise laws which provide safety standards to protect the basic needs of workers and take care of their welfare. Legislation on occupational health and safety has existed in India for several decades. The principal health and safety laws are based on the British Factories Act.

The Factories Act 1948, the Mines Act 1952, The Dock Workers (Safety, Health & Welfare) Act 1986 and The Building & Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996 are some of the laws which contain provisions regulating the health of workers in an establishment whereas the Employees' State Insurance Act 1948 and the Workmen's Compensation Act 1923 are compensatory in nature.

Some of the other relevant legislations dealing with occupational safety and health (OSH) are:

- Explosives Act, 1884;
- Dangerous Machines (Regulations) Act, 1923;
- Indian Boilers Act, 1923;
- Petroleum Act; 1934;
- Plantation Labour Act, 1951;
- Indian Atomic Energy Act, 1962;
- Insecticides Act, 1968;
- Radiological Protection Rules; 1971;
- Electricity Act, 2002.

2.6.1 THE FACTORIES ACT, 1948

The Factories Act, 1948 (amended in 1987) was enacted with the object of protecting factory workers from subjecting to unduly long hours of bodily strain or manual labour. It lays down that employees should work in healthy and sanitary conditions so far as the manufacturing will allow and that precautions should be taken for their safety and for the prevention of accidents.

The Factories Act, however, is applicable only to factories that employ 10 or more workers; it covers only a small proportion of workers.

The Act defines a ‘worker’ as any person employed directly or through any agency (including a contractor), whether for remuneration or not in any manufacturing process or in any work incidental to or connected with the manufacturing process. It is required that work performed should be connected with the product which is produced in the manufacturing process.

This Act is enforced by the State Governments through factory inspectors.

2.6.2 THE MINES ACT, 1952

This is an Act to amend and consolidate the law relating to the regulation of labour and safety in mines (coal, metal and oil) and extends to the whole of India.

The significant obligations under the Mines Act and the Mines Rules, 1955 include the formation of safety committees in every mine where more than 100 persons are employed; providing a notification of accidents and the appointment of workmen’s inspectors by the manager (one inspector for every 500 miners).

The Act states that adolescents (not completed 15 years) are prohibited from any mining operation; the initial and periodical examination of miners is to be conducted and notice has to be provided for any notifiable diseases.

The Directorate of Mines is empowered to undertake safety and occupational health surveys in the mines and the central government is empowered to appoint a “competent” person for inquiring into the occupational diseases that have been detected.

2.6.3 THE DOCK WORKERS (SAFETY, HEALTH & WELFARE) ACT, 1986

This Act regulates health, safety, welfare and other working conditions of employees in ports and docks with an emphasis on reducing accident rates on ports and docks.

THE DOCK WORKERS (SAFETY, HEALTH & WELFARE) RULES, 1990 apply to all major ports in India as defined in the Major Ports Act, 1963.

2.6.4 THE BUILDING AND OTHER CONSTRUCTION WORKERS (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE) ACT, 1996

This is an Act to regulate the employment and conditions of service of building and other construction workers and to provide for their safety, health and welfare measures and for other matters connected therewith or incidental thereto Section 47 contains penal provisions for contravention of provisions regarding safety measures under the Act.

(1) Whoever contravenes the provisions of any rules made under section 40 shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to two thousand rupees, or with both, and in the case of a continuing contravention, with an additional fine which may extend to one hundred rupees for every day during which such contravention continues after conviction for the first such contravention.

(2) If any person who has been convicted of any offence punishable under sub-section (1) is again guilty of an offence involving a contravention or failure of compliance of the same provision, he shall be punishable on a subsequent conviction with imprisonment for a term which may extend to six months or with fine which shall not be less than five hundred rupees but which may extend to two thousand rupees or with both:

Provided that for the purposes of this sub-section, no cognizance shall be taken of any conviction made more than two years before the commission of the offence for which the person is subsequently being convicted.

2.6.5 THE WORKMEN'S COMPENSATION ACT, 1923

This Act creates legal obligation on the employer to pay compensation to workmen involved in accidents arising during the course of their employment. The objective of the Workmen's Compensation Act is to make provision for the payment of compensation to a workman only, i.e., to the concerned employee himself in case of his surviving the injury in question and to his dependants in the case of his death.

The prerequisites for payment of compensation to such injured workmen are as follows:

- Personal injury must be caused.
- There must be temporary, total or partial disablement due to an accident, which also includes occupational diseases.

The State Government is to appoint a Commissioner to decide the liability of an employer to pay compensation, the amount and duration of compensation, among other issues. An appeal may lie to the High Court in case the applicant has grievance against the Commissioner's orders.

Compensation is decided on the nature of injury caused. Where the injury from an accident results in the death of the workman, the minimum compensation payable is around Rs.50,000 and the maximum may extend to Rs.3 lacs. In case of permanent total disablement and permanent partial disablement, compensation may extend to Rs.60,000, depending on its nature. Further the amount of compensation is calculated on the wage-group to which the workman belongs and the time-period for which he has worked

2.6.6 THE EMPLOYEES' STATE INSURANCE ACT, 1948

It is a social welfare/security legislation enacted with the object of ameliorating various risks and contingencies sustained by workers while serving in a factory or establishment.

It is designed to provide cash benefit in the case of sickness, maternity and employment injury, payment in the form of pension to the dependents of workers who died of employment injury and medical benefit to workers. It recognizes the contributory principle against such contingencies, provides protection against sickness, replaces lumpsum payments by pension in the case of dependents benefit and places the liability for claims on a statutory organization.

The Act lays down provisions to set up an ESI Corporation, to promote measures to improve health and welfare of insured persons and a Medical Benefit Council to advise the Corporation on medical benefits, certification, etc. The Medical Boards have to ascertain the percentage of disability of injured workers before submitting their report to the Corporation in order to grant compensation to the workers.

Section 39 of the Act makes the employer primarily liable for the payment of contribution on behalf of himself and his employees towards the ESI Fund.

In case of misuse of the contribution by employer, the employee can sue the employer in the Employees' State Insurance Court set up by the respective State Government.

2.7 REVIEW YOUR UNDERSTANDING

1. In which year was the Stockholm Conference held?
 - A. 1992
 - B. 1972
 - C. 2005
 - D. 1872
2. What was the objective of Stockholm Conference?
 - A. Preservation and improvement of natural resources and wildlife
 - B. Preservation and improvement of human environment
 - C. Preservation and improvement of forest and natural environment
 - D. None of the above
3. Which Act, expanded definition of “environment” to include water, air, land and the interrelationship which exists among and between water, air, land and human other living being and property?
 - A. The Water (Prevention and Control of Pollution) Act, 1974
 - B. The Water (Prevention and Control of Pollution) Cess Act, 1977
 - C. The Air (Prevention and Control of Pollution) Act,1981
 - D. The Environment (Protection) Act, 1986
4. Which Act provides for maintaining the wholesomeness of water in the nation?
 - A. The Water (Prevention and Control of Pollution) Act, 1974
 - B. The Water (Prevention and Control of Pollution) Cess Act, 1977
 - C. The Air (Prevention and Control of Pollution) Act,1981
 - D. The Environment (Protection) Act, 1986
5. Which one is said to be non-forest use under Forest Conservation Act?
 - A. Construction of fencing
 - B. Construction of Check post
 - C. Plantation of tea
 - D. Clearing up portion of forest land
6. The penalty imposed for contravention of Forest Conservation Act,1980 is
 - A. Maximum 15 days of simple imprisonment
 - B. Maximum 30 days of simple imprisonment and fine
 - C. Minimum 15 days of simple imprisonment and a fine
 - D. One year simple imprisonment and Rs.10000/- fine

7. The Advisory Committee constituted under Forest Conservation Act advises
 - A. State Government on any matter of forest management
 - B. As regards approval of government grants
 - C. In recruitment of staff for forest resources
 - D. All of the above
8. Discuss the provisions of the Forest Conservation Act, 1980

MODULE-3

VALUATION OF ENVIRONMENTALLY AFFECTED PROPERTY

1.0 INTRODUCTION

The objective of studying environmentally affected property is to provide guidance to the valuers in preparing valuation brief when environmental factors may have influence on the asset values.

The environmental factors which are important in asset valuation are those which are potentially detrimental to real property and plant & machinery. These may be on account of environmental factors like gases, heat, radiation, noise, vibration, chemicals, hazardous substances as well as odour impacting air, water, groundwater, soil and having direct or indirect effect on the individual asset. The assets may be important from the aesthetic, archaeological, historical and heritage point of view and may belong to the private sector or to the Government.

3.1 CONTAMINATED PROPERTY

When the buyer is devoid of the property rights i.e. the exclusive rights partly or fully to possess, enjoy, dispose etc. due to contamination, the property is said to be contaminated. In other words the environmental factors play their role in interference of the property rights. They create an indirect restraint in the use of property owned. When the contamination can result or is likely to result or has already resulted in the diminished utility of the property, the property is said to be contaminated. It is immaterial whether the diminished utility is for a short-term or long-term duration.

The monetary value of the contaminated property is always diminished. This is because the term monetary value has its basis in economics. The monetary value of the property is determined in the market where there are buyers and sellers and when there is a supply and demand of these goods and services.

3.2 ENVIRONMENTAL CONTAMINATION

Broadly, environmental contamination has been divided into two types, viz. Physical contamination and Non-physical contamination.

3.2.1. PHYSICAL CONTAMINATION

Physical contamination is on account of presence of physical contaminants in the environment. Physical contaminants are substances present in, on or near a subject property in measurable quantities and identified as having harmful environmental impact. It also includes substances which are hazardous i.e. ignitable, corrosive, toxic or reactive.

A hazardous substance is any substance or preparation which by reason of its chemical or physico-chemical properties or handling is liable to cause harm to human beings, other living beings, plants, microorganisms, property or the environment which has an adverse effect on marketability of the assets.

In ordinary words, the physical contaminants are those contaminants which may bring change resulting from human perception. These may include asbestos, heavy metals such as lead, mercury or mining products like arsenic, cyanide, pesticides or organic compounds like formaldehyde, coal tar from coal used in power house operations etc.

3.2.2. NON-PHYSICAL CONTAMINATION

Non-physical contamination is the result of non-physical contaminants present in the environment. Contaminants that have no tangible physical substance are defined as non-physical contaminants. In other words, all contaminants other than physical contaminants are non-physical contaminants. These contaminants are in many forms and are considered as 'real' as the physical contaminants. Illustrations include – proximity to noise sources often diminishes utility and therefore property value, or electromagnetic radiation originating from nearby power lines or radio-wave transmission devices.

3.3 CONTAMINATED SITE

As defined by the Contaminated Sites Management Working Group of Treasury Board of Canada Secretariat, a contaminated site is that at which, substances occur at concentrations (1) above background levels and pose or are likely to pose an immediate or long term hazard to human health or the environment, or (2) exceed levels specified in policies and/or regulations.

The Canadian Council of Ministers of the Environment has developed a national classification system for contaminated sites (NCSCS, 2003) to provide a basis for classifying sites according to their current and potential adverse impact on human health and environment. According to their priority for action, contaminated sites are placed into classes one to five, namely:

Class-1: High Priority for Action– available information (assessment) indicates that action (*e.g.*, further site characterization, risk management, remediation, etc.) ‘is required’ to address the existing concerns for public health and safety.

Class-2: Medium Priority for Action– available information (assessment) indicates that there is a high potential for adverse impacts due to off-site migration, although threat to human health and the environment is generally not imminent. Action is ‘likely required’.

Class-3: Low Priority for Action- available information (assessment) indicates that the site is currently not a high concern. However, additional investigation may be carried out to confirm the site classification and some degree of action ‘may be required’.

Class-N : Not a Priority for Action - available information (assessment) indicates that there is probably no significant environmental impact or human health threats and there is action ‘not likely required’ unless new information becomes available indicating greater concerns when the site be re-examined.

Class-I or INS : Insufficient Information – some initial site assessment action has been taken but there is insufficient information to classify the site and additional information is required.

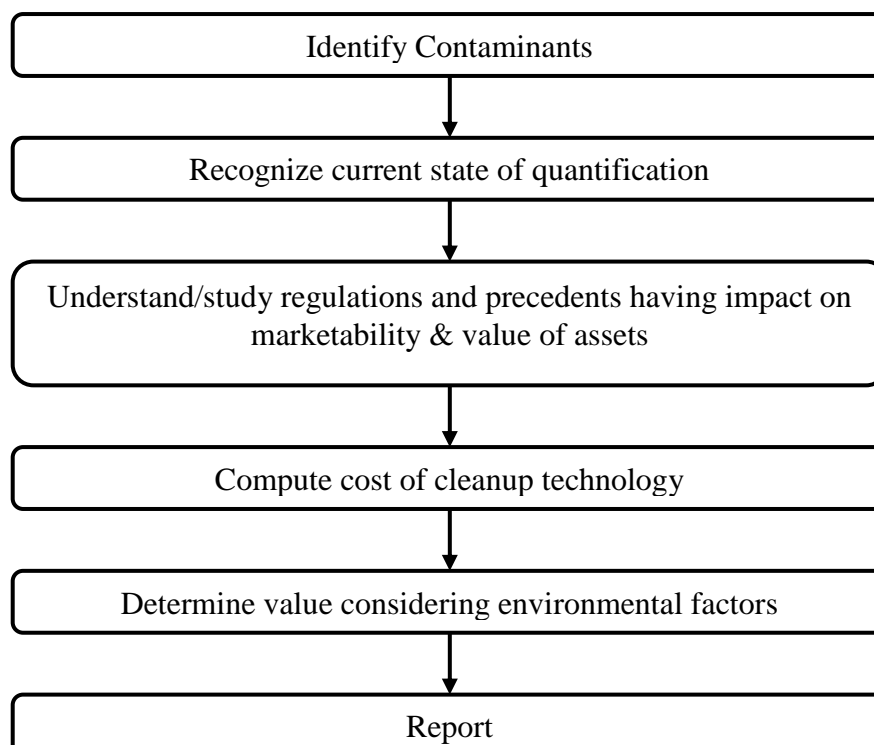
NCSCS is a tool specifically for the classification and prioritization of contaminated sites. The system screens sites with respect to the need for further action (*e.g.* characterisation, risk assessment, remediation, etc.) to protect human health and environment.

3.4 CONCEPT AND PRINCIPLES OF VALUATION OF ENVIRONMENTALLY AFFECTED PROPERTY

The 'Environmental Impact Assessment' subject addresses the impact of environmental contamination on asset value. To understand such effect, valuers must have knowledge on the following aspects:

- **CONTAMINANTS:** The substances, contaminants or conditions currently thought to produce contamination.
- **DETECTION, MONITORING and ABATEMENT:** Recognizing the current state of detection, monitoring and abatement technology.
- **LEGAL STATUS:** Understanding the legal state of current regulations and court decisions (precedents) which have greater impact on the marketability and value of asset.
- **HAZARDOUS SUBSTANCES:** List of the substances that are hazardous and their level of concentration which are considered harmful, their clean up technology and such other treatments.
- **REMEDIATION:** The effect of technology that facilitates safe and efficient clean-up of contaminant and help in minimizing or reducing the stigma value (negative value). However, the cost factor must be identified. It may include :
 - (1) Cost of Physical clean up, and
 - (2) Continued costs of monitoring and legal costs.

Schematic block diagram showing important aspects that valuer must know for valuation of contaminated property.



3.5 LIABILITY OF VALUERS AS TO CONTAMINATION

Public or residents near nuclear power plants may not be aware of potential effect of radon gas emitted from such plants. Similarly, public may not be aware of potential impact of electromagnetic radiation from proximity to overhead power distribution lines of transmission towers or about hazards associated with the use of asbestos as construction material. But the valuers must be aware of the impact of such environmental factors as applicable to valuation of assets. The valuer is also liable for value determination and valuation calculations considering environmental factors while ultimate preparation of valuation of assets - may it be for financial statements, market value estimates, security against loan and all such other purposes.

Valuers should have primary knowledge as to quality of data of site which may include:

- ✓ Proposed use of data/ information
- ✓ Nature of adjacent land or similar type of assets.
- ✓ Source(s) of contamination and elimination if possible by substitute
- ✓ If elimination not possible, temporary measures as to how to cover it to make the property fit for use.
- ✓ Mitigation of contamination by optimum use of technology

Valuers are also required to encompass the substantial report on environmental factors considered while preparing valuation of assets in the valuation report. A detailed report in a clear narrative text must be prepared. It must delineate each factor identified, its concentration and its impact on property, level of mitigation and cost of removal of stigma on the property under consideration.

3.6 APPOINTMENT OF AN ENVIRONMENTAL EXPERT

A valuer is unlikely to have knowledge or skills to undertake an environmental audit in accordance with the Environment (Protection) Act-1986 or guidelines given by the Ministry of Environment and Forests, New Delhi. However, valuers may employ environmental expert or client may appoint a suitable consultant. But in any case, valuers must have primary knowledge as to the quality of data regarding the subject site and its proposed temporary or permanent use.

Amongst the other items which might be introduced in brief are:

- a) Can the source of contamination of hazard be successfully eliminated economically?
- b) If the contamination of hazard cannot be entirely eliminated, can it be converted or contained so as to make the property fit for a particular use?
or
- c) Is it possible to mitigate the effect of the contamination of hazard in any way?

The expert's report then covers the following:-

- ⇒ Identification of hazard, its degree and extent. (i.e. identification and qualification)
- ⇒ Treatment, measured to be taken to bring the property to acceptable condition.
- ⇒ Cost of such measures (and effects of any such works undertaken).

3.6.1 SAFEGUARDING THE VALUER- TEMPORARY MEASURE

If a consultant is not appointed, the standard clause for safeguarding valuers from legal implications can be written as under:

“We have neither made any attempt nor arranged for any investigation to be carried out to determine whether or not any deleterious or hazardous material has been used in the construction of this property and we are therefore unable to report that property is free from risk in this respect. For the purpose of this evaluation, we have assumed that such investigation would not disclose the presence of any such material to any significant extent.”

3.7 REVIEWING YOUR UNDERSTANDING

1. In which type of contaminant Chromium is categorised?
 - Domestic wastewater
 - Industrial wastewater
 - Physical contamination
 - Non-physical contamination

2. The objective of environmental valuation is
 - preparing valuation brief for the client
 - determining the value of the assets in conditions of contamination
 - determining the factors of the contamination
 - none of the above

3. A valuer is likely to have
 - knowledge or skills to undertake an environmental audit
 - knowledge of hazardous material present in the property
 - primary knowledge as to the quality of data regarding site
 - none of the above

4. List the various physical and non-physical contaminants.

5. Define contaminated land and contaminated property and discuss their ingredients

6. State the principal causes of contamination of land.

7. Define contaminated site and contaminated land and bring out causes of the same.

8. Show by a block diagram the important aspects the valuers must know for the valuation of contaminated property.

MODULE-4

GENERAL EFFECTS OF CONTAMINATION OF PROPERTY

4.0 INTRODUCTION

Valuation is the act of determining the value of the asset which is based on its quality, nature and utility which includes all forms of rights and interest arising out of the asset. The impacts of the presence of the contaminants normally lead to value diminution compared with open market price. The impact therefore means change in the value of the assets on account of presence of contaminants.

Impacts can be short term or long term depending upon the persistence or duration of the impacts. It is necessary to identify the short term and long term impacts because its significance is based on duration it remains on the environment. The loss of grass or other low lying herbaceous vegetation on a particular property is a short term impact because the said property can be re-vegetated through seeding and manure in a relatively short period of time. The loss of value of the asset therefore in such cases is temporary or short term. But the loss of a mature forest can be considered as a long term impact because of the time required to re-forest the area and for the trees to reach maturity. The loss of the value of the asset in such cases is permanent or long term.

4.1 GENERAL EFFECTS OF CONTAMINATED PROPERTY ON VALUATION

The property market as such has now become sensitive to various detrimental effects on account of contamination caused to the assets. The general effects of contaminated property on its valuation can be enumerated as under:

FALL OF DEMAND

The demand of the contaminated property falls because normally no buyer will be interested to purchase such a property when non-contaminated property is available in the market. Fall of demand and fall of price of a property is due to the stigma. 'Stigma' is intangible factor. It may not be measurable in terms of remediation cost or cost to cure but certainly affects market value.

4.1.2. FALL OF PRICE

The buyer may demand discount on account of contamination. The discount demanded may or may not be in proportion to the level of contamination. It is otherwise also obvious that fall of demand leads to fall of price.

4.1.3 ASSETS OFF THE MARKET

Some companies in absence of the market data on contaminated assets believe that assets would not be sold at any price and such companies keep the assets off the market.

Normally, valuers keep themselves abreast of the market price of the various assets and they would however be deprived of such important information when the assets are contaminated. It has been observed that valuers find it very difficult to collect the data about contamination and analyse them for the valuation purposes.

4.1.4 RISK OF LAW SUITS

It is a substantial fact that the companies have fear that buying a contaminated asset may create contingent liabilities associated with law suits. If the subject property has used any hazardous material in construction and the valuer has not taken into consideration the impact of such materials while preparing valuation brief, there are chances that litigation may take place on account of carelessness on the part of the valuer. It may attract various criminal offences like cheating and thereby dishonestly inducing delivery of the property or offence on account of using as genuine a forged document which was known to the valuer to be forged.

Thus litigation is likely to take place against the seller or valuer and it may be difficult to prove innocence of the seller or the valuer as regards the knowledge of the presence of the contaminant(s). As a result, both the seller may refrain from buying and the valuer from valuing such contaminated property.

4.1.5 REDUCED MARKET VALUE

Whenever stigma is attached, the property remains in less demand even though complete clean-up has been established. This creates situation similar to the 'obsolescence'. This is because the market will pay less for a once-contaminated but now restored property; the value of the property is diminished. Thus, an effect of this nature may be for some temporary period and efforts should be made to re-establish the market for that restored property.

Even though the water from a previously contaminated well now meets all environmental standards, the property value remains reduced till the seller builds a new well in different location or establishes an independent alternate water supply.

If the property owner makes no attempt to overcome the stigma and thereby accepts a lower price for the property, the price may not accurately reflect market.

4.1.6 DIFFICULTY IN GETTING FINANCE

It is difficult to mortgage and get finance on contaminated properties especially when the property is known to be contaminated. This is so because the return on investment on such property is believed to be such that the finance companies foresee risk in funding project on such contaminated land.

4.1.7 DIFFICULTY IN GETTING FUNDS FOR REMEDIATION

For a contaminated property, remediation is most essential to enhance its utility. Remediation means that act or process of eliminating environmental contamination from, on, in or under the asset to restore the asset to an uncontaminated state. It is also difficult to obtain additional funds for remediation. Even the funds are made available by some finance companies after many efforts. It can be concluded that such properties may increase the borrowing liabilities.

4.2 COST TO CURE

Cost is defined as a resource sacrificed or forgone to achieve a specific objective. Cost is considered as monetary amount that must be paid to acquire goods and services. Thus for combating the problem of contamination, some 'costs' are attached to acquire that objective. The cost comprises of Direct Costs and Indirect Costs.

Direct costs are those related to the particular cost object that can be traced to it in an economically feasible way.

Indirect costs are those related to the particular cost object but cannot be traced to it in an economically feasible way.

Broadly, costs arising from contamination are those costs which are related to either controlling the contamination or repairing the contaminated part of the property. Other costs are associated while the part property is under remediation and part is in use like operating, disruption, utility, stigma and so on.

4.1 STIGMA DUE TO ENVIRONMENTAL FACTORS - INTANGIBLE COST

The loss in property value resulting from a property's bad reputation on account of contamination is defined as 'Environmental Stigma'. As an intangible negative input factor, stigma is a market-imposed penalty that can affect a property that is known to be contaminated.

Thus, it must be borne in mind that the value of contaminated property ultimately depends not only on the extent of the contamination but also the way in which the contamination is perceived.

The reluctance of potential buyers to take on a once contaminated property because of fears of future liability and fears of hidden clean-up costs are intangibles that are difficult to translate into quantifiable costs.

Stigma may not be measurable in terms of cost to cure but may affect the market value when it is determined through sales comparison approach. According to Advisory Opinion (AO-9) in Uniform Standards of Professional Appraisal Practice (USPAP 2016-17) of the Appraisal Foundation-USA, **Environmental Stigma** is 'as an adverse effect on property value produced by the market's perception of increased environmental risk due to contamination'.

Environmental stigma is market imposed activity which has direct bearing on property value on following type of properties:

- **Environmentally contaminated property or source site**– these properties are absolutely known to be contaminated and market is not in a position to hide or make them off the market.
These properties have adverse effect on value produced by the market perception of increased environmental risk due to contamination.
Non-source sites are sites onto which, contamination generated from a source site has migrated.
- **Environmentally suspected property**-these are as such suspected to be contaminated and confirmatory reports are not available. These properties contribute stigma on account of following reasons:
 1. Risk of the remediation costs which are hidden
 2. Trouble factor
 3. Fear of future law suits
 4. Lack of saleability and mortgage-ability.
- **Environmentally remediated property**-these are the properties once known to be contaminated and remediation work is completed and now free from contamination. These properties contribute stigma due to following risks:
 1. Risk about its absolute remediation
 2. Risk of additional clean up in future and
 3. Risk of unexpected perception
- **Environmentally adjacent or proximate property/site** - these are the properties which were never contaminated but they are located in proximity to a contaminated property. Adjacent property shares a common property line with the source site. These properties are never reported to be contaminated but the stigma is attached to them as they are likely to be contaminated because they are believed to be very near to hazardous waste.
Such property however can only be determined by people’s perception and cannot be generalized.

While non-source sites are themselves also contaminated, adjacent and proximate sites in the neighbourhood are not contaminated but are affected by stigma.

4.4 COST TO CONTROL

Controlling a hazard encompasses both controlling by Systematic Operation & Maintenance and renovation which may include taking suitable steps to mitigate the impact of contamination on the assets. In short, it is the gross cost for controlling a hazard in a property.

4.5 COST TO PUBLIC LIABILITY

A toxic substance can destroy the life or it may tend to harm the health of a living animal or plant. Every substance has the ability to act as either a poison or a remedy, including water. The dose and the duration of exposure generally determine whether the given substance has harmful or beneficial effects. Toxic contamination may give rise to public liability. This cost is required to be incurred as the public at large is affected. The unanticipated release of toxic gases or flumes or contaminants onto the surrounding property may lead to substantial public liability. Discharge of improperly treated effluent may pollute the water body and presence of any toxic substance may get entry in the user of the said water body.

Public liability leads to a loss in property value because of following two reasons:

- (a) The owner has to pay the costs related to the release of the toxic contaminants onto the surrounding properties and
- (b) The owner may have to defend law suits associated with contamination. e.g. When contaminants penetrate into the ground water which is used for public water supply scheme.

4.6 COST TO DISRUPTION

The cost of disruption is cost of disturbance experienced during the remediation stage. This is indirectly the cost of remediation due to disrupted use of property on account of contamination. This is a fact that during the remediation period, a part of the property which is absolutely free from contamination can be used whereas the remaining part remains under renovation. The cost of disruption is due to trouble in operation temporarily or permanently due to contamination.

Cost to disruption is remediation cost e.g. Asbestos removal from office may require renovation expenses. Broadly the cost of disruption includes:

- removal of contamination from the subject property
- disposal of contaminant to the safer location like landfill site or incinerator site
- renovating the part of the property
- displacement of occupant/tenant, if any, and bringing other tenants

It is difficult to determine the cost of disruption. We may however estimate the profit from a business before disruption and after disruption.

4.7 COST TO OPERATION

Contamination may result into increase in operation and maintenance costs. This is because contaminated property may need extra supervisory personnel, additional testing, careful monitoring as well as security.

Similarly, special insurance of the property during remediation process, higher utility expenses like special ventilation system and the general & administrative expenses also ultimately increase.

4.8 COST TO UTILITY

This is the cost when the property cannot be fully utilized by the owner on account of contamination. The plans have been made for remediation. But the sanction of the plans has not yet been received. In other words the property is used partially. Thus cost to utility is due to lack of utility. Some portion of the property is under 'non-use' stage and cannot be utilized for the purpose for which it was contemplated.

Cost to utility can also be defined as deferred utility. Deferred utility indicates that the value of the property will be raised in future. This has obviously, therefore, a direct impact on the property value. Any contaminated property will show some impairment in its utility and thus value is affected.

Though the cost of utility and the cost of disruption apparently seem to be the same, it is not so. The cost to disruption is due to the remediation taking place in the property. No portion of the property is under 'non-use'. Cost to utility is prior to remediation. No option is available except waiting for the sanction from the authority and keeping the part of the property under 'non-use'. This normally happens when the contamination is quite less and the property has still substantial utility.

4.9 REDUCED REVENUES

When a contaminated property is given on rent, the rental value gets reduced. In other words, the net income gets diminished. This is so because the contaminated property as seen earlier under the head 'Operation & Maintenance Cost' will increase the operating expenses. The rent receivable will be reduced when the operating expenses are deducted from gross rent.

Sometimes the revenue may be found reduced though there is no contamination. This happens during the transition period when the building permit is awaited from the competent authority and tenants have feelings that the property is lightly contaminated. During this period it may be difficult to attract the tenants.

4.10 FORMAT OF VALUATION REPORT OF CONTAMINATED PROPERTY

In the profession of valuation, the format for valuation reports depending upon the purpose, are available or have been prescribed e.g. by Rule 8-D, Form No.O-1 under the Wealth Tax Act, 1957. Nevertheless, a concise format for valuation report on contaminated assets is not prescribed by any of the authority. Environmental Site Assessment (ESA) is the tool for valuation of the contaminated assets.

The format given below is purely for the guidance of the valuers and may be altered as per requirements. However, following minimum essential ingredients may be incorporated.

- **Basic Information of Contaminated Property**

Name of the contaminated property valued, postal address of the site and details of the environmental agency including qualifications of environmental professional should be stated in the beginning of the report.

- **Introduction of Valuer and the Environmental Agency**

This should bring out the summary of the terms and conditions under which the valuer has assigned the job to the environmental agency. Based on the purpose of the valuation, methodology used can be determined for ESA. This should be reflected under the head of 'Introduction'.

- **Major Elements in a valuation report for contaminated assets**

The major components in a valuation report for contaminated assets should be stated under the following heads:

- detailed site description and record studies
- interviews and environmental site reconnaissance
- inventory quantification of the contaminants
- legal requirements
- abatement technology
- valuation process findings and conclusion followed by declarations

4.11 REVIEW YOUR UNDERSTANDING

1. The demand of the contaminated property falls as
 - A. The seller is ready to sell at a lower rate
 - B. Buyer is not interested in purchasing contaminated property
 - C. Buyer has option of purchasing non-contaminated property
 - D. None of the above
2. Which one is not environmental risk?
 - A. Additional risk in financing
 - B. Additional risk in buying
 - C. Additional risk in investing
 - D. None of the above

3. Which one is incorrect with reference to environmental stigma?
 - A. Stigma is difficult to be explained
 - B. Stigma is difficult to measure
 - C. Stigma is equal to cost to cure
 - D. None of the above
4. Environmentally contaminated property is
 - A. Property known to be contaminated and market is not in a position to hide
 - B. Property known to be contaminated and market is in a position to hide
 - C. Property is suspected to be contaminated and confirmatory reports are not available
 - D. None of the above
5. Environmental suspected property is
 - A. Property known to be contaminated and market is not in a position to hide
 - B. Property known to be contaminated and market is in a position to hide
 - C. Property is suspected to be contaminated and confirmatory reports are not available
 - D. None of the above
6. Environmentally remediated property is
 - A. Never contaminated property
 - B. Known to be contaminated and remediation work is completed
 - C. Property is suspected to be contaminated and confirmatory reports are not available
 - D. None of the above
7. Environmentally adjacent property is
 - A. Never contaminated property
 - B. Property which was never contaminated but are located in proximity
 - C. Property is suspected to be contaminated and confirmatory reports are not available
 - D. None of the above
8. Define environmental stigma. Explain whether environmental stigma is equivalent to the cost to cure.
9. Explain the word 'Environmental stigma' and discuss its bearing on different types of properties.

10. Cost to control is
 - A. The gross cost of controlling a hazard in a property
 - B. The cost of breaking the routes of chemical absorption
 - C. The cost of remediation
 - D. None of the above
11. In some of the industries, notices are displayed as regards protection from hazards at the work. What type of cost is it?
 - A. Cost to reduce revenues
 - B. Cost to utility
 - C. Cost to control
 - D. None of the above
12. The hazardous chemical enters normally by three routes. Which one is false from the options given below?
 - A. Inhalation
 - B. Dermal
 - C. Ingestion
 - D. Contact
13. Surveillance is examination of hazardous processes.
 - A. Daily
 - B. Periodically
 - C. Annually
 - D. None of the above
14. Providing isolation of risk from transportation of hazardous material forms
 - A. Control by renovation
 - B. Control by remediation
 - C. Control by O & M
 - D. None of the above
15. Public liability leads to a loss in property value because
 - A. The owner has to pay the costs related to release of the toxic contaminants onto surrounding properties
 - B. The owner has to control hazards by O & M programme
 - C. The owner has to incur the expenses on administrative control
 - D. None of the above

16. The duration of the operating cost is
- A. For the specific period
 - B. Frequently occurring
 - C. Twice in a year
 - D. None of the above
17. Write short notes on followings:-
- A. Cost to disruption
 - B. Cost to utility
 - C. Cost to reduced revenues

MODULE-5

ENVIRONMENTAL VALUATION TECHNIQUES

5.0 INTRODUCTION

The existence of contamination is a factor that affects the highest and best use (HABU) of a subject property and the valuer should analyse the contamination's impact on the use of subject property. Contamination or the risk of contamination can result in a diminished utility for a property and the type of impact (short or long term) will determine the particular valuation techniques to be applied. These impacts include (*source: Appraisal Guidelines – Environmental Impacts, Public Works and Government Services, Canada, 1998*):

- Cost of controls (remediation)
- Change in operating costs
- Limitations in maximum income that could be anticipated, and
- Loss of marketability due to public perceptions of increased risk (stigma).

The valuer should understand that the value of a contaminated property may not be measurable by simply deducting the remediation costs from the value as-if unaffected. Other factors may influence value and must be considered, including the impact of stigma and the possibility of change in highest-and-best use as well as potential income.

The following are some of the specialised terms and definitions given in AO-9 of USPAP (2016-17) that are relevant for contaminated property valuation.

- **Unimpaired Value:** The market value of a contaminated property developed under the hypothetical condition that the property is not contaminated.
- **Impaired Value :** The market value of the property being appraised with full consideration of the effects of its environmental condition and the presence of environmental contamination on, adjacent to, or proximate to the property. Conceptually, this could be considered the “as-is” value of a contaminated property.

- **Diminution in Value (Property Value Diminution)** : The difference between the unimpaired and impaired values of the property being appraised. This difference can be due to the increased risk and/or costs attributable to the property's environmental condition.
- **Remediation Cost:** The cost to cleanup (or to remediate) a contaminated property to the appropriate regulatory standards. These costs can be for the cleanup of on-site contamination as well as mitigation of off-site impacts due to migrating contamination.

When the appraiser addresses the diminution in value of a contaminated property and/or its impaired value, the appraiser must recognize that the value of an interest in impacted or contaminated real estate may not be measurable simply by deducting the remediation or compliance cost estimate from the opinion of the value as if unaffected (unimpaired value). Rather, *cost*, *use* and *risk* effects can potentially impact the value of contaminated property.

Cost effects primarily represent deductions for costs to remediate a contaminated property. These costs are usually estimated by someone other than the appraiser, and should include consideration of any increased operating costs due to property remediation. The appraiser should also be aware that the market might not recognize all estimated costs as having an effect on value.

Use effects reflect impacts on the utility of the site as a result of the contamination. If the contamination and/or its cleanup rendered a portion of the site unusable, or limited the future highest and best use of the property, then there could be a use effect on value.

Risk effects are typically estimated by the appraiser and often represent the most challenging part of the appraisal assignment. These effects are derived from the market's perception of increased environmental risk and uncertainty. The analysis of the effects of increased environmental risk and uncertainty on property value (environmental stigma) must be based on market data, rather than unsupported opinion or judgment.

It is an unacceptable practice to assume that environmental contamination will reduce the value of a property without adequate support derived from information in the relevant real estate market.

These three potential effects (cost, use, risk) influence the value of a potentially impacted site according to the following formula:

$$\begin{aligned} \text{Impaired value} &= \text{Unimpaired value} \\ &- \text{Cost effects (remediation and related costs)} \\ &- \text{Use effects (effects on site usability)} \\ &- \text{Risk effects (environmental risk/stigma)} \end{aligned}$$

In general, the **unimpaired value of the property** being appraised can be estimated using (i) sales comparison approach, (ii) cost approach and (iii) income approach. Estimating the effects of environmental contamination on real property value usually involves the application of one or more specialized valuation methods.

The **impaired value** of a property that may be impacted by environmental contamination, can **rarely be estimated through one of the traditional approaches to value** due to data limitations and other factors; thus, alternative methods must be utilized but these should also be based on relevant market data.

Cost effects are derived from remediation costs, which typically are estimated by environmental specialists. Assuming the market recognizes these costs, the appraiser can usually deduct them as a lump sum from the unimpaired value in a similar manner to a capital expenditure for deferred maintenance. When a discounted cash flow analysis used, the anticipated costs can be deducted from the projected cash flows in the periods in which they are projected to occur. Uncertainty regarding cost estimates, projection, and timing would be reflected in the environmental risk premium added to the unimpaired property or equity yield rate (risk effect).

Use effects can be analyzed by estimating the highest and best use of the subject contaminated property in an impaired and unimpaired condition. If the conclusions of the two highest and best use analyses are the same, then there are no use effects on value. If they differ, then the unimpaired and impaired values would be estimated for different uses and compared.

Risk effects are derived from the perceived environmental risk and uncertainty related to a property's environmental condition. Measuring this element usually requires more sophisticated and less direct techniques as below:

- Analysis of environmental case studies
- Paired Sales Analysis of potentially impacted properties
- Multiple Regression analysis of potentially impacted neighbourhood areas or properties in proximity to a contamination source
- Market Interviews to collect data and information used in other approaches or to support and supplement the results of other analyses
- Income Capitalisation Analysis - adjustment of income and yield capitalization rates to reflect environmental risk premiums in an income capitalization analysis

Valuing contaminated properties is complex because circumstances are different for each affected property and because sufficient comparable sales may be unavailable, difficult to obtain, or subject to unreasonable or unsupportable adjustments for varying conditions and situations. Nevertheless, as in all other types of property valuation, **three approaches to value are recognized** and should be used (*source :Standard on the Valuation of Properties Affected by Environmental Contamination, International Association of Assessing Officers, USA, 2016*).

5.1 SALES COMPARISON APPROACH

The sales comparison approach also known as market approach is the systematic gathering, recording and analysing data of similarly affected properties recently sold and comparing sales to the contaminated property being valued. When adequate data exist for similarly affected properties, this approach is considered the most objective and supportable.

The sales comparison approach requires sufficient sales of similar properties. As in the general sales comparison approach **when data on comparable contaminated properties are limited**, the valuer should expand strata, the period from which sales are drawn, and geo-economically defined areas. However, appropriate adjustments must be made to ensure that proper comparability is achieved.

Rather than relying only on the limited data available for similarly contaminated property, **sales of similar uncontaminated (or unimpaired) property can also be used.** In this way a benchmark, unencumbered value can be established for the subject property, after which adjustments can be made for the contamination. Such adjustments should be based on the cost to cure (properly discounted or amortized), imposed limitations on use, increased insurance and financing costs, and potential liability.

This is the process wherein **joint efforts of valuers and environmental expert** are needed. The contribution of the valuer is to undertake valuation of *impaired* property or *as if unimpaired* but comparable in characteristics whereas the contribution of environmental engineer is to compare the contaminant present and the level of contamination of the comparable contaminated properties identified by the valuer with the subject property proposed to be valued.

The following steps are followed in this method:

Step 1 - Identification of Contaminated Properties

Identify as far as possible contaminated/impaired properties that are comparable. List the similar characteristics which can be considered comparable.

This involves both impaired / unimpaired properties and the contamination level that are comparable to the subject property. This is the investigation which cannot be exercised only by the valuer. Environmental expert reports about the presence of contaminant and the contamination level of comparable properties and the contamination level of subject property.

Step 2 - Analyses and Comparison

In this step, joint efforts are made in collecting necessary information about each such contaminated property and complete information of subject property is recorded.

The next step is to analyse the asset properties and contaminant characteristics. This will provide a scientific platform to analyse the market correctly and compare them with the subject property being valued.

The objective here is to establish the prices by comparable features of properties and contaminant. The comparable features of the properties are those which are considered in estimation of unimpaired value. It may include location, size, age, type of construction, etc. The comparable features of the presence of contaminant include the type of the contaminant(s) or hazardous substance(s) present in the properties being identified to be similar.

Step 3 - Adjustment of prices of comparable properties

In the third step, the differences between the sales of contaminated properties and the subject property are adjusted. The technique to be used is the same as generally used for unimpaired property.

Step 4 - Determination of the value estimate or stigma assessment

This is the final step of arriving at a value estimate. After the comparable sales of impaired properties have been carefully analysed and adjusted, the value estimate can be determined by ‘adjusted sales’.

5.1.1 ILLUSTRATIONS ON SALES COMPARISON APPROACH

(1) A property has original unimpaired value of Rs.90,00,000/-. The comparable sales of the similar contaminated/impaired property transacted adjacent to such property very recently show that the value is Rs.55,45,000/-. The cost of remediation is found to be Rs.20,00,000/-. Determine the stigma value.

⇒ The sale evidenced from unimpaired property is given. Comparable price of contaminated site is also furnished.

Step 1 - Estimate the property value diminution due to contamination.

- Unimpaired Value : Rs.90,00,000/-
 - Impaired Value : Rs.55,45,000/-
 - Property Value Diminution : Unimpaired Value – Impaired Value
- = Rs.(90,00,000-55,45,000) =
Rs.34,55,000

Step 2 - Determine the stigma considering the remediation cost.

- Property Value Diminution : Rs.34,55,000/-
 - Cost of Remediation : Rs.20,00,000/-
 - Stigma Value : Value Diminution – Remediation Cost
- = Rs.(34,55,000 - 20,00,000)
= Rs.14,55,000/-

(2) Determine the stigma value in percentage based on the following data gathered by scientific method.

Sr. no.	Transaction after due adjustments	Amount (Rs.)
1	Sale Price derived from comparable non-contaminated assets	5,00,000/-
2	Sale Price derived from comparable contaminated sites	2,50,000/-
3	Cost of remediation as worked out by environmental consultant	2,00,000/-

⇒ Step 1 - Estimate the Property Value Diminution.

Sr. no.	Transaction after due adjustments	Amount in Rs.
a	Sales from non-contaminated (unimpaired) assets	5,00,000/-
b	Sale price of contaminated (impaired) site	2,50,000/-
c	Property Value Diminution (a – b)	2,50,000/-

Step 2 - Determine the stigma considering the remediation cost.

Sr. no.	Transaction after due adjustments	Amount in Rs.
d	Property Value Diminution	2,50,000/-
e	Remediation Cost	2,00,000/-
f	The amount of stigma (d – e)	50,000/-
g	The value of stigma in percentage (f/a)	10

From the illustration, it will be seen that even after the remediation works are completed, the original value is not regained in the market. The difference of the Property Diminution Value and Remediation Cost is the market imposed penalty which is known as Stigma. Here, the stigma is 10% which is quite low.

- (3) Determine the current value of the property having 40 acre land parcel. Value prior to contamination was Rs.22,50,000peracre. Comparable sales of similar size, similarly contaminated properties indicate a value of Rs.4,05,000 per acre. This includes the cost of clean-up which is already capitalized in the sales price of the comparable sales.

Step1 - Determine the as-if unimpaired value of the property.

$$\begin{aligned}
 \text{Thus, the unimpaired value} &= \text{Area x unit rate} \\
 &= 40 \text{ acres x} \\
 &\quad \text{Rs.22,50,000/acre} \\
 &= \text{Rs.9,00,00,000/-}
 \end{aligned}$$

Step 2 - Determine the value after contamination discovery

$$\begin{aligned}
 \text{Thus, Impaired Value} &= \text{Area x unit rate} \\
 &= 40 \text{ acre x Rs.4,05,000/acre} \\
 &= \text{Rs.1,62,00,000/-}
 \end{aligned}$$

Step 3- The value after discovery of contamination is itself the current value of the property.

5.1.2 REVIEW YOUR UNDERSTANDING

1. The Sales Comparison Approach involves:
 - A. Analysing the sales of contaminated properties
 - B. Comparing the sales of subject property
 - C. Comparing level of contamination
 - D. None of the above
2. In a 'Sales Comparison Approach':
 - A. There is no need to hire the services of environmental expert
 - B. There is a need to hire the services of environmental expert
 - C. Joint efforts of valuers and environmental experts are needed
 - D. None of the two are needed
3. Which step is not involved in the Sales Comparison Approach?
 - A. Identification of contaminated properties
 - B. Analysing and comparing the asset and contaminants characteristics
 - C. Preparing a report of environmental contaminants present in the adjacent property.
 - D. Adjusting price of comparable properties and determination of value estimate.

4. Which one is the most important connotation to use 'Sales Comparison Approach'?
 - A. Sufficient statistics of comparable contaminated assets must exist along with environmental expert's report.
 - B. Not only the amount of contamination but the risk associated must be known to be the same.
 - C. Manufacturing and process of comparable properties must be identical
 - D. The current and future utility of the comparable contaminated properties must be the same.
5. Explain the steps involved in sales comparison approach in detail.
6. Discuss the conditions which must be satisfied to use the sales comparison approach.
7. A property has an original (unimpaired) value of Rs.66 lakhs. The derived sale price from comparable sales of adjacent properties is Rs.45.66 lakhs. The cost of remediation as per environmental expert is Rs.18 lakhs. Determine stigma value.
8. Determine stigma value in percentage when the cost of remediation is found to be Rs.25 lakhs for subject property. Sale price from contaminated sites is Rs.30 lakhs and sale price from non-contaminated assets is Rs.42 lakhs.

9. Determine the current value of the property from following data.

Sr. no.	Description	Rs in Lakhs
1	Value of property with contamination	55.35
2	Comparable sales value inclusive of remediation	38.65

5.2 COST APPROACH

The principle of cost approach is determination of cost of producing a similar property as a replacement, so it is clear that in this approach the valuation must calculate the replacement cost by adjusting the estimates of the remediation cost and diminution in value of the property resulting from market impact due to stigma. The estimation part for stigma is difficult.

The estimate becomes higher if the provable loss is overstated because when the costs are not foreseeable, it is the general tendency of the valuer to be on higher side.

The cost approach is often applicable in cases of environmental contamination, provided the present worth of direct and indirect costs is calculated and used and provided adjustments are made for overestimation or underestimation of costs and impact. The cost approach, however, may ignore the value-in-use concept and thereby overstate the impact of costs to cure contamination problems.

This approach is normally used in all techniques for contaminated property valuation in different form, but to value the properties which are not leased or not within the orbit of sale in open market, the only approach viable in all such cases is the cost approach.

The following steps are followed in this method:

Step1 - Estimating the value of the subject property as if unimpaired

This is the step wherein the cost of substitution is estimated considering the **hypothetical condition** (*contrary to the fact*) that there is no contamination. This is the usual process for a valuer to determine the estimate based on comparative area method, unit in place method, index method or the actual quantity method by considering every physical component, certain specific features and based on their marketability or utility. Here, the current utility must be considered based on the judgment of valuer.

Step2 - Determining the direct and indirect costs due to contamination

Primarily, direct cost in the contamination is cost to cure. It is the clean-up cost required to bring the property to a status of unimpaired in the market. This would therefore also include the stigma factor. Thus in this step, the valuer with the help of environmental expert must determine the following costs:

(a) The cost of remediation

The cost of remediation depends upon many factors viz.

- Type of the property
- Nature of the pollution
- Concentration of each of the contaminants present
- Sequence of the treatment which is most economical and effective for a given situation
- Designing of the treatment system consisting of many components
- The estimated cost of such system or components.

(b) The stigma factor based on 'provable losses'

The provable loss can be calculated by associating the property with utility. It is the period for which the property or part of the property remained in non-use or non-functional stage. This is the duration when the contamination was first noticed to the appointment of environmental consultant who submitted the remediation plans to the owner. The further period of the 'provable loss' is the time it has taken to undertake the remediation- the period till the property value moves up to current market value. Thus the provable loss will take into consideration the following costs:

- Cost of disruption
- Cost of operation
- Cost to utility
- Cost to revenue
- Cost to liability

These 'costs' as a 'provable loss' can be well assessed by the assessors/valuers.

(c) The **specialized costs** which include the additional costs for management of remediation and clean-up.

The specialized costs may include:

- Contamination related legal expenses, that is professional legal fees for dealing with State Pollution Control Board, Government or courts;
- Contamination related insurance expenses- additional insurance during the remediation programme;
- Cost of discovery of contamination like professional fees to consultants;
- Future monitoring cost to avoid recurrence of such contamination, a part time environment engineer for periodic monitoring of the property to take action at the appropriate time before the matter reaches to market;
- Cost to cure functional non-use i.e. obsolescence are then added to accrued depreciation.

Step3 - Estimating the value of contaminated properties considering both the steps 1 and 2

The cost approach is based on the premise that the market value of an improved parcel is equal to the market value of the land plus the current construction costs of the improvement less accrued depreciation.

The cost to cure a problem reduces the utility of property and should be considered a form of functional or economic obsolescence of improvements. This would then be added to the accrued depreciation because current replacement cost new would be based on the assumption of a typical, presumably clean environment.

The cost to cure includes all expenses associated with a cleanup, including the expenses that reduce stigma.

Specialised cost such as contamination-related legal and insurance expenses, above those that would be typical for ordinary operation, must be considered. In addition, provision must be made for the cost of discovery of contamination and future monitoring to watch for recurrence of contamination.

5.2.1 ILLUSTRATIONS ON COST APPROACH

(A) The subject land (25 m x 50 m) is located in the vicinity of secured landfill. The reproduction cost is found to be Rs.4,200/- per m².

The cost of contaminant containment (in terms of m² basis) is found to be Rs.505/-. Based on the provable loss during the containment, stigma was worked out to Rs.302/-m². The accrued depreciation may be ignored. Determine the replacement cost of improved property.

⇒ Market Value

Reproduction cost of land	=	Area x unit rate
	=	25 m x 50 m x Rs.4200/m ²
	=	Rs.52,50,000/-
Cost of remediation	=	25 m x 50 m x Rs.505/m ²
	=	Rs.6,31,250/- partial
Stigma due to non-use factor	=	25 m x 50 m x Rs.302/m ²
	=	Rs.3,77,500/-
Total Costs due to contamination	=	Rs.(6,31,250 + 3,77,500)
	=	Rs.10,08,750/-
Replacement Cost of improved land	=	Rs.52,50,000 +Rs.10,08,750
	=	Rs.62,58,750/-

(B) Determine the market value if the cost of construction is found diminished on account of discovery of contamination by 35% of its current construction cost. The industrial property worth Rs.20,00,000/- located in Sachin Industrial Estate, Gujarat (India) was constructed in the year 1995. The construction index of 1995 is 1450 and that of current year is 2000.

⇒

Step 1

Estimate the current construction cost as if the property is unimpaired

$$\begin{aligned}
 &= \text{Rs.}20,00,000 \times \frac{2000}{1450} \\
 &= \text{Rs.}20,00,000 \times 1.38 \\
 &= \text{Rs.}27,60,000/-
 \end{aligned}$$

Step 2

$$\begin{aligned}
 \text{Accrued depreciation} &= \text{Rs.}27,60,000 \times 0.35 \\
 &= \text{Rs.}9,66,000/-
 \end{aligned}$$

Step 3

Impaired Value = Rs.27,60,000 - Rs.9,66,000
= Rs.17,94,000/-

5.2.2 REVIEWING YOUR UNDERSTANDING

1. Cost Approach involves
 - A. Estimating the value of subject property unimpaired and determination of remediation cost
 - B. Comparing level of contamination
 - C. Comparing sales of contaminated properties
 - D. None of the above
2. What is the principle of Cost Approach for contaminated property valuation?
 - A. Determination of cost of producing similar property as a replacement
 - B. Systematic gathering, recording and analysing data of similarly affected properties and comparing sales of the contaminated property being appraised
 - C. Determination of income which the contaminated property still can derive
 - D. None of the above
3. In the cost approach
 - A. There is no need to hire environmental consultant
 - B. There is a need to hire environmental consultant
 - C. Only valuer is needed
 - D. None of the above
4. Determining direct cost in the contamination in the Cost Approach is
 - A. Cost to cure
 - B. Cost to operation
 - C. Cost to utility
 - D. None of the above
5. The 'specialised costs' in the Cost Approach is
 - A. Additional costs for management of remediation and clean up
 - B. Cost to construct new facilities
 - C. Cost to operation
 - D. None of the above

6. What is the 'Provable Loss' as applied in Cost Approach of valuation of contaminated property? Explain the term in detail.
7. Discuss the steps involved in cost approach for contaminated property valuation.
8. The subject property is located near the biomedical waste incinerator site. Determine the market value of land from the following data.

Cost of land	=	Rs.62.50 lakhs
Cost of remediation	=	Rs.12.80 lakhs
Stigma due to non-use factor	=	Rs.8.40 lakhs
9. The current construction cost of the property as if unimpaired is Rs.50 lakhs. The construction cost of contaminated property is Rs.16.50 lakhs. Determine the market value of the property.

5.3 INCOME APPROACH

The income approach estimates property value by determining the present value of the projected typical income stream for the type of property. Income-producing properties are the most common property type influenced by environmental regulations and subject to contamination. Often the greatest and most easily measured effect is on the ability of the property to continue to generate income. For this reason, the income approach is often the most suitable approach for contaminated properties.

The income approach is also effective in dealing with the situation that occurs when even the present worth of the cost to cure a problem far exceeds the replacement cost of property. There is a value-in-use to the owner even where no other market exists so long as the owner continues to operate the facility. Value-in-use may be impaired by temporary closure or loss of customers, and therefore some adjustments in income stream and income-determined value is likely.

The basic principle involved in this approach is to estimate the impact of the contaminant on the value. This is determined based on the reduced ability of a subject property to generate the income. Income approach estimates reasonable estimate of value because in this process, the present value of the property is derived by measuring actual income against income typical for properties of the same type.

The logic behind this principle is the relation of property usefulness / utility and the income generated from it. Contaminated property by definition itself has diminished utility and therefore the income generated is reduced.

Following steps are followed in this technique.

Step1 - Estimating the annual gross income stream by obtaining market rental data

Use of market rental data assumes that the property has utility (is still in use or will be shortly) and is capable of commanding rent. When these conditions are met, market rental data forms an important source for establishing the “base capitalization rate”. The income stream however is required to be modified to account for the cost to cure the contamination problem and any loss of utility.

- Modification should be based on the amortised present worth of actual costs, recognising that permissible alternatives may limit costs to those necessary to satisfy the regulatory agency, not necessarily the full cost to cure the problem.
- Further, income modification may be necessary to account for more expensive substitute processes or materials that can no longer be manufactured on site. Adjustments to reflect temporary closure or loss of customers must also be considered.

The primary objective of income capitalization is translating incomes into value. The data of gross income of the contaminated property may help the valuer in selecting capitalization rate that reflect the real estate investment market in its true sense. The overall capitalization of rate of contaminated properties from market sales can be determined by using the ratio of net income to selling price.

The income stream however is diminishing provided immediate actions are taken to remediate it. In other words, the income stream requires to be altered by considering two aspects i.e. Cost to cure and the loss of utility of the property. The cost to cure should be based on the amortized present worth of the actual costs.

To determine the annual gross rental and arrive at the appropriate capitalization rate, the valuer must keep the database of contaminated and remediated properties containing data like the type of the real estate, contamination, costs, market history and capitalization rate in consideration while determining value.

Step2 - Obtaining income or allowable expenses related to contamination

The allowable expenses which must be subtracted from the gross income are the expenses incurred to remove the specific contaminant and includes amortized present worth of the cost to cure. Cost to cure as usual includes the disruption cost as there is a partial loss of income due to its partial non-use.

Cost to discovery of contamination including professional fees paid to the environmental expert is an allowable expense.

Legal expenses for handling litigation on account of contamination and monitoring expenses are allowable expenses. Ongoing monitoring is often expensive and inflation will often increase costs which are often incurred over lengthy periods. Any money spent for improving operation may also be a part of allowable expense. Other unforeseen expenses may be disclosed during the clean-up operation and can also be considered a part of the allowable expenses. Ongoing monitoring and inflation will increase the cost with respect to time. These aspects must be considered in developing modified income streams.

In summary, all the expenses associated with removal of contaminant which are actual, current or reliably anticipated must be recorded. It must be remembered that the expenses documented must be provable. Expenses to be used should be based on current cleanup mandates and not the ones that are invoked only upon sale of property or change in use Subtracting allowable expenses from gross income gives effective gross income or net income.

Step3 - Determination of the Value of contaminated property using Capitalization Rate

Capitalization is the process of converting net income of a property into its equivalent capital value. Capitalization process reflects the time value of money by reducing or discounting future income to present worth by the Year's Purchase concept.

$$Y = V * R$$

where,

Y = Yield

V = Value of the property

R = Rate of return

As such, capitalization rate in the income approach is such a rate of return that directly or indirectly provides for return on investment (interest) and return of investment (capital recovery).

The capitalized rate is based on the equity yield rate, mortgage terms and anticipated appreciation or depreciation. In many cases of contaminated properties, mortgages may be unobtainable and future appreciation is applicable. Contaminated properties also suffer from lack of appeal due to possible future clean up requirement and public liability exposure. This leaves the equity yield rate as the major component of capitalization rate.

In developing this rate, the presumption must be that the property is still capable of producing income. Adjusted rates may be developed for property not currently producing income but expected to do so at a predictable level at a predictable time in future. The capitalization rate must reflect the difference between comparable contaminated and uncontaminated properties. Capitalisation rate may be increased to reflect added risk.

▪ **Financing (unusual term)**

Financing is known to affect property value. The impact is particularly significant when favourable or unfavourable financing is obtained because the market has already accepted the influence of typical financing costs.

In the case of environmentally contaminated properties, two types of financing effects need to be considered:

- (i) the ability of a prospective buyer to finance the purchase of the property; and
- (ii) the terms for financing the actual costs to cure contamination problems.

If prospective buyers cannot obtain typical financing due to the problem, the cash equivalency value of the property will be diminished. If terms for financing the costs to cure problems are poor, additional liability or unfavourable debt will reduce buyer income anticipation and thereby reduce market value.

Demand for alternative uses particularly those compatible with contaminated site will result in sale. Financing may facilitate a sale but will require adjustment in any sales analysis. Income generation is predicted based on the report of environmental expert as to the date of completion of the remediation project. When the market comes to know that remediation is in process, perception starts improving and the stigma effect begins to diminish.

5.3.1 ILLUSTRATIONS ON INCOME APPROACH

- (A) Kamal had rented his property at Rs.30,000/- per annum net of outgoings. The yield upto last year was found to be 10%. Subsequent to the complaint made by the tenant, the discovery of the contaminant was made and the yield was found to be 12%. Determine the value of contaminated property.



Step 1

Determine the value of the unimpaired property

$$\begin{aligned}
 \text{Net Income (NI)} &= \text{Rs.30,000 per annum} \\
 \text{Unimpaired Value} &= \text{NI} \times \text{YP} \\
 &= \text{Rs.30,000} \times \frac{100}{10} \\
 &= \text{Rs.3,00,000/-} \qquad (1)
 \end{aligned}$$

Step 2

Determine the value of the impaired property as found in the current year

$$\begin{aligned}
 \text{Net income} &= \text{Rs.30,000/- per annum} \\
 \text{Impaired Value of property} &= \text{NI} \times \text{YP}_{\text{impaired}} \\
 &= \text{Rs.30,000} \times \frac{100}{12} \\
 &= \text{Rs.2,50,000/-} \qquad (2)
 \end{aligned}$$

Step 3

Determine the loss in value of contaminated property or Property Value Diminution

$$\begin{aligned}
 &= (1) - (2) \\
 &= \text{Rs.3,00,000} - \text{Rs.2,50,000} \\
 &= \text{Rs.50,000/-}
 \end{aligned}$$

- (B) The effective gross income of the industrial property contaminated due to chromium fumes is Rs.88,25,540/-. The annual expenses towards the cost to cure and other legal and disruption expenses are Rs.38,78,200. From similar contaminated property, it indicates that 9% rate of return is appropriate. Find the value estimate of the property.



Effective gross income	=	Rs.88,25,540/-
Annual expenses	=	Rs.38,78,200/-
Net income	=	Rs.88,25,540 – Rs.38,78,200
	=	Rs.49,47,340/-

Capitalization rate is 9% or 0.09

$$\begin{aligned} \text{Thus, Impaired Value} &= \frac{\text{Net income}}{\text{Capitalization rate}} \\ &= \text{Rs.} \frac{49,47,340}{0.09} \\ &= \text{Rs.5,49,70,444/-} \end{aligned}$$

- (C) An industrial property is leased at rent of Rs.220/- per sq. ft and has an annual net operating income of Rs.55,00,000/-. The said property is found to be partially contaminated. The loss of the useful space will reduce the net operating income to Rs.42,50,000/- during the clean-up operations which may be completed within one year.

The remediation contract is given on turnkey basis to M/s. Enviro Group who will be paid for in 5 equal instalments of Rs.12,50,000/- every year over five years.

The yearly payment of instalment is proposed to be made from the net operating income. The rents are expected to be absolutely market based and market-derived discount rate is 12%.



	Year 1	Year 2	Year 3	Year 4	Year 5
Net Income (Rs.)	30,00,000	30,00,000	30,00,000	30,00,000	30,00,000
Present Value Factor	0.892857	0.797194	0.71178	0.635518	0.567427
Present Value of Income (Rs.)	26,78,571	23,91,582	21,35,340	19,06,554	17,02,281

$$\begin{aligned} \text{Term Value} &= \text{Rs.}(26,78,571 + 23,91,582 + 21,35,340 + \\ &19,06,554 + 17,02,281) \\ &= \text{Rs.}1,08,14,328/- \end{aligned}$$

$$\begin{aligned} \text{Residual (or Reversionary) Value} &= \text{Terminal Income} \times \text{YP}_{\text{perpetuity}} \times \text{PV} \\ &\text{factor} \\ &= \text{Rs.}55,00,000 \times \frac{100}{12} \times \frac{1}{(1 + 0.12)^5} \\ &= \text{Rs.}2,60,05,833/- \end{aligned}$$

$$\begin{aligned} \text{Value of Lessor's Interest} &= \text{Term Value} + \text{Residual value} \\ &= \text{Rs.}(1,08,14,328 + 2,60,05,833) \\ &= \text{Rs.}3,68,20,161/- \end{aligned}$$

- (D) The net income of the contaminated property is Rs.32,28,540/-. The market derived overall capitalization rate for this property is 11%. The income of a similar uncontaminated property is Rs.55,14,775/-. Determine the loss in value.



- Contaminated property net income = Rs.32,28,540/-
Hence, Impaired Value = $\frac{\text{Income}}{\text{Capitalization rate}}$
= $\frac{32,28,540}{0.11}$
= Rs.2,93,50,364/-

- Uncontaminated property net income = Rs.55,14,775/-
Hence, Unimpaired Value = $\frac{55,14,775}{0.11}$
= Rs.5,01,34,318/-

- Property Value Diminution = Unimpaired Value – Impaired Value
 = Rs.(5,01,34,318 - 2,93,50,364)
 = Rs.2,07,83,954/-

Thus, Rs.2,07,83,954/- represents the indicated loss in value due to contamination and required clean up.

(E) Find percent reduction in value from following data.

- 1) The value of the non-contaminated property by comparison approach – Rs.15,00,000
- 2) Effective contamination control and management measures – Rs.75,000
- 3) Regular monitoring of the site – Rs.10,000
- 4) Clean up of onsite contamination – Rs.3,50,000
- 5) Indemnity insurance for the future – Rs.10,000
- 6) Control of migration from other sites – Rs.15,000
- 7) Present value of Re.1 after 20 years @ 7.5% - 0.235
- 8) Anticipated economic life of building, years - 20
- 9) Avoidance of origination of contamination of adjacent sites – Rs.1,00,000



Total Cost of Remediation = (75,000 + 10,000 + 3,50,000 + 10,000 + 15,000 + 1,00,000)
 = Rs.5,60,000 incurred at the end of 20th year

Present value of treatment = Total Cost x PV factor for 20 years
 = Rs.5,60,000 x 0.235
 = Rs.1,31,600/-

Adjusted Value (excluding Stigma Allowance) = Rs.15,00,000 –
 Rs.1,31,600
 = Rs.13,68,400/-

i.e. 13,68,400 / 15,00,000 or 91.27%

% Reduction in Value = (100 - 91.27)%
 = 8.73%

5.3.2 REVIEW YOUR UNDERSTANDING

1. Contaminated property receive reduced income because
 - A. It has diminished utility
 - B. property is off the market
 - C. It has lost the reputation
 - D. None of the above
2. Base capitalization rate can be established based on
 - A. Market rental data
 - B. Real estate market current rate
 - C. Remediation cost
 - D. None of the above
3. The allowable expenses which must be subtracted from the gross income
 - A. Is expense involved to remove the specific contaminant
 - B. Are expenses involved to remove the specific contaminant and amortized present worth of the cost to cure
 - C. Is the amortized present worth of the cost to cure
 - D. None of the above
4. Which one is not allowable expense in income approach of valuation?
 - A. Cost to cure
 - B. Disruption cost
 - C. Cost of discovery of contaminant and legal expenses
 - D. Cost of maintenance
5. Explain the process of income approach with each step in detail.
6. Shweta rented the property at Rs.6000/- per month. The yield upto last year was found to be 12%. Subsequent to the complaint made by the tenant and the contaminant cadmium in excess concentration was discovered, the yield was found to be 14%. Determine the value of contaminated property.
7. The net income of the contaminated asset is Rs.55 lakhs and the market derived overall capitalization rate is 11%. The income of a similar unimpaired property is Rs.75 lakhs. Determine the loss in value.
8. Find reduction in value from following data of contaminated property.

(a) Value of non-contaminated property by comparison approach	–
	Rs.22
lakhs	

(b)	Effective contamination control	–
	0 lakh	Rs.1.0
(c)	Regular monitoring of site	–
	0 lakh	Rs.0.5
(d)	Cleanup cost	–
	0 lakh	Rs.4.0
(e)	Insurance	–
	0 lakh	Rs.0.2
(f)	Control of migration from other sites	–
	0 lakh	Rs.0.3
(g)	Present value of Re.1 for 20 years @ 7.5%	–
	35 lakh	Rs.0.2
(h)	Anticipated economic life of building	–
	years	25
(i)	Avoidance of origination of contamination of adjacent sites	–
	lakh	Rs.1

9. Determine the value estimate of property from the following data

- Effective gross income Rs.80 lakhs
- Annual cost to cure, legal & disruption expenses Rs.32 lakhs
- Rate of return from similar contaminated property 9%

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PROFESSIONAL ETHICS AND STANDARDS

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Kirit P. Budhbhatti
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Model Code of Conduct as notified by MCA under the Companies (Registered valuers and valuation) Rules 2017 and Other Engagement Considerations

1. Integrity and Fairness:

- A valuer should, in the conduct of his/its business, follow high standards of integrity and fairness in all his/its dealings with his/its clients and other valuers.
- A valuer should maintain integrity by being honest, straightforward, and forthright in all professional relationships.
- A valuer should endeavour to ensure that he/it provides true and adequate information and shall not misrepresent any facts or situations.
- A valuer should refrain from being involved in any action that would bring disruption to the profession.
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2. Professional Competence and Due Care:

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- A valuer should carry out professional services in accordance with the relevant technical and professional standards that may be specified from time to time.
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A valuer should have a duty to carry out with care and skill, the instructions of the client insofar as they are compatible with the requirements of integrity, objectivity and independence.

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- A valuer should act with objectivity in his/its professional dealings by ensuring that his/its decisions are made without the presence of any bias, conflict of interest, coercion, or undue influence of any party, whether directly connected to the valuation assignment or not.
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- A valuer while respecting the confidentiality of information acquired during performing professional services, should maintain proper working papers for a period of three years or such longer period as required in its contract for a specific valuation, for production before a regulatory authority or for a peer review. In the event of a pending case before the Tribunal or Appellate Tribunal, the record should be maintained till the disposal of the case.

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- A valuer should not conduct business which in the opinion of the Registration Authority or the registered valuer organisation is inconsistent with the reputation of the profession.

PRINCIPLES OF INSURANCE AND LOSS ASSESSMENT

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UNIT – 1

INTRODUCTION TO INSURANCE

1.1 What is Insurance?

There is normally expected lifetime for the asset, during which time it is expected to perform. However, if the asset gets lost earlier, being destroyed or made non-functional, through an accident or other unfortunate event, the owner and those deriving benefits there from suffer. Insurance is a mechanism that helps to reduce such adverse consequences.

1.2 Purpose and Need of Insurance

Assets are insured, because they are likely to be destroyed or made non-functional, through an accidental occurrence. Such possible occurrences are called perils, like fire, earthquake, flood, break down, accident etc.

The damage that these perils may cause to the asset, is the risk that the asset is exposed to.

The risk only means that there is a possibility of loss or damage, it may, or it may not happen. There has to be an uncertainty about the risk. If there is no uncertainty about the occurrence of an event, it cannot be insured against.

The risk may sometime be referred to as subject matter of insurance.

There are other meanings of the term 'risk'. To the ordinary man in the street 'risk' means exposure to danger. In Insurance practice, 'risk' is also used to refer to the peril or loss producing event. For examples, it is said that fire insurance covers the risks of fire, explosion, cyclone, flood etc. Again, it is used to refer to the property covered by insurance, for example, a timber construction is considered to be a bad 'risk' for fire insurance purpose.

Conceptually, the mechanism of insurance is very simple. People who are exposed to the same risk come together and agree that, if any one of member suffers the loss, the others will share the loss and make good to the person who lost. By this method the risk is spread among the community and the likely big impact on one is reduced to smaller manageable impacts on all Insurance does not protect the asset. It does not prevent its loss due to the peril. The peril cannot be avoided through insurance.

Insurance only tries to reduce the impact of the risk on the owner of the asset and those who depend on that asset. It compensates, may not be fully, the losses. Only economic or financial losses can be compensated

The purpose of insurance is to safe guard against misfortunes by making good the losses of the unfortunate few, through the help of fortunate many, who are exposed to the same, risk but saved from the misfortune. Thus, the essence of insurance is to share losses and substitute certainty with uncertainty.

1.3 How Insurance Works?

People facing common risks come together and make their small contributions to a common fund. The contribution to be made by each person is determined on the assumption that while it may not be possible to say beforehand, which person will suffer, it is possible to say, on the basis of past experiences, how many persons, on an average, may suffer losses. The following examples explain the above concept.

- In a village, there are 400 houses, each valued at Rs.20,000/-. Every year, on an average, 4 houses got burnt, resulting into a total loss of Rs.80,000/- If all 400 owners come together and contribute Rs.200/- each, the common fund would be Rs.80,000/-. This is enough to pay Rs.20,000/-, to each of the 4 owners whose houses got burnt thus the risk of 4 no. house owners is spread over 400 no. house owners of the village. Rs.200/- paid by house owner is called premium payable. Rs.20,000/- is the sum insured of the risk.
- Similar risk is houses in a village, claim of few Rs.20,000/- each, total Rs.80,000/- , loss suffered by the 4 house owners and shared by 400 house owners insurer is in the position of trustee as it is managing the common fund.

- It has to ensure that that nobody is allowed to take undue advantage of the arrangements. The decision to allow the entry is the process of underwriting of risk. Both underwriting and claim settlement have to be done with great care.

The Business of INSURANCE – POOLING OF RISK & RESOURCES

The business of insurance done by insurance companies, called insurers, is to bring together persons with common insurance interests (sharing the same risks), collecting the share of contribution (called premium) from all of them, and paying out compensations (called claims) to those who suffer. The premium is determined on the same lines as indicated in the example above with some additions made for the expenses of administration.

Thus, insurance may be described as a method or a technique which provides for collection of small amounts of premium form many individuals and firms out of which losses suffered by the few are paid.

ROLE OF INSURANCE IN ECONOMIC DEVELOPMENT.

An insurance company's strength lies in the fact that huge amounts are collected and pooled together, these amounts come by way of premiums. Every premium represents a risk that is covered by that premium. In effect, therefore, these vast amounts represent pooling of risk. The funds are collected and held in trust for the benefit of the policyholders. The management of insurance companies is required to keep this aspect in mind and make all its decisions in ways that benefit the community. This applies also to its investments. That is why successful insurance companies would not be found investing in speculative ventures. Their investments benefit the society at large.

The system of insurance provides numerous direct and indirect benefits to the individual and his family as well as to industry and commerce and to the community and the nation as a whole. Those who insure, both individuals and corporates, are directly benefited because they are protected from the consequences of the loss that may be caused by the accident or fortuitous event. Insurance, thus, in a sense protects the capital in industry and releases the capital for further expansion and development of business and industry.

Insurance removes the fear, worry and anxiety associated with this future uncertainty and thus encourages free investment of capital in business enterprises and promotes efficient use of existing resources. Thus, insurance encourages commercial and industrial development and thereby contributes to a vigorous economy and increased national productivity. No bank or financial institution would advance loans on property unless it is insured against loss or damage by insurable perils.

Insurers are closely associated with several agencies and institutions engaged in fire loss prevention, cargo loss prevention, industrial safety and road safety.

Before acceptance of a risk, insurers arrange survey and inspection of the property to be insured, by qualified engineers and other experts. The object of these surveys is not only to assess the risk for rating purposes but also to suggest and recommend to the insured, various improvements in the irks, which will attract lower rates of premium.

Insurance ranks with export trade, shipping and banking services as earner of foreign exchange to the country. Indian insurers operate in more than 30 countries. These operations earn foreign exchange and represent invisible exports.

UNIT – 2

FUNDAMENTALS/PRINCIPLES OF GENERAL INSURANCE

CONTRACT OF INSURANCE

When the insured pays the premium and the insurer accepts the risk, the contract of insurance is concluded. The policy issued by the insurer is the evidence of the contract.

2.1 Conditions Necessary for a Contract

1. There should be consideration, i.e. there should be offer and acceptance of both parties, and one party will give offer the other party will accept.
2. There should be consent of both parties, (agreement). – Both parties should be of the same mind with a common intention. For example, if the proposer desired fire insurance, and the insurers issue a burglary policy, there is no consent arising out of common intention.
3. The parties to contract must be competent, minors and person of unsound mind are not competent to sign contracts.
4. The object of contract must be legal and not against public policy. For example, stolen goods cannot be insured.

2.2 Principles of General Insurance

Insurance contracts are subject to certain special principles evolved under common law in the U.K. and are generally followed by Indian courts. The principles are known as fundamental or basic principles of law of insurance.

2.2.1 Utmost good faith

The parties to a commercial contract, according to law, are required to observe good faith. The seller cannot mislead the buyer in respect of the transaction, but he has no obligation to disclose all information about the subject of the contract. It is the buyer's duty to be careful while entering into the contract. 'Let the buyer beware.' Is the legal rule?

In insurance contract there is duty of utmost good faith and giving material facts information. The proposer has duty to disclose all material information/facts about the subject matter of insurance to the insurer. The material fact is that, enables insurer to decide whether to accept the risk and the rate of premium and terms and conditions of acceptance. The duty applies not only to the material facts which the proposer knows, but also extends to the material facts which he ought to know.

The following are some examples of material facts

Fire Insurance (a) Construction of the building; (b) Occupancy (e.g. office, residence, shop, godown, manufacturing unit, etc.) (c) The nature of goods, i.e. non-hazardous, hazardous extra-hazardous etc.

Marine Insurance (a) Method of packing i.e. whether in single gunny bags or double gunny bags, whether in new drums or second hand drums' etc. (b) the nature of goods (e.g. whether the machinery is new or second hand);

Motor Insurance (a) Cubic capacity of engine (private car); (b) the year of manufacture; (c) carrying capacity of a truck (tonnage); (d) the purpose for which the vehicle is used; (e) the geographical area in which it is used; etc

Personal accident Insurance (a) the exact nature of occupation; (b) age, height and weight; (c) physical disabilities etc.

General (a) The fact that previous insurers had rejected the proposal, or charged extra premium, or cancelled, or refused to renew the policy (b) Previous losses suffered by the proposer.

Note: If the insurance is placed through an agent, the latter has similar duty to disclose all material facts known to him or communicated to him by the proposer.

Facts which are common knowledge or matters of law need not be disclosed by the proposer. For example, if a proposer seeks riot cover, he need not disclose the fact of prevalence of riot conditions. Insurance are expected to know about it in the normal course.

The duty of disclosing material facts ceases when the contract is concluded by the issue of a cover note or a policy. The duty arises again at the time of renewal of the policy. However, a policy condition provides the duty also arises during the period of the policy, if there is any change in the risk.

The breach of duty of utmost good faith may arise unintentionally through an oversight or because the proposer thought that it was not a material fact, if there is non-disclosure or mis-representation with fraudulent intention, the insurance contract will become void; it will not be contract at all. If duty of utmost good faith is breached in any other way, the contract becomes voidable, which will mean, the insurers have the option to avoid the contract and reject the claim.

Unenforceable contracts are those which cannot be produced as an evidence in court of law, If an insurance policy is not stamped as per the Indian stamp act, the contract becomes unenforceable.

Contractual duty

Proposal forms are designed to obtain all material information about the subject matter of insurance. Each form contains a declaration to the effect that all the questions have been answered truly and correctly, and that the proposal and declaration shall be the basis of the contract.

The legal effect of the above declaration is that insurers can avoid the contract if any answer is inaccurate or incorrect, even if the answer is not material to the risk. This is called the contractual duty of utmost good faith, which is far stricter than the common law duty.

The duty of disclosure of “material information” regarding a proposal or policy also applies to insurers, agents or insurance intermediaries, as provided in IRDA Regulations (Protection of Policyholders’ Interests) 2002.

2.2.2 Insurable Interest

The owner of property has a right under law to effect insurance on the property, if he is likely to suffer financially, when property is lost or damaged. This legal right to insure is called insurable interest. Without insurable interest, the contract of insurance will be void. Because of this legal requirement of insurable interest, insurance contracts are not gambling transactions.

Examples of insurable interest

- (a) Ownership of property (and joint ownership) is a clear example of insurable interest.
- (b) A bank has insurable interest in the property on the mortgage of which loans have been given. The interest is limited to the amount of the loan. Usually, under such circumstances, the policies are issued in the joint names of the insured and the bank.
- (c) A ship owner has insurable interest in the ship owned by him. Cargo owners, both sellers and buyers, have insurable interest in the goods owned by the owner.
- (d) The owner of a motor vehicle has insurable interest in the vehicle; he also has insurable interest in potential third party liability. If a third party is injured in the accident, the damages payable to the third party would be financial loss to the insured, Hence, he can insure his third party liability.
- (e) A person has insurable interest on his own life.

Insurable interest can arise in a variety of ways but the above examples are sufficient to explain the concept.

Time When Insurable Interest should be Present

In fire and miscellaneous insurance, insurable interest must be present both at the time of taking the policy and at the time of loss. For example, if the property insured under a fire insurance policy is sold and there is a loss after the sale, the insured cannot recover the loss as he has no insurable interest at the time of loss.

In marine cargo insurance, insurable interest is required at the time of loss. It may not be present at the time of effecting insurance. An importer of goods may insure the goods under a marine policy, although at the time, he may not be the owner of the goods. Ownership of the goods passes from the exporter to the importer when the payment is made. If goods arrive damaged at destination, and if the importer had paid for the goods, he can recover the loss as he has insurable interest at the time of loss and also has a policy. In marine hull insurance, insurable interest must be present both at the time of taking the policy and at the time of loss.

Assignment

Assignment means transfer of rights and liabilities of an insured to another person who has acquired insurable interest in the property insured. Generally fire and miscellaneous insurance policies are assigned only with the consent of the insurers. Marine cargo policies are, however, freely assignable without the previous knowledge or consent of the insurer. The reason is that the ownership of goods insured under a marine cargo policy frequently changes when the goods are still in transit, and it is necessary that the benefit of the policy should pass to the new owner, A marine hull policy cannot be assigned without the consent of the insurers.

1.2.3 Indemnity

The principle of indemnity arises under common law and requires that an insurance contract should be governed by principle of indemnity. The object of the principles is to place the insured in the same financial position as far as possible, as he occupied immediately before the loss. The effect of this principle is to prevent the insured from making any profit out of his loss or gaining any benefit or advantage.

The measure of indemnity applied to some types of property is explained below:

Building

In these cases, the cost of reinstating the building or repairing the damage portion, is assessed and from that an appropriate allowance is made toward depreciation, depending upon the age and condition of the building.

Machinery

In practice, the measure of indemnity is the replacement value at the place and date of loss or damage. Less an appropriate allowance towards depreciation.

If the damaged machinery is repairable, the measure of indemnity is the cost of repairing the damage. If however, during repairs, any part is replaced, an appropriate allowance is to be made towards depreciation on the total cost of repairs including labour cost.

Stocks

In respect of the stocks of wholesalers and retailers, the measure of indemnity is not the selling price of the wholesaler or the retailer, but it is the price at which he can replace the goods, the element of expected profit does not pay any part in computing the measure of indemnity.

Fire insurance policies may be issued on Reinstatement Value basis. Under these policies, generally issued for covering building or machinery, the basis of indemnity is the cost of repairs or cost of reinstatement or replacement of damaged or destroyed property by new property of the same type. In as much as the insured gets new property in the place of old, the principle of indemnity is modified, (this is explained in Unit – 6 : Fire and Special Peril Insurance).

Motor Insurance

The indemnity shall not exceed.

- (a) For total/constructive total loss of the vehicle the insured's Declared Value of the vehicle (including accessories thereon) as per Schedule of the policy less the value of the wreck.
- (b) For partial losses, costs of repair / replacement as per depreciation limits specified in the policy.

Claims for third party liability are indemnified as per law, subject to limits, if any, under the policy.

Marine Insurance

The values of cargo are subject to constant fluctuations during transit from one country to another, Besides, the market values of ships fluctuate widely, but the market value may not reflect the true value of the ship to its owner, Therefore, almost all the marine ship/hull insurance policies are issued as valued policies or agreed valued policies, where under the sum insured is agreed between the insurers and the insured as the value of the insured property. The agreed amount is payable in the event of total loss, irrespective of considerations of depreciation, etc.

Personal Accident Insurance

Personal accident insurances are not contracts of strict indemnity. After an accident in which the insured person is disabled, it is not practicable to place him in the same financial position in which he was before the accident, since no monetary value can be placed on human life. So, these are fixed benefit policies.

Limitation of Liability of Insurer

- i. The sum insured is the maximum limit of liability under the policy and is always defined in policy.
- ii. If sum insured is less than required the condition of average will be applicable. In such case only that proportion of loss is payable, which the sum insured bears to the market value of the insured property at the time of loss.
- iii. Some policies are subject to “excess” or “franchises”.
- iv. The difference between ‘excess’ and ‘franchise’ should be clearly understood. In either case, if the loss does not reach the limit, it is not payable at all. If it exceeds the limit, the excess only is payable under the ‘excess’ clause and the entire loss is payable under the ‘franchise’ clause
- v. For example, if there are two insurance policies ‘A’ and ‘B’ policy ‘A’ subject to an excess of Rs.1,000/- and policy ‘B’ subject to a franchise of Rs.1,000/-, and if a loss of Rs.500/- is reported under each policy, nothing will be payable under both the policies.
- vi. If however, the loss under each policy was Rs.1,100/-, policy “A’ will pay Rs.100/- only but policy ‘B’ will pay Rs.1,100/-.
- vii. Salvage is property, which is partially damaged, by fire for example, and if the full loss is paid, the insurers may take over the salvage and dispose it off.

2.2.3.1 Subrogation under Policy Conditions

The right of subrogation is implied in all contracts of indemnity and is automatic and without any express condition in contract.

Subrogation may be defined as the transfer of rights and remedies of the insured to the insurer who has indemnified the insured in respect of the loss. If the insured has any rights of action to recover the loss from any third party, who is primarily responsible for the loss, the insurer, having paid the loss, is entitled to avail himself of these rights to recover the loss from the third party. The effect is that the insured does not receive more than the actual amount of his loss and any recovery effected from the third party goes to the benefit of the insurer to reduce the amount of his loss.

The principle may be illustrated by the following example:

If cargo is damaged due to the negligence of a carrier (e.g. railways, truck operators, shipping companies etc.) who has an obligation to make good the loss of the insured, the benefit of this obligation passes to the insurer.

The right of subrogation is implied in all contracts of indemnity, In other words its application to contracts of indemnity is automatic without any express condition in the contract. It arises, however, only after payment of a loss.

Fire and miscellaneous policies contain an express condition to the effect that the right of subrogation can be exercised by the insurer even before payment of a claim. In certain circumstances, it becomes necessary to take action immediately against a third party in order to ensure that the rights of recovery are not prejudiced by any delay.

Marine insurance policies are subject to the doctrine of subrogation, but the policies do not contain any conditions, and the insurers are subrogated to the rights of the insured only after payment of claim.

The IRDA Regulations make specific provisions that the policyholders shall assist the insurer in recovery of claims from other parties.

2.2.3.2 Contribution under Policy Conditions

If an insured takes out more than one policy, say two policies, he can not recover the claim two times, it would amount to making profit, he can recover only one claim from any one of insurance companies, or each company is liable for ratable proportion of claim.

Sum Insured Rs.3,00,000/-	Claim Rs.1,80,000/-	
		<u>Claim</u>
Sum insured with insurer A	Rs. 50,000/- A pays	Rs.30,000/-
Sum insured with insurer B	Rs.1,00,000/- B pays	Rs.60,000/-
Sum insured with insurer C	Rs.1,50,000/- C pays	Rs.90,000/-
	Total Rs.3,00,000/-	Total Rs.1,80,000/-

The application of the principle of contribution is subject to the following pre-requisites.

1. The subject matter must be common to all policies.
2. The peril, which is causing loss, must be common.
3. The interest covered must be the same in all policies, must be in favour of same insured.
4. The policies must be in force at the time of loss.
5. The policies must be legally enforceable.

2.2.4 Proximate Cause

In an insurance contract the claim/loss to the property is payable if it is caused by a peril insured in the policy, similarly if it is caused by uninsured peril it is not payable. If the loss is caused by one peril only it is easy to decide if claim is payable or not. In actual situation the loss may be the result of two or more causes acting simultaneously, or one after the other. It becomes then, necessary to choose the most important, the most effective, and the most powerful cause which has brought about the loss. This cause is termed as the Proximate Cause all other causes being considered as remote.

2.4.1.1 Example

A person insured under a personal accident insurance policy went out hunting and met with an accident. Due to shock and weakness, he was not able to walk, while lying on the wet ground he contracted cold, which developed into pneumonia, which caused his death.

The court held that the proximate cause was accident covered in the policy and the remote cause was pneumonia, hence claim was payable.

2.4.1.2 Example

A person was covered under personal accident insurance policy. He suffered accidental injuries and was taken to hospital. While undergoing treatment he contracted an infectious disease, which caused his death. The court held that the proximate cause of death was infectious disease and the remote cause was accident. Hence the claim was not payable under personal accident policy.

The proximate cause or theory of cause proxima enables one to decide which one is remote cause and which one is proximate cause. If there are more than one cause or concurrent causes theory of cause proxima must be used.

UNIT – 3

FIRE AND SPECIAL PERILS INSURANCE

INTRODUCTION

Fire insurance offers financial protection against property damage due to fire or specified special perils.

3.1 Subject Matter Insured – Examples of Insurable Property

- Building.
- Electrical installation.
- Contents of building (plant & machinery, equipment, accessories)
- Goods in open/storage in building, Raw material, in process, semi finished, finished, packing materials,
- Utility, boiler, water treatment plant, sub-station, pump-house
- Furniture, fixtures, fittings,
- Pipelines (including content), inside/outside premises.
- Contents in dwelling, shops, hotels etc.

The standard fire and special perils policy covers the following perils:

The perils specified in the policy are -

1. Fire

Excluding destruction or damage caused to the property insured by -

- (a) (i) its own fermentation, natural heating or spontaneous combustion.
- (ii) its undergoing any heating or drying process.
- (b) Burning of property insured by order of any Public Authority:

Note: Spontaneous Combustion can be covered at extra premium

2. Lightning

3. Explosion / Implosion

Explosion / Implosion cover excludes loss, destruction of or damage.

- (a) To boilers (other than domestic boilers) or their contents resulting from their own explosion / implosion.
- (b) Caused by centrifugal forces.

Note: This risk be covered by Boiler Explosion policy in Engineering Insurance

4. Aircraft Damage

Destruction or damage caused by Aircraft, other aerial or space devices and articles dropped there from excluding those caused by pressure waves.

5. Riot, Strike and Malicious Damage

Loss of or visible physical damage or destruction by external violent means directly caused to the property insured by riot, strike, and malicious damage.

Terrorism damage exclusion warranty:

Notwithstanding any provision to the contrary within this insurance it is agreed that this insurance excludes loss. Damage cost or expense directly or indirectly caused by, any act of terrorism.

For the purpose of this endorsement an act of terrorism means an act, including but not limited to the use of force or violence and / or the threat thereof, of any person or group(s) of persons whether acting along or on behalf of or in connection with any organization(s) or government(s), committed for political, religious, ideological or similar purpose including the intention to influence any government and / or to put the public, or any section of the public in fear.

Terrorism cover

When the insured opts for Terrorism Damage cover by paying additional premium as provided, cover will be granted by attaching an endorsement:

Terrorism cover will be a separate cover which can be granted only in conjunction with Riot, Strike and Malicious Damage cover (RSMD), Terrorism cover will not be given in isolation without RSMD cover.

Deductibles

Every claim under terrorism cover will be subject to a deductible as under:

Industrial Risks: 0.5% of Total Sum Insured subject to a minimum of Rs.1 Lakh.

Non-industrial Risks: 0.5% of Total Sum Insured subject to a minimum of Rs.25,000/-

6. Storm, Cyclone, Typhoon, Tempest, Hurricane, Tornado, Flood and Inundation

The natural perils cover is defined as :

Loss, destruction or damage directly caused by Storm, Cyclone, Typhoon, Tempest, Hurricane, Tornado, Flood or Inundation excluding those resulting from earthquake, volcanic eruption or other convulsions of nature (wherever earthquake cover is given as an “add cover” the words “ excluding those resulting form earthquake, volcanic eruption or other convulsions of nature” shall stand deleted.)

7. Impact Damage

Loss or visible physical damage or destruction caused to the property insured due to impact by any Rail / Road vehicle or animal by direct contact not belonging to or owned by –

- (a) The insured or any occupier of the premises or
- (b) Their employees while acting in the course of their employment.

8. Subsidence and Landslide including Rockslide

“Loss, destruction or damage directly caused by subsidence of part of the site on which the property stands or Landslide/Rockslide excluding....”

- (a) The normal cracking, settlement or bedding down of new structures
- (b) Demolition, construction, structural alterations or repair of property or ground works or excavations.

9. Bursting and/or Overflowing of Water Tanks, Apparatus and Pipes

10. Missile Testing Operations

11. Accidental Leakage from Automatic Sprinkler Installations

12. Bush Fire

Excluding destruction or damage caused by forest Fire.

3.2 General Exclusions

This policy does not cover –

- (a) The first 5% of each and every claim subject to a minimum of Rs.10,000/- in respect of each and every loss arising out of “Act of God” perils such as Lightning, STFI, Subsidence, Land slide and Rockslide.
- (b) The first Rs.10,000/- for each and every loss arising out of other perils (the excess is not applicable to dwellings).
- (c) Loss, destruction or damage caused by war, and kindred perils.
- (d) Loss, destruction or damage directly or indirectly caused to the property insured by nuclear peril.
- (e) Loss destruction or damage caused to the insured property by pollution or contamination excluding -
 - (i) Pollution or contamination which itself results form a peril hereby insured against.
 - (ii) Any peril hereby insured against which itself results from pollution or contamination.
- (f) Loss, destruction or damage to bullion or unset precious stones, curios or works of art for an amount exceeding Rs.10,000/- manuscripts, plans, drawings, stamps, coins or paper money, cheques, books of accounts or other business books, computer systems records, explosives etc. Unless otherwise expressly stated in the policy.
- (g) Loss, destruction or damage to the stock in cold storage premises caused by change of temperature.
- (h) Loss, destruction, or damage to any electrical machine, apparatus, fixture or fitting arising from or occasioned by over-running, excessive pressure, short circuiting, arcing, self-heating or leakage of electricity from whatever cause (lightning included) provided that this exclusion shall apply only to the particular electrical machine, apparatus, fixture or fitting so affected an not to other machines, apparatus, fixture of fitting which may be destroyed or damaged by fire so set up.

This is known as “electrical Risks” exclusion. These risks can be covered under Machinery Insurance policy (Engineering Insurance).

It is to be noted that only damage to the particular electric machine, etc by specified electrical risks is excluded; but resulting fire damage to other machines, etc is covered.

- (i) Expenses incurred on
 - (a) Architects, Surveyors and Consulting Engineer's Fees; and
 - (b) Debris Removal necessarily incurred by the insured following a loss destruction or damage to the property insured by an insured perils in excess of 3% and 1% of the clam amount respectively.

Note: Cover for expenses in excess of 3% and 1% can be arranged by endorsement

The other exclusions under the policy are –

- (a) Loss or damage by spoilage from the interruption of any process caused by any of the perils covered.
- (b) Loss or damage by earthquake.
- (c) Loss or damage to insured property if removed to any building or place other than the insured premises (except machinery temporarily removed for repairs etc for a period not exceeding 60 days)
- (d) Theft during or after the occurrence of any insured perils.

Note: Add-on cover is available for (a), (b), and (c)

3.3 Sum Insured

3.3.1 Market value basis/depreciated value basis which is arrived at by deducting, depreciation from its present day replacement value.

3.3.2 Reinstatement value basis, which is arrived at by reinstating the property with same kind or type by new property.

3.4 Period of Insurance

3.4.1 Usually 12 months, expires at mid-night on last day.

3.4.2 The policy can be taken for short period by paying short period rate.

3.5 Premium Rate

Premium rate depends on following:

1. Nature of industry
2. Nature of storage in open/inside building etc.
3. Nature of property
4. Nature of operation/construction/processing etc.
5. Nature of segregation of property etc.

3.6 Policy Conditions

- 3.8.1 Refers to misrepresentation, misdescription or non-disclosure of material facts. In such event the policy becomes voidable.
- 3.8.2 Refers policy ceases after 7days from the date of fall or displacement of any building or part thereof. Insurer can continue on revised terms.
- 3.8.3 Refers to discontinuing risk, if there is any change in risk insured must inform insurer.
- 3.8.4 If there is concurrent marine policy claim will be preferred in marine and then under fire.
- 3.8.5 Cancellation of policy by insured on short period basis of premium rates, cancellation of policy by insurer on pro rata basis of premium rates.
- 3.8.6 Refers to duty of insured after happening of claim, notice of claim, 15days to file claim details, of other insurances going to court, arbitration, etc.
- 3.8.7 Refers to rights of insurers after the happening of claim, this does mean that insured cannot abandon damaged property, whether the insurers takes possession or not.
- 3.8.8 Refers to fraudulent false, claim willful negligence, etc all benefits will be forfeited.
- 3.8.9 Refers to option available to the Insurance Company to reinstate or replace instead of paying claim, i.e. when insured prefers highly exaggerated claim.
- 3.8.10 Refers to condition of average, when sum insured selected in policy is lower than its value. This is the condition of average. An insured is expected to insure his property for its full value. In the event of claim if it is found that he has not covered the property for its full value, then he has to bear a portion of the claim on his own account.

Example

Value of property	=	Rs.2,00,000/-
Sum insured	=	Rs.1,50,000/-
Loss	=	Rs.80,000/-
The amount payable =		$\frac{1,50,000}{2,00,000} \times 80,000 = \text{Rs.}60,000/-$

3.8.11 Refers to condition of contribution, i.e. risk covered in more than one policy.

3.8.12 Refers to condition of subrogation, i.e. if third party is responsible for causing damage.

3.8.13 Refers to provision for arbitration.

3.8.14 Refers to all communication to insurers in writing or printed.

3.8.15 Refers to re-instatement of sum insured i.e. after the claim is Settled the sum insured is required to be reinstated by paying premium.

3.7 Extensions (Add on covers)

1. Architects fees in excess of 3.0%
2. Debris removal expenses in excess of 1.0% of claim amount
3. Deterioration of stocks in cold storage premises due to temperature rise
4. Spontaneous combustion
5. Forest fire
6. Impact damage
7. Omission to insure, additions alterations or extensions
8. Earthquake (shock and fire)
9. Spoilage material damage cover under a separate item in the policy
10. Temporary removal
11. Loss of rent
12. Start up expenses
13. Escalation clause

Escalation clause:

This clause, applicable to policies on buildings, machinery and accessories only, can be incorporated in policies on payment of additional premium.

The clause allows automatic regular increase, not exceeding 25% in the Sum Insured throughout the period of the policy. The automatic increase operates from the date of inception up to the date of occurrence of any of the insured perils. Pro rata condition of average will apply as usual.

3.8 Special Policies

1. Floater Policy

These policies cover stock at various specific locations under one sum insured. The insured may have stocks in two or more godowns, He is able to declare for insurance the total value of goods in all godowns but not separate values for each godown.

Unspecified locations are not allowed. Similarly, in a manufacturing risk, the stocks in the process blocks, godowns and /or in the open can be covered under one sum insured

2. Declaration Policies

To take care of frequent fluctuations in stocks / stock values, Declaration policy(ies) can be granted subject to the following conditions.

The policy is issued for a sum insured selected by the insured (Insurers stipulate a minimum Sum Insured).

- a. Monthly declarations based on the average of the value at risk on each day or highest value on any day of the month shall be submitted by the insured. If declarations are not received within the specified period, the full Sum Insured under the policy shall be deemed to have been declared.
- b. Refund of premium on adjustment based on the declaration / cancellation shall not exceed 50% of the total premium.

Illustration

Sum Insured	Rs.1,00,00,000 (1 crore)
Rate	Re.1/- per mille
Premium	Rs.10,000/-

Monthly declaration:

January	52,00,000
February	56,00,000
March	46,00,000
April	46,00,000
May	30,00,000
June	30,00,000
July	30,00,000

August	30,00,000
September	40,00,000
October	40,00,000
November	40,00,000
December	40,00,000
Total Declaration	----- Rs.4,80,00,000/-
Average Sum Insured	Rs.40,00,000/-
Premium	Rs.10,00,000/-
Premium on average S.I.	<u>Rs.4,000</u>
	Rs.6,000

According to rules above refund cannot exceed 50% of the total premium. Therefore, refund is Rs.5,000/- and not Rs.6,000/-

2. Reinstatement Value Policy

This is the fire policy with the reinstatement value clause attached to it. The clause provides that in the event of loss, the amount payable is the cost of reinstating property of the same kind or type, by new property.

This basis of settlement differs from the basis under the fire policy where the losses are settled on the basis of market value i.e. making deductions for depreciation, etc.

The reinstatement value clause incorporates the following special provisions:

- (a) Reinstatement must be carried out by the insured and completed within 12 months after the destruction of damage, failing which the loss will be settled on the normal indemnity basis i.e. according to the fire policy.
- (b) The reinstatement basis of settlement will not apply.
 - If the insured fails to intimate to the insurer within 6 months or any extended time his intention to replace the damaged property.
 - If the insured is unable or unwilling to replace the damaged property. In such cases the loss will be settled on the normal basis of indemnity.
- (c) The work of reinstatement may be carried out upon another site and in any manner required by the insured provided the liability under the policy is not thereby increased.

These insurances are granted to insured whose bonafide are satisfactory and, are generally issued only in respect of building, plant and machinery in a comparatively new condition.

These insurances are not granted on stocks.

3. Industrial All Risks Policy

This is package cover designed for industrial risks (both manufacturing and storage facilities) with an overall sum assured of Rs.100 crores and above. The policy provides cover for the following:

- Fire and special perils
- Burglary
- Machinery Breakdown / Boiler Explosion / electronic equipment (Material Damage)
- Business Interruption (Fire & allied perils)
- Business Interruption (machinery Breakdown). This is an optional cover.

Discounts in rates are provided. Under insurance of up to 15% is permitted. Apart from the reduced costs of premium, there is administrative convenience both for the insured and the insurer.

3.9 Consequential Loss (Fire) Insurance

Fire insurance is designed to provide protection in respect of loss of or damage to buildings, machinery, furniture and fittings, goods and merchandise, etc. by fire and allied perils. The insurance affords cover for “material damage”. However an indemnity for the “material damage” does not provide complete protection to the insured who may also suffer trading losses due to total or partial stoppage of the business.

The purpose of consequential loss or loss of profit insurance (also known as Business Interruption Insurance) is therefore, to make good these losses, namely net profit, standing charges and increased cost of working.

Turnover of a business consists of the following elements:

(a) Variable Charges:

These are expenses incurred in producing the goods (e.g. purchase of raw materials, wages, etc.)

(b) Standing Charges:

These expenses are fixed in amount irrespective of the volume of the business transacted (e.g. taxes, bank interest, salaries to permanent staff, etc.)

(c) Net Profit:

This is turnover minus variable and standing charges.

(d) Gross Profit:

Standing charges, and net profit together constitute the gross profit of the business.

Indemnity Period

The profits policy provides indemnity in respect of loss of gross profits during the indemnity period which is selected by the insured. The indemnity period chosen by the insured may vary from 3 months to 3 years.

The indemnity period is to be distinguished from the period of insurance which is usually a year; the insured peril must occur during the period of insurance and the indemnity period commences on the date of loss and terminates when the business returns to normal level or on the completion of selected period whichever is earlier.

The Sum Insured

The sum insured is to be fixed by the insured. As the indemnity provided by the consequential loss policy is in respect of loss of gross profits for the indemnity period naturally the sum insured should represent the gross profits of the indemnity period selected. Where the indemnity period is 12 months or less, the sum insured should be the annual amount of the gross profit i.e. the annual amount of the net profit and the insured standing charges. Where the indemnity period is 24 months, the sum insured should represent twice the annual gross profit and so on.

The sum insured is to be computed from the insured's accounts. The standing charges have to be computed from the insured's accounts. The standing charges have to be specified by the insured. Some examples of the standing charges are :-

- Interest on loans, bank overdrafts and debentures, including brokerage on deposits;
- Rent;
- Directors fees and remuneration;
- Legal, auditing and other professional fees and expenses;
- Insurance premiums;
- Advertising and publicity expenses;
- Conveyance, Stationery, Postage, Telephone, Telex, Telegram, Telephone expenses;
- Office and General Establishment expenses;
- Salaries to permanent staff including Employees State Insurance contributions;
- Wages including Employees State Insurance contributions etc.

When Loss becomes Payable

- (a) Fire or other insured peril must occur at the insured premises
- (b) Property used for the business of the insured at the insured premises must be destroyed or damaged and the loss must be admissible in material damage policy.
- (c) The business must be interrupted or interfered with as a consequence.
- (d) The resulting loss is paid in accordance with the provisions of the policy.

Note: A formula is incorporated in the policy to calculate the loss. (This is known as "specification").

Payment of loss under the L.O. P. policy is subject to payment or admission of liability for the loss under the material damage insurance i.e. fire and special perils policy. (This is the material damage clause)

UNIT – 4

CLAIM

- 4.1** The processing and settlement of claims is one of the important functions in an insurance organization. Indeed, the payment of claims may be regarded as the primary service of insurers to the public.

For proper settlement of claims, it is necessary to have a sound basic knowledge of General Law of Contract as applicable to insurance and the special principles of law governing in Insurance contracts. In addition it is necessary to have a thorough knowledge of the terms, conditions and warranties incorporated in the policies as also the loss assessment procedures.

The settlement of claims has to be prompt as well as fair. It is also necessary that the personnel handling claims must have the personal qualities of patience, tact, diplomacy and courtesy.

The settlement of claims involves examination of the loss in relation to the coverage under the policy and compliance with policy conditions and warranties;

The first aspect to be dealt with is whether the loss is within the scope of the policy. The legal doctrine of proximate cause provides guidelines to decide whether the loss is caused by an insured peril or an excepted peril.

The burden of proof, or to use the legal expression, the onus of proof that the loss is within the scope of the policy is upon the insured. However, if the loss is caused by an excepted peril the onus of proof is on the insurer. However, this onus of proof under some policies is shifted back to the insured so that he has also to prove that the loss was not caused by an excepted peril.

The second aspect to be decided is whether the insured has complied with policy conditions, especially conditions which are precedent to liability. These conditions relate to immediate notification of loss to the insurers, submission of proof of cause and extent of loss, providing assistance and cooperation to the insurers in recovering losses from third parties, or others responsible for the loss.

If a breach of condition is alleged, the onus of proving it is on the insurers. If the insurers, after having learnt of breach of conditions, have ignored the breach then they are deemed to have waived their rights and cannot rely upon the breach of condition to repudiate liability.

The third aspect is in respect of compliance with warranties. The survey report would indicate whether or not warranties have been complied with. Insurers, however, take a liberal view when the breach of warranty is purely of a technical nature and is not in any way connected with the cause of loss or the extent of loss.

The fourth aspect relates to the examination of the observance of utmost good faith by the proposer before the conclusion of the contract, and if provided by policy conditions, during the currency of the policy. Especially on the occurrence of a loss the insured is expected to act as if he is uninsured. In other words, he has a duty to take measures to minimize the loss.

The fifth aspect concerns the determination of the amount payable. The amount of loss payable is subject to the sum insured. However, the amount payable will also depend upon the following:

- (i) The extent of the insured's insurable interest in the property affected
- (ii) The value of salvage
- (iii) Application of pro-rata average
- (iv) Deduction for any excess or franchise
- (v) Application of contribution and subrogation conditions

The sixth aspect relates to resolution of disagreement between the insurers and the insured. The majority of property and liability policies incorporate an Arbitration condition to resolve disputes regarding the amount of loss, the liability being admitted under the policy. If question of liability is involved, the matter has to be settled through a court of law. In marine policies there is no arbitration condition.

The final aspect deals with recovery from the third parties under subrogation proceeding and requisite contributions from co-insurers, facultative and treaty reinsures, etc.

4.2 The claims which are dealt with under insurance policies fall into the following categories:

(a) Standard claims:

These are claims which are clearly within the terms and conditions of the policy. Settlement of these claims present no difficulty.

(b) Non-Standard claims:

These are claims where the insured has committed a breach of condition or warranty. The settlement of these claims is considered subject to certain rules and regulations framed by the insurers.

(c) Ex-gratia payments:

These are losses which fall outside the scope of cover under the policy and hence are not payable. However, in very special cases, to avoid hardship to the insured, settlement of these losses is considered as a matter of grace. For example, due to genuine oversight a certain item of property is not included in the insurance although it was the intention of the insured to include it.

Ex-gratia settlements are never made on the basis of the full amount of the loss. A certain percentage only is paid.

Also, such claims are paid “without precedent” so that the insurers do not have an obligation to meet similar claims in future. Although, there is no legal liability to pay for such losses yet the courts have approved of such settlements. In the English case Taunton vs. Royal Insurance Co., the court held that the directors were authorized, for the benefit of the business, under the discretionary powers vested in the managers of a trading concern to pay such losses, the payment being akin to an expenditure upon an advertisement. Thus ex-gratia payments can be justified on grounds of good business policy.

Since the payments are made without admission of legal liability, subrogation rights do not arise under these payments. Where co-insurance is involved the leading office has to consult the co-insurers before deciding on ex-gratia settlement. In any case, ex-gratia payments require the approval of the Boards of Directors of the companies.

4.3 Claim Settlement – Preliminary Procedure

4.3.1 Notice of loss

1. Policy conditions usually provide that the loss be intimated to the insurer immediately. The purpose of an immediate notice is to allow the insurer to investigate a loss at its early stages.
2. Under certain types of policies (e.g. Burglary) notice is also to be given to police authorities. Under Rail transit cargo policies, notice has to be served on the Railway also.

4.3.2 On receipt of intimation of loss or damage insurers check that:

- The policy is in force on the date of occurrence of the loss or damage;
- The loss or damage is by a peril insured by the policy;
- The subject matter affected by the loss is the same as is insured under the policy; and
- Notice of loss has been received without undue delay.

4.3.3 Investigation and assessment of loss

Surveyor will carry out investigation for following Property damaged.
What is the most probable cause of damage?

If property will be repaired/ replaced or combined, no temporary repairs will be permitted; Photographs will be taken as evidence. Surveyor will assess the cost of repairs/replacements and give final assessment.

4.3.4 Survey report

Surveyor may give preliminary/ interim /final report considering status of claim progress. Surveyor may give adjustment of loss in terms of policy conditions. It will include salvage, under insurance, deductibles, parts not payable etc. He must give clear opinion regarding cause of damage and if that is covered in terms of insurance contract. He must give opinion about sum insured of damaged item and its replacement value as on the date of damage.

Insured will submit claim form, photographs and estimate/bills of repairs to surveyors to facilitate the procedure of claim.

4.3.5 Insurer will offer claim settlement along with claim discharge voucher.

4.3.6 Arbitration

If the claim is payable and there is difference of opinion regarding quantum of loss, insured can go for arbitration. If there is difference of opinion regarding cause of damage, the insured can go to court of law within 12 months from date of disclaimer.

4.3.7 Salvage

The parts, which require repairs/replacements will become property of insurer, Surveyors must assign / assess salvage value, which must be deducted from claim amount.

4.3.8 Recoveries

After the claim settlement, the insurers under the law of subrogation are entitled to the rights and remedies of the insured and to recover the paid loss from third party who may be responsible for loss under respective law applicable.

4.3.9 Loss minimization

Surveyors are finding out the cause of damage/accident and therefore they have to suggest the measures of loss minimization in their survey report for avoiding the loss in future.

4.3.10 Reinsurance

If a policy is having reinsurance, then the loss can be recovered from reinsurers. Details may be submitted to reinsurers.

UNIT – 5

EXAMPLES – PRINCIPLES OF CLAIM SETTLEMENT

5.1 Example on Reinstatement Basis

M/s. Adarsh Chemicals had taken a Fire and Special Perils Insurance Policy for their Chemical Plant at Karamsad for the period 01/01/03 to 31/12/03 on Reinstatement value basis as under:

<u>Item</u>	<u>Sum Insured</u>
a. Building	Rs.1,00,00,000/-
b. Plant and Machinery	Rs.3,50,00,000/-
c. Electrical Installation including sub-station	Rs.75,00,000/-
d. Furniture Fixtures and Fittings	Rs.40,00,000/-
e. Stocks and Stocks in Process	Rs.3,00,00,000/-

On 25th February 2003 there was a fire in the plant and they reported the loss to their insurance company. The insurance Company appointed M/s. Arun Dasgupta & Co. as surveyor, who surveyed the loss and submitted their final Survey Report on April 15th, 2003. Following is an extract from the survey report.

1. Fire affected building was partly repaired and replaced and the cost incurred was Rs.12,00,000/- The reinstatement value of the building was found to be Rs.1,20,00,000/- on the date of repair completion/reinstatement.
2. The cost of repairs and replacement of Plant and Machinery affected by the fire was Rs.57,00,000/- net of salvage. The re-instatement value of the plant and machinery was found to be Rs.5,25,00,000/- at the time of reinstatement.
3. Electrical installation was affected by fire to the extent of Rs.8,00,000/- its present re-instatement cost was Rs.1,00,00,000/-
4. Furniture Fixtures and Fittings were affected to the extent of Rs.9,00,000/- by fire and were re-instated by them. The re-instatement value of Furniture Fixtures and Fittings was Rs.60,00,000/- on the date of the loss.

5. Cost of stocks and stocks in process was affected by fire to the extent of Rs.30,00,000/- (market value). The sum insured was adequate.

Insured had incurred a cost of removal of debris of Rs.1,25,000/-

What is amount of claim M/s. Adarsh Chemicals will get from the insurance company?

Compute the loss on reinstatement basis.

SOLUTION

(Assessment on Reinstatement value basis)

A. Building

Repairs to building	Rs.12,00,000/-
Insured value	Rs.1,00,00,000/-
Reinstatement value	Rs.1,20,00,000/-

They are found under insured in the proportion of

$$\frac{1,00,00,000}{1,20,00,000}$$

Therefore claim payable on building will be

$$12,00,000 \times \frac{1,00,00,000}{1,20,00,000} = \text{Rs.10,00,000/-} \quad (\text{A})$$

B. Plant & Machinery

Repairs and replacement of Plant & Machinery	Rs. 57,00,000/-
Insured value of Plant & Machinery	Rs. 3,50,00,000/-
Reinstatement value of Plant & Machinery	Rs. 5,25,00,000/-

They are found under insured in the proportion of

$$\begin{array}{r} 3,50,00,000 \\ \hline 5,25,00,000 \end{array}$$

Therefore claim payable on plant & machinery will be

$$57,00,000 \times \frac{3,50,00,000}{5,25,00,000} = \text{Rs. } 38,00,000/- \quad (\text{B})$$

C. Electrical Installations

Repairs/replacements	Rs. 8,00,000/-
Insured value	Rs. 75,00,000/-
Reinstatement value	Rs. 1,00,00,000/-

They are found under insured in the proportion of

$$\begin{array}{r} 75,00,000 \\ \hline 1,00,00,000 \end{array}$$

Therefore claim payable on electrical installations will be

$$8,00,000 \times \frac{75,00,000}{1,00,00,000} = \text{Rs. } 6,00,000/- \quad (\text{C})$$

D. Furniture, Fixtures and Fittings

Cost of Repairs/replacement	Rs. 9,00,000/-
Insured value	Rs. 40,00,000/-
Reinstatement value	Rs. 60,00,000/-

They are found under insured in the proportion of

40,00,000

60,00,000

Therefore claim payable on furniture, fixtures and fittings will be

$$9,00,000 \times \frac{40,00,000}{60,00,000} = \text{Rs.}6,00,000/- \quad (\text{D})$$

E. Stocks and Stocks in Process

Stocks value affected (market value)	Rs. 30,00,000/-
Insured value (market value basis)	Rs.3,00,00,000/-
(No under insurance)	

Therefore claim payable on stocks will be Rs.30,00,000/- (E)

Therefore total claim will be Rs. A + B + C + D + E

$$= \text{Rs.}10,00,000 + \text{Rs.}38,00,000 + \text{Rs.}6,00,000 + \text{Rs.}6,00,000 + \text{Rs.}30,00,000$$

$$= \text{Rs.}90,00,000/-$$

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Removal of debris claim

As the insured has not covered the ADD ON cover for removal of debris, insured is covered for removal of debris only up to 1.0% of claim amount i.e. Rs.90,000/- and therefore insured will get claim only up to Rs.90,000/- out of their claim for Rs1,25,000/-.

Final claim of insured will be Rs.90,00,000 + Rs.90,000 = Rs.90,90,000/-

An excess of Rs.10,000/- will be further applicable

5.2 Example on Market Value Basis

M/s. Indian Chemicals had taken a Fire and Special Perils Insurance Policy for their Chemical Plant at Vadodara for the period 01/01/05 to 31/12/05 on market value basis as under

<u>Item</u>	<u>Sum Insured</u>
a. Building	Rs.1,00,00,000/-
b. Plant and Machinery	Rs.3,50,00,000/-
c. Electrical Installation including sub-station	Rs.75,00,000/-
d. Furniture Fixtures and Fittings	Rs.40,00,000/-
e. Stocks and Stocks in Process	Rs.3,00,00,000/-

On 25th February 2005 there was a fire in the plant and they reported the loss to their insurance company. The insurance Company appointed M/s. Arun Dasgupta and Co. as surveyor, who surveyed the loss and submitted their final Survey Report on April 15th, 2005.

Following is an extract from the survey report:

1. Fire affected building was partly repaired and replaced and the cost incurred was Rs.12,00,000/-. The reinstatement value of the building was found to be Rs.1,20,00,000/- on the date of repair. Market value was Rs.1,08,00,000/- arrived at by deducting 10% depreciation from RIV on date of damage.
2. The cost of repairs and replacement of Plant and Machinery affected by the fire was Rs.57,00,000/-. The re-instatement value of the plant and machinery was found to be Rs.5,25,00,000/- on the date of damage. Market value was Rs.3,94,00,000/- arrived at by deducting 25% depreciation from RIV on the date of damage.
3. Electrical installation was affected by fire to the extent of Rs.8,00,000/- its present re-instatement cost was Rs.1,00,00,000/- on the date of damage. Market value was Rs.80,00,000/- arrived at by deducting 20% depreciation from RIV on the date of damage.
4. Furniture Fixtures and Fittings were affected to the extent of Rs.9,00,000/- by fire and were re-instated by them. The re-instatement value of Furniture Fixtures and Fittings was Rs.60,00,000/- on the date of the loss, market value was Rs.48,00,000/- arrived at by deducting depreciation of 20% from RIV on the date of damage.

5. Cost of stocks and stocks in process was affected by fire to the extent of Rs.30,00,000/-(market value).

Insured had incurred a cost of removal of debris of Rs.1,25,000/-

What is amount of claim M/s. Indian Chemicals will get from the insurance company? Compute the loss on the market value basis. Assume that fire has taken place after 5 years of operation.

SOLUTION

(Assessment on Market value basis)

A. Building

Repairs to building	Rs.12,00,000/-
Insured value	Rs.1,00,00,000/-
Reinstatement value	Rs.1,20,00,000/-
Less depreciation 10% = Rs.12,00,000/- (at 2% per year or part thereof)	

Therefore market value = Rs.1,08,00,000/-

The insured were found under insured on market value basis and under insurance is applicable as under:

$$10,80,000 \times \frac{1,00,00,000}{1,08,00,000} = \text{Rs.10,00,000/-} \quad (\text{A})$$

B. Plant & Machinery

Cost of Replacements net of salvage	Rs. 57,00,000/-
Insured value	Rs.3,50,00,000/-
Reinstatement value	Rs.5,25,00,000/-

Less depreciation 25% = Rs.1,31,25,000/- (at 5% per year or part thereof for 5 years)

Therefore market value = Rs.3,94,00,000/-

The insured were found under insured on market value basis and under insurance is applicable as under:

$$\begin{array}{rcl}
 & 3,50,00,000 & \\
 42,75,000 \times \frac{\text{-----}}{3,94,00,000} & = & \text{Rs.37,97,589/-} \\
 & \text{Say} & \text{Rs.38,00,000/-} \quad (\text{B})
 \end{array}$$

C. Electrical Installations

Cost of Reinstatement by repairs/replacements	Rs. 8,00,000/-
Insured value	Rs. 75,00,000/-
Reinstatement value	Rs.1,00,00,000/-

Less depreciation 20% = Rs.20,00,000/- (at 4% per year or part thereof for 5 years)

Therefore market value = Rs.80,00,000/-

The insured were found under insured on market value basis and under insurance is applicable as under:

$$\begin{array}{rcl}
 & 75,00,000 & \\
 6,40,000 \times \frac{\text{-----}}{80,00,000} & = & \text{Rs.6,00,000/-} \quad (\text{C})
 \end{array}$$

D. Furniture, Fixtures and Fittings

Cost of Reinstatement by repairs/replacement	Rs.9,00,000/-
Insured value	Rs.40,00,000/-
Reinstatement value	Rs.60,00,000/-

Less depreciation 20% = Rs.20,00,000/-

Therefore market value = Rs.80,00,000/-

The insured were found under insured on market value basis and under insurance is applicable as under:

$$7,20,000 \times \frac{40,00,000}{48,00,000} = \text{Rs.}6,00,000/- \quad (\text{D})$$

E. Stocks and Stocks in Process

Stocks value affected (market value)	Rs. 30,00,000/-
Insured value (market value basis)	Rs.3,00,00,000/-
Total market value - fully insured	Rs.3,00,00,000/-

The insured were adequately covered and they get their claim in full for
Rs.30,00,000/- (E)

Therefore total claim will be Rs. A + B + C + D + E

$$= \text{Rs.}10,00,000 + \text{Rs.}38,00,000 + \text{Rs.}6,00,000 + \text{Rs.}6,00,000 + \text{Rs.}30,00,000$$

$$= \text{Rs.}90,00,000/-$$

=====

Removal of debris claim

As the insured has not covered the ADD ON cover for removal of debris, their claim is covered in the policy to the extent of 1% of claim amount = Rs.90,000/- out of Rs.1,25,000/-.

Final claim on Market Value

Insured will get total claim of Rs.90,00,000 + Rs.90,000 = Rs.90,90,000/-

An excess of Rs.10,000/- will be further applicable

5.3 Guiding Principles of Claim Settlement

1. Insured must have insurable interest in property damage at the time of claim.
2. There must be insurance contract and property should be damaged by perils covered in the policy, (claim is admissible) if damage is caused by more than one peril use principle of proximate cause and arrive at efficient, powerful, effective cause.
3. Surveyor must assess the claim after physical inspection of damaged property, observe the principle of indemnity and observe the basis of claim settlement provided in the policy.
4. Surveyor must list out the damaged parts and assess the salvage value of damaged parts, if insured wants to retain damaged parts as emergency spares, surveyor should give proper comment on the same.
5. If the damage is caused, for which third party is responsible the subrogation rights must be reserved for insurer.
6. If the property insured is covered with more than one insurance company the condition of contribution must be observed.
7. If the cause of damage is not clear, surveyor must resort to laboratory testing and try to find the most probable cause of damage.
8. If there is breach of any warranty surveyor must bring it to the notice of insurer and insured.
9. If there is any difference of opinion, surveyor must consult insurer and appoint technical expert.

UNIT – 6

OBLIGATIONS AND RIGHTS OF INSURER AND INSURED

6.0 OBLIGATIONS AND RIGHTS OF INSURER & INSURED, DUTIES OF THE INSURER AND THE INSURED

All insurance policies impose certain duties on the insured. Some of the duties are supplemented by the common law, state statutes and regulations. Similarly the duties of the insurer are implied by insurance contracts and it is strengthened by Protection of Policyholders' Interest Regulations framed by Insurance Regulatory and Development Authority of India.

6.1 The rights, duties and obligations of the Insured are briefed below.

1. Obligation to pay the premium to purchase the insurance policy, to examine the policy and to decide the exercise of free look period as allowed by the policy.
2. Duty to observe utmost good faith while purchasing the policy and throughout the policy period. The misrepresentation can void a policy. This is the application of honesty.
3. To act/ behave as if uninsured and take all reasonable steps to protect the subject matter. If it is discovered that the insured is behaving recklessly or in a way that could invite the loss or increase the loss or liability, the claim will be prejudice.
4. Duty to notify the loss or claim to the insurer. The policy condition provides the time limit (normally forthwith) for claim intimation and also for other compliance.
5. To notify all material facts concerning to the incident and the loss or underlying claim.
6. To provide proof of loss and required documents.
7. The duty to cooperate with the insurer and the surveyor.
8. The duty requiring the insurer's consent for incurring the defence cost.
9. In case of property damage claim, the duty to take all reasonable and necessary steps to prevent further damage after the loss.
10. Duty and obligation to protect the rights of subrogation. When the Insured has a right of recovery from the third party who is responsible for the loss, the insured has to take all steps to protect the right of recovery and to subrogate his right to the insurance company as per the policy condition and common law.
11. Right of indemnification i.e. right to receive the claim as per the terms, coverage, limitations and compliance of the policy.

6.2 The rights, duties and obligations of the Insurer are briefed below.

1. It is the duty of the insurer to ensure that
 - a. Interest of the insurance policy holders (insured) is protected.
 - b. Insurer, distribution channels and other regulated entities fulfil their obligations towards policyholders and have in place standard procedures and best practices in sale and services of insurance policies.
 - c. Policy holders-centric governance by insurer with emphasis on grievance redressal.
2. Duty to defend the Insured. It is insurer's obligation to provide an insured with defense to claim made under a liability insurance policy.
3. Duty to gain the insured's cooperation. It is the duty of the insurer to maintain good relationship with the insured. Each party must be able to rely on one another and abide by the guidelines of their end.
4. The duty of good faith and fair dealing. The insurer owes a duty to deal fairly and in good faith with its insured. The duty at the time of entering contract is to provide all details of coverage. The timely issuance of policy. Fair dealing and supporting at the time of claim.
5. The duty to settle the claims/pay benefits. Insurer should be careful to make settlement offers based on a realistic evaluation of the covered exposure. Once the insured contingency/accident happens and the damages have been reviewed, if it is found that the claim qualifies based on the benefits, time periods and exclusions given in the policy, it is the duty of the insurer to pay for it.
6. In case the claim is not admissible, it is the duty of the insurer to inform the insured giving reasons.
7. Privacy protection. It is the duty of the insured to protect the privacy of the insured.
8. It is the duty of insurer to adopt all required measures for the assessment of the risk and fixing the premium. The premium should be as per the associated risk.
9. Reserve for policy. It is the duty of the insurance company to set a side certain amount of income/premium for policy reserve. This will ensure the obedience of their commitment to pay the claim.

FOR DETAIL STUDY REFERANCE-
INSURANCE POLICY
COMMON LAWS AND PRINCIPLES OF INSURANCE
IRDAI NOTIFICATION. PROTECTION OF POLICYHOLDERS' INTEREST.

SUPPLEMENTARY READING (from PME guidelines 2015)

(A) **Fire Insurance Policy** is a contract of indemnity with a view to place the Insured in same or similar pre-damage position. Thus, at the time of loss or destruction of any used asset, the insured is able to obtain a depreciated value by way of a claim from the Insurers which is value as new at the time of damage less depreciation for the use made over the years of usage. The quantum of depreciation provided in the books of account is not of any consequence; as such depreciation is charged on the original cost (purchase price) and moreover repairs and maintenance carried out by the owner is not reflected in the depreciation calculation. The value as new at the time of damage, due to price rise and inflation is much higher than the original cost.

Further, the amount of depreciation charged in the account books is never kept aside in cash form or separately funded and is used up in the industrial operation or expansion, i.e., either in working funds or in capital assets. As a result, the insured had to find a fresh flow of funds to reinstate the destroyed assets to the extent of the depreciation deducted in the claim. If there is any under-insurance, the proportionate loss is borne by the insured and the amount of depreciation together in aggregate would be the fresh funds requirement. In the absence of such funds availability, the insured would normally be forced to give up the rehabilitation or replacement of the destroyed asset. This is the drawback of market value policy.

Keeping the above factors in mind and to meet the varying needs of different types of industries and trade, special types of policies have been designed with certain changes in the basis of indemnity under fire insurance policy by providing **variations to Principle of Indemnity**. The **Reinstatement Value (RIV)** is one of such variations. RIV policy is discussed in detail later.

(B) Insurance valuation under Indian context

(i) Contract of insurance

All insurance contracts are inter alia contracts of indemnity except personal accident, i.e. the Insurer undertakes to place the Insured in the same position before the damage subject to adequate sum insured and subject to policy conditions, clauses, warranties.

(ii) Fire insurance covers

The standard fire and special perils policy covers fire and allied perils like:-

- Fire
- Lightning
- Explosion / Implosion
- Aircraft damage
- Riot, strike, malicious damage
- Storm, cyclone, typhoon, tempest, hurricane, tornado, flood and inundation
- Impact damage
- Subsidence and landslide including rock slide
- Bursting and/or overflowing of water tanks, apparatus and pipes
- Missile testing operations
- Leakage from automatic sprinkler installations
- Bush fire

The above policy also covers following costs:-

- Architects' consultants' and surveyors' fee up to 3% of admissible claim amount
- Debris removal up to 1% of admissible claim amount

The cost for Architects' fee (above 3%) and debris removal (above 1%) can be insured at additional premium.

Earthquake and terrorism damage are not included in the standard policy referred above. However, an add-on cover for these can be taken separately as add on covers at extra premium.

- (iii) In case of sum insured for building, machinery and stock exceeds ` 100 crores **Industrial All Risk Policy (IAR)** can be availed. Now in de-tariffed scenario the limit of ` 100 crores is relaxed and many insurers are giving IAR cover for sum insured of ` 50 crores. This policy covers fire and all special perils including flood, earthquake, burglary, machinery break-down, boiler explosion and electronic equipment insurance. The policy covers business interruption (fire & special perils) i.e. fire loss of profit cover. The policy provides option to cover business interruption due to machinery break-down i.e. machinery break-down loss of profit. The amount of ` 50 crores or any limit for IAR fixed by the insurer is not limited to one location but for any number of locations in India under single ownership.

The advantages of this policy are:-

- It includes covers for earthquake, burglary, machinery break-down, boiler explosion & electronic equipment.
- Lower rate of premium
- Machinery break-down risk is covered on single sum insured i.e. total value of plant and machinery in a plant and it is not required to specify each & every machinery with its value/sum insured.

(C) Indemnity

(i) Principle of indemnity:

Indemnity is compensation for actual material loss or damage sustained due to an insured peril. The indemnity is to secure against loss or damage and make good the loss as per policy terms and conditions. It is imperative to bear in mind that fire insurance contract is a contract of indemnity.

Insurers undertake to place the insured after the loss due to an insured peril in the same financial position as he was before the loss, neither better nor worse; profit of any kind out of insurance taken is not permissible under a fire policy. If it was possible to derive profit, abuse and malpractices would result.

Lord Mansfield states in a judgement as under:

“Fire Insurance was considered as an indemnity only, in case of a loss; and therefore the satisfaction ought not to exceed the loss. The rule of indemnity was calculated to prevent fraud, lest the temptation of gain should occasion unfair and willful losses”.

That a contract of fire insurance is one of indemnity cannot be too strongly emphasized. A contract of fire insurance is fundamentally one of indemnity, since its object is to make good, within the limits of the amount of insurance, and subject to terms and conditions of the policy, the actual loss sustained and nothing more.

(ii) Insurable interest

It is necessary for the insured to have insurable interest in the insured property at time of loss in order to observe the principle of indemnity. Policy does not only insure property itself, but also the insured's interest in the property and measurement of loss is the extent of such interest in property damaged or destroyed by an insured peril.

The following items constitute insurable interest –

- * Existence of a property capable of being damaged or destroyed by fire or an insured peril.
- * Such property should be the subject matter of insurance.
- * The proposer must stand in some legal relationship with this object, whereby he benefits by its safety or be prejudiced by its loss. Mere expectancy of interest is not sufficient.

(D) Utmost Good Faith

In addition to the general law of contract, the insurance contract is also subject to certain special principles under common law like utmost good faith.

In insurance contracts, the legal doctrine of “utmost good faith” applies. This casts on the insured, the positive duty to disclose all material facts which have bearing on the insurance. A breach of this duty may make the contract void or voidable depending upon the nature of the breach.

Material facts are those which would influence a prudent insurer in his decision as to acceptance of insurance or in fixing premium, and terms and conditions of acceptance.

Duty of disclosures continues throughout preliminary negotiations leading up to the contract, but ceases when contract is complete. It applies again at renewal which is tantamount to making a fresh contract and the insured should make necessary disclosure of any new material fact.

Over and above utmost good faith Insurable Interest and Indemnity also apply in insurance contracts.

(E) Various add on covers/clauses are available and for each such cover there are applicable clauses. However, for valuer's and insured's point of view the following add on covers/clauses are important:

- (i) Add on cover for omission to insure additions, alterations or extensions
- (ii) Add on cover for start-up expenses
- (iii) Designation of property clause
- (iv) Reinstatement Value clause
- (i) Local authorities' clause
- (vi) Escalation clause
- (vii) Architects', Surveyors' and Consulting Engineers' fees (up to 3% of the admissible claim amount) clause
- (viii) Removal of debris clause (up to 1% of the admissible claim amount)

Explanation to above add on covers/clauses

(i) Add on cover for omission to insure additions, alterations or extensions clause (this is to be incorporated if opted at additional premium)

"The Insurance by this policy extends to cover buildings and / or machinery, plant and other contents as defined in columns ... hereof which the insured may erect or acquire or for which they may become responsible -

- (a) at the within described premises,
- (b) for use as factories.

- * The liability under this extension shall not exceed in respect of (a) above, 5% of the sum insured by each item, in respect of (b) above, 5% of the sum insured by item No.(---).
- * The insured shall notify the insurer of each additional insurance as soon as it shall come to their knowledge and shall pay the appropriate additional premium thereon from the date of inception.
- * Following the advice of any additional insurance as aforesaid, cover by this extension shall be fully reinstated.
- * No liability shall attach to the insurers in respect of any building, machinery, plant or other contents while such property is otherwise insured."

N.B.

- * All new additions to building and/or machinery and plant not specifically insured/included during the currency of the policy should be declared at the end of the year and suitable additional premium paid on *pro rata* basis from the date of completion of the construction/erection of additions subject to adjustment against the advance premium collected.
- * If the insured fails to declare the values of such additions within 30 days after the expiry of the policy, there shall be no refund of the advance premium collected.
- * “Other contents” in the above clause shall mean ‘furniture and fittings’ and does not include stocks.

(ii) Add on cover for Start-up expenses (this is to be incorporated if opted at additional premium)

“It is hereby agreed and declared that this policy extends to cover start-up costs necessarily and reasonably incurred by the insured consequent upon a loss or damage covered by this policy.”

A separate sum insured may be mentioned for this clause if included.

(iii) Designation of property clause

“For the purpose of determining, where necessary, the item under which any property is insured, the insurers agree to accept the designation under which the property has been entered in the insured’s books.”

(iv) Reinstatement Value Clause/Policy (if reinstatement basis is opted):

This extension of cover is usually granted on buildings, machinery, furniture, fixtures and fittings only. It is not granted for stocks in trade or merchandise.

To safeguard and uphold the principle of indemnity, it is provided that Reinstatement Value Clause shall have no effect, if the insured fails to replace or reinstate the property damaged or destroyed, or the insured is unwilling to replace or reinstate the property destroyed or damaged on the same or another site.

Reinstatement Value Clause reads as under:

“ It is hereby declared and agreed that in the event of the property insured under (Item Nos.____) of the within policy being destroyed or damaged, the basis upon which the amount payable under (each of the said items of) the policy is to be calculated, shall be the cost of replacing or reinstating on the same site or any other site with property of the same kind or type but not superior to or more extensive than the insured property when new as on date of the loss, subject to the following Special Provisions and subject also to the terms and conditions of the policy except in so far as the same may be varied hereby.”

Special Provisions

* The work of the replacement or reinstatement (which may be carried out upon another site and in any manner suitable to the requirements of the insured subject to the liability of the Company not being thereby increased) must be commenced and carried out with reasonable dispatch and in any case must be completed within 12 months after the destruction or damage or within such further time as the company may (during the said 12 months) in writing allow, otherwise no payment beyond the amount which would have been payable under the policy if this memorandum had not been incorporated therein shall be made.

* Until expenditure has been incurred by the insured in replacing or reinstating the property destroyed or damaged, the company shall not be liable for any payment in excess of the amount which would have been payable under the policy if this memorandum had not been incorporated therein.

* If at the time of replacement or reinstatement the sum insured representing the cost which would have been incurred in replacement or reinstatement if the whole of the property covered had been destroyed, exceeds the sum insured thereon at the operation of any of the insured perils or at the commencement of any destruction of or damage to such property by any other peril insured against by this policy, then the insured shall be considered as being his own insurer for the excess and shall bear a rateable proportion of the loss accordingly. Each item of the policy (if more than one) to which this Memorandum applies shall be separately subject to the foregoing provision.

This Memorandum shall be without force or effect if -

*“the insured fails to intimate to the company within 6 months from the date of destruction or damage or such further time at the Company may in writing allow, his intention to replace or reinstate the property destroyed or damaged.

*the insured is unable or unwilling to replace or reinstate the property destroyed or damaged on the same or another site”.

(v) Important considerations / variations etc.

- (a)** Valuation of plant for fire insurance purpose is the estimation of possible financial loss by reference to machinery of comparable output, productivity and quality at a given point of time, seen in the background of policy terms and conditions. Valuation is carried out to decide the “Value at Risk” of plant.

This is the maximum possible loss of value of a physical asset measured against policy terms and conditions. Reinstatement Value is the amount payable under the policy to be calculated and shall be the cost of replacing or reinstating on the same site or any other site with property of the same kind or type but not superior to or more extensive than the insured property when new as on date of loss. It is a standard provision of insurance policies that in the event of the loss the insured will take all reasonable steps to minimize his loss. It is common for the insured to attempt to replace the plant as quickly as may be prudent in order to minimize any loss of turnover to the business and goodwill of his added advantage of minimizing any loss-of-profit claim on insurers if such insurance is there.

Reinstatement Value is inclusive of machinery foundation. So, while instructing insurer it should be made clear in writing that the plant and machinery are insured inclusive of their foundations.

(b) The important variations which flow from the Insurer's Reinstatement Value clause compared to the Market Value (Depreciated Value) policy are set out hereafter.

(i) Damaged / destroyed / irreparable property to be replaced by new property of "the same kind or type but not superior to or more extensive than the insured property" and the monetary claim to be **allowed on value as new basis without deducting depreciation.**

For damage to repairable property, the full cost of repairs including replacement of parts would be payable without deduction of any depreciation, subject to the repairs / replacement of parts are of the "same kind or type."

(ii) Such monetary claim is to be paid only after actual repairs / replacement of parts / reinstatement has been completed and then payment shall be made for claims made by the insurer, as per terms and conditions of relevant policy.

(iii) The important aspects to be borne in mind by the insured are set out hereafter.

- a. The insured has the option to reinstate or not and the said option has to be exercised within 6 months of the damage or any further time limit which may be allowed by the insurer in writing.
- b. The reinstatement may be done at the same site or at any other site.
- c. The reinstatement has to be completed within 12 months of the date of damage. Extension of time, may be allowed by the insurer.
- d. To obtain full coverage and claims, the sum insured has to be adequate to cover the value of insured property **at the time of reinstatement of the damage.**

(iv) To get full advantage of maintaining an undisturbed cash flow and of getting a new asset against the old asset destroyed, it is abundantly clear that full insurance on RIV basis is absolutely essential.

Example on reinstatement value and condition of average:

A machine was purchased in 2004 for ` 50,000/-. If it is to be replaced today, it will cost say ` 5,00,000/- (a). The physical depreciation for 10 years is say ` 2,25,000/- (b). In this example,

Actual cost (historical cost) = ` 50,000/-

Reinstatement value

(replacement cost) on date of loss or damage

= ` 5,00,000/- (a)

Depreciated replacement cost

(a) – (b) = ` 2,75,000/-

Thus, if the machinery is totally damaged due to an insured peril and is insured for reinstatement, the insured will get a sum of ` 5,00,000/- even if the machine is worth only ` 2,75,000/- in the market at the time of total loss, provided the actual reinstatement of the damaged machinery is accomplished, as per Reinstatement Value Clause.

If it is desired to take benefit of the escalation clause, with 25% escalation, the insurable value will work out to:

$$5,00,000 + \frac{25}{100} \times 5,00,000 = ` 6,25,000/-$$

If there is a total loss during the year, the maximum amount payable to the insured for the reinstatement of the machinery will be ` 6,25,000/- provided reinstatement cost incurred is ` 6,25,000/- and provided the loss has taken place on the last day of the period of insurance. (Please see Escalation clause under paragraph (vi) later). In all such cases, salvage, if any, of the damaged property will always belong to the Insurance Company.

Condition of Average

If the amount of insurance is less than the value of the machinery damaged or destroyed, on the date of damage, due to an insured peril, the condition of average will operate, and the insured will proportionately receive less than the actual loss suffered.

A loss payable as per condition of average is worked out as under:

$$\frac{\text{Sum insured}}{\text{Value of machinery at the time of loss}} \times \text{Loss} = \text{Claim amount payable}$$

- (c) However, the manner in which the **condition of average** is applied with particular reference to the sum insured at the time of damage being required to be equivalent to value as new of the insured property item-wise at the time of reinstatement / reconstruction, to ensure full insurance is a very difficult task. The changing factors of prices, local taxes, excise duty, sales tax, customs duty, and fluctuations in the rate of foreign exchange, makes the task almost impossible. Even if the sum insured is fixed adequately at the time of inception or renewal of the insurance policy, no insured can forecast when the damage will take place during the 12 months period of the policy or the type of loss that will take place or the time or period required for reinstatement. In case of a major catastrophic loss involving special purpose imported machinery, such period of reinstatement could exceed two or three years. Alternatively, in small loss or if required spares are available in stock, the period of repairs / reinstatement may be a week or two or even less. The various factors which build up the cost or value may fluctuate after the loss also leading to more difficulty. Unfortunately there is no provision for adjustment of the Sum Insured after the loss. Escalation takes care of inflation up to policy period. If reinstatement extends beyond expiry of policy there is no remedy available for increase in price from the date of expiry of policy to the completion of reinstatement except to over insure.

How much to over insure will depend on the facts and in the circumstances of each individual case.

In view of the above, it is evident that there is no tailor-made exact solution to the problem of how to determine the Reinstatement Value in advance and this is known and recognized by the insurers world-wide.

(v) Local authority's clause:

Reinstatement value policy can be extended to cover additional cost of reinstatement solely by reason of the necessity to comply with the regulations of local authority by incorporating the following clause in the policy.

“The insurance by this policy extends to include such additional cost of reinstatement of the destroyed or damaged property hereby insured as may be incurred solely by reason of the necessity to comply with the Building (or other) Regulations under or framed in pursuance of any Act of Parliament or with bye-laws of any municipal or local authority provided that :

The amount recoverable under this extension shall not include:

- The cost incurred in complying with any of the aforesaid Regulations or bye-laws,

in respect of destruction or damage occurring prior to the granting of this extension,

- * in respect of destruction or damage not insured by the policy,
- * under which notice has been served upon the insured prior to the happening of the destruction or damage,
- * in respect of undamaged property or undamaged portions of property other than foundations (unless foundations are specifically excluded from the insurance by this policy) of that portion of the property destroyed or damaged.
- * The additional cost that would have been required to make good the property damaged or destroyed to a condition equal to its condition when new had the necessity to comply with any of the aforesaid Regulations or bye-laws not arisen.
- * The amount of any rate, tax, duty, development or other charge or assessment arising out of capital appreciation which may be payable in respect of the property or by the owner thereof by reason of compliance with any of the aforesaid Regulations or bye-laws.
- * The work of reinstatement must be commenced and carried out with reasonable dispatch and in any case must be completed within twelve months after the destruction or damage or within such further time as the insurers may (during the said twelve months) in writing allow and may be carried out wholly or partially upon another site (if the aforesaid Regulations or bye-laws so necessitate) subject to the liability of the insurer under this extension not being thereby increased.

- * If the liability of the insurer under (any item of) the policy apart from this extension shall be reduced by the application of any of the terms and conditions of the policy then the liability of the insurers under this extension (in respect of any such item) shall be reduced in like proportion.
- * The total amount recoverable under any item of the policy shall not exceed the sum insured thereby.
- * All the conditions of the policy except in so far as they may be hereby expressly varied shall apply as if they had been incorporated herein.”

No additional premium is charged for inclusion of this clause in the policy.

(vi) Escalation clause (if opted at additional premium)

“In consideration of the payment of an additional premium amounting to 50% of the premium produced by applying the specified percentage to the first or the annual premium as appropriate on the under noted item(s) the sum(s) insured thereby shall, during the period of insurance, be increased each day by an amount representing 1/365th of the specified percentage increase per annum.

Unless specifically agreed to the contrary the provisions of this clause shall only apply to the sums insured in force at the commencement of each period of insurance.

At each renewal date the insured shall notify the insurers:-

- * The sums to be insured under each item above, but in the absence of such instruction the sums insured by the above items shall be those stated on the policy (as amended by any endorsement effective prior to the aforesaid renewal date) to which shall be added the increases which have accrued under this clause during the period of insurance up to that renewal date.
- * The specified percentage increase(s) required for the forthcoming period of insurance, but in the absence of instructions to the contrary prior to renewal date the existing percentage increase shall apply for the period of insurance from renewal.

All the conditions of the policy in so far as they may be hereby expressly varied shall apply as if they had been incorporated herein.”

It will be in order for insurers to allow automatic regular increase in the Sum Insured throughout the period of the policy in return for an additional premium to be paid in advance. The terms and conditions for this extension are as follows:

- The selected percentage shall not exceed 25% of the sum insured.
- The additional premium, payable in advance, will be at 50% of the final rate, to be charged on the selected percentage increase.
- The sum insured at any point of time would be assessed after application of the Escalation Clause.
- Escalation Clause will apply to policies covering building, machinery and accessories only and will not apply to policies covering stock.
- Escalation Clause will apply to all policies and is not restricted to policies issued on reinstatement value basis.
- Pro rata Condition of Average will continue to apply as usual.
- The automatic increase operates from the date of inception up to the date of operation of any of the insured perils.

(vii) Architects', Surveyors' and Consulting Engineers' fees (up to 3% of the admissible claim amount) clause

"It is hereby declared and understood that the expenses incurred towards Architects', Surveyors' and Consulting Engineers' fees for plans, specifications, tenders, quantities and services in connection with the superintendence of the reinstatement for the building, machinery, accessories and equipment insured under this policy is covered up to 3% of the adjusted loss, but it is understood that this does not include any costs in connection with the preparation of the insured's claim or estimate of loss in the event of damage by insured perils."

The insurers may cover Architects' fees up to further 4.5% in addition to 3% which is already covered under the policy as per above clause subject to appropriate additional premium payable.

(viii) Removal of debris clause (up to 1% of the admissible claim amount)

"It is hereby declared and agreed that the expenses incurred up to 1% of the admissible claim amount is included in the sum insured on:

- (a) removal of debris from the premises of the insured;
- (b) dismantling or demolishing;
- (c) shoring up or propping."

Note: (b) and (c) above should be deleted when neither building nor machinery are covered.

The insurers may cover removal of debris charges for higher amount, over and above 1% up to 10% of sum insured subject to additional premium payable.

(F) Other types of insurance policies

1. Machinery break-down policy:

- a) The Insurance Policy covers “Unforeseen and sudden physical damage” subject to certain exclusions. The insured has the choice to select specific machinery for insurance. While a deductible of 1% of the Sum Insured is common, this can be increased at the insured’s option with a reduction in premium.
- b) The Sum Insured “shall be equal to the cost of reinstatement of the insured property by a new property of the same kind and capacity.” If the item-wise Sum Insured “is less than the amount required to be insured as per above provision, the Company will pay only in such proportion as the Sum Insured bears to the amount required to be insured.
- c) The provisions for settlement of claims are briefly stated hereafter.
 - (i) If the damage can be repaired, then full cost of repairs to restore the machine to pre-damage condition is payable. No depreciation will be deducted on the value of parts replaced unless such parts are of limited life. However, if the cost of repairs exceeds the actual pre-damage value of the property, i.e., depreciated value, settlement of claim will be limited to actual pre-damage value after taking account of salvage.
 - (ii) If the insured property is destroyed, the Insurance Company will settle the claim for actual pre-damage value, i.e., depreciated value, after taking into account value of salvage.
 - (iii) In both the above situations, the Insurance Company will make payments only after being satisfied that the repairs have been effected or replacements have taken place.

- (a) It is evident from the above provisions that the Sum Insured has to be equal to the replacement cost while the maximum settlement of any claim for repairs or replacement would be on the basis of actual value net of depreciation and salvage. Further payment of any claim will be made only after repairs or replacements are carried out.
- (b) The problems of determining the reinstatement value and the Sum Insured are identical to what has been narrated earlier.

(i) Boiler and pressure plant insurance policy:

This policy covers explosion/implosion (including flue gas explosion) and collapse damage to boiler and pressure plants wherein steam is being generated.

G. Illustration on computation of Insurable Value (Hypothetical Case)

Insurable value is based on market value or reinstatement value. Both these values are discussed earlier and out of two, reinstatement value is desirable though premium payable is high but the benefits derived are more in the event of loss.

Computation of reinstatement value of a machine installed in a plant.

The plant manufactures seafood products by cooking / blanching or raw. The raw materials used are sea caught shrimps, cephalopods (Squids, Octopuses and Cuttlefish) and fishes. The aquaculture shrimps are also used as raw material. The product is either individually quick frozen in IQF freezer or block frozen in plate freezer. The product is also semi IQF in the air blast freezer. Ammonia gases are used as refrigerant. The product is stored in the frozen store below -18°C temperature. The finished product is transported in refrigerated container for shipment.

The machine to be insured is located in a plant in Kerala where the company produces IQF and other frozen products in the unit. The capacity of the IQF plant is 3500 TPA with 3 shift operation, Block plant is 3500 TPA and Blast is also 3500 TPA. Current capacity utilization is around 60 to 70% for IQF and Block. The total manpower of the plant is 300 which includes managers, officers, staff and workmen. Pre-processing, cold store and packaging material facilities are created for facilitating better consumer safety.

The product profile of the plant is given below:

- Raw / blanched / cooked IQF shrimps
- Block / blast frozen shrimps
- Raw / blanched / cooked IQF cephalopods
- Block / blast frozen cephalopods
- IQF raw / blanched / cooked sea food mix
- Blast frozen fishes / fish fillet

The process employed by the plant:

- IQF freezing (ammonia refrigeration)
- Plate freezing (ammonia refrigeration)
- Blast freezing (ammonia refrigeration)
- Cooking / blanching through steam generation from non IBR boiler
- Cold storage (ammonia refrigeration)

Valuation procedure

First step is to inspect the machine and collect the data so that the current cost of brand new machine can be estimated and supplier of machine can quote current price without any further query.

The details collected for machine under consideration are as under:

Plant, machinery and equipment to be valued: IQF Hardening – Tunnel

Single belt tunnel for individual quick freezing (hardening) of products.

On a plastic modular belt the product is led past the high velocity airflow called Arctic Flow[®], which blows the air across the belt and past the product and then continuously blows through the evaporator.

The rapid horizontal Arctic Flow[®] and the ultra-low temperature ensure a quick and homogenous freezing within a minimum of time. Thus, ensuring a good quality finished product, with an equalized core temperature of minimum -18° C within a minimum of time.

Features

- Plastic modular belt, suitable for small and large products.
- Belt frame and support, in-feed/outlet and guiding plates are in stainless steel in an open design, to ensure easy cleaning and a long life without corrosion.
- In-and-Out – feed openings are fully covered by 2 x double layer silicon strip curtains to minimize air/moisture entering the cabinet, which prevents frosting built-up on the evaporator and prolongs the time in between defrosting periods.
- Self-adjusting mechanically operated belt tension system to slacken or tighten belt.
- Long durable UHMW polyethylene wears rails on frame and belt support, to ensure long belt life.
- Electrically operated ventilators to ensure optimal air circulation from evaporator to product for quick and uniform freezing.
- Evaporator.
- Fully insulated cabinet made of 125 mm sandwich panels, insulated with polyurethane and plated with 0.6 mm galvanized steel plate, coated with 150 µm white PVC.
- Fully welded stainless steel floor with center mounted gully and hatch for water outlet when defrosting and cleaning.
- The cabinet is equipped with access door mounted with electrical door heaters to prevent ice bounding of panel.
- Additional emergency breakers mounted next to in-feed conveyor and inside cabinet for full personnel security.
- Internal electrical neon lights mounted in ceiling for clear view when freezing, cleaning or maintenance.

Technical data

Cabinet dimension (L x W x H)	
(external)	: 3,900 x 2,300 x 2,700 mm
Belt type	: Plastic modular
Belt width effective/overall	: 850 mm effective, 900 mm
Conveyor length	: 3,600 mm
Belt speed - minutes per cycle:	Adjustable from 2 to 10
No. of belt	: 1
Maximum product height	: 750 mm
Product in-feed height	: 1,100 mm
Product outlet height	: 750 mm
Refrigeration duty to product	: 10 kW
Coolant supply to evaporator	: 15 kW
Suction temperature	: Minus 40 ⁰ C, at evaporator
Air temperature	: Minus 35 ⁰ C
Cooling medium system	: R-717 or R-22 pump
Cooling pump flow rate	: 4-5 times evaporated liquid
Installed fan power	: 3.3 kW
Power supply	: 6 kW
Voltage	: 3 x 380 V 50 Hz
Year of installation	: January, 2013
Date as on which valuation	
is made	: 31 st December, 2014
Gross Book Value	= ` 1,25,00,000/-
Depreciation	= ` 14,25,000/-
Net Book Value	= ` 1,10,75,000/-

The figures indicated in this case are hypothetical.

The identical machine is available from the same manufacturer.

The computation of RIV based on the quotation received is as under:

Particulars	Amount in `	
Ex-works price at manufacturer's site.	1,05,00,000	(a)
C I F (custom duty, insurance and freight)	35,00,000	(b)
Landed cost at Indian port	1,40,00,000	(a) + (b) = (c)
Clearing, forwarding and transit insurance from port to the plant	3,00,000	(d)
Handling charges at plant	50,000	(e)
Costs of foundation, erection and installation	6,50,000	(f)
Total	1,50,00,000	(c) + (d) + (e) + (f)

(a) The insurance policy is for the period of one year.

(b) ` 1,50,00,000/- is value on first day of policy.

(c) Suppose something happens on last day of policy – what about increase in the price from day one to last day. Let us assume that increase in the price is likely to be 10%.

Therefore, insurable value after considering escalation will work out to ` 1,65,00,000/-.

Note: (i) The question of computation of depreciation does not arise as policy recommended is not market value policy but reinstatement value policy (RIV).

- (ii) Even if the policy is taken at ` 1,65,00,000/- based on scientific valuation carried out by the valuer, the insurance company will issue RIV policy and collect premium on the basis of ` 1,65,00,000/- but shall not commit to pay ` 1,65,00,000/- in the event of total loss because the question of adequacy of insurable value shall be considered at the time of reinstatement.

H The approach to valuation for computation of insurable value is dependent on the type of the policy, i.e. whether policy is on RIV basis or market value basis. However, in both the cases the first step is to estimate current cost of brand new similar item. These costs include following:

A. For indigenous machine

- (i) Ex-works price of machine
- (ii) Packing and forwarding charges
- (iii) Excise duty
- (iv) VAT (Value added tax)
- (v) Handling charges
- (vi) Transportation charges
- (vii) Transit insurance cost
- (viii) Foundation, erection and installation costs

B. Imported machine

As per Illustration for valuation for insurable value given earlier.

Note: Taxes and duties mentioned above are non-recoverable tax i.e. effective taxes.

If the policy is with the escalation clause then amount worked out by considering above factors would be increased depending upon the escalation amount.

Let us consider the case of a process plant established 5 years back to manufacture a particular product. It has an installed capacity of X unit. The unit has 100 machines. All the machines are to be insured on RIV basis without escalation.

The RIV of each individual machine as on date of taking new policy is say ` 1.00 Crore giving a total of ` 100.00 Crores.

The latest plant to manufacture same product with an installed capacity of X unit can be established with 75 machines, RIV of such entire plant is ` 80 Crores. The latest plant is economical to operate also.

Let us consider the following two situations due to any insured peril:

- (a) One of the machines is damaged in such a way that it cannot be repaired.
In this case insurance company will approve the claim for ` 1.0 Crore because RIV of damaged machine is ` 1.0 Crore.

- (b) All the machines of plant are damaged and all the machines are beyond repair.
In this case insurance company will not approve the claim for ` 100 Crores as RIV for all the machines as per current technology is ` 80 Crores.

There are differences between the valuation of PME for reinstatement insurance value and replacement cost new for financial reporting. The lack of provision for interest charges in valuation for insurance is one of these. For computation of replacement cost new the finance charges are to be considered. In the case of some large plants, this may represent a significant percentage of the overall cost. In insurance valuation, provisions for the finance charges is incorrect and will lead to the statement of inflated values.

LAW - REAL ESTATE

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Note: The study material of this subject covers the legal issues to be taken into consideration by the valuers in their practice. The laws relating to Real Estate may vary from state to state; therefore, the valuer must take into account the laws applicable to the state where the property is located. The provisions concerning valuation of certain states are given here as a guide.

LAW REAL ESTATE

UNIT - I

The right to fair compensation and transparency in land acquisition, rehabilitation and resettlement Act, 2013

INTRODUCTION

In India the Government has the power to acquire land for a public purpose. The legislation that was enacted to govern the same was very old, having not been changed since the time of the British and had several lacunae. Most prominently, there were no provisions for compensation or rehabilitation on acquiring land. This led to the passing of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013

The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 is a legislation that regulates land acquisition and provides laid down rules for granting compensation, rehabilitation and resettlement to the affected persons in India. The Act has provisions to provide fair compensation to those whose land is taken away, brings transparency to the process of acquisition of land to set up factories or buildings, infrastructural projects and assures rehabilitation of those affected.

Old Act -

Allowed acquisition of Land for Public Purpose by government agency from individual land owners after paying a government – determined compensation to cover losses incurred by landowners from surrendering the land to the acquiring Agency.

New Act -

An Act to ensure, in consultation with institutions of local self-government and Gram Sabhas established under the Constitution, a humane, participative, informed and transparent process for land acquisition for industrialization, development of essential infrastructural facilities and urbanization with the least disturbance to the owners of the land and other affected families and provide just and fair compensation to the affected families whose land has been acquired or proposed to be acquired or are affected by such acquisition and make adequate provisions for such affected persons for their rehabilitation and resettlement and for ensuring that the cumulative outcome of compulsory acquisition should be that affected persons become partners in

development leading to an improvement in their post-acquisition social and economic status and for matters connected therewith or incidental thereto.

Aims and objectives:

The aims and objectives of the Act include:

To ensure, in consultation with institutions of local self-government and Gram Sabhas a humane, participative, informed and transparent process for land acquisition for industrialization, development of essential infrastructural facilities and urbanization with the least disturbance to the owners of the land and other affected families

Provide just and fair compensation to the affected families whose land has been acquired or are affected by such acquisition.

Make adequate provisions for such affected persons for their rehabilitation and resettlement.

THE ACT IS APPLICABLE WHEN -

Sec. 2. Application of Act.

1. The provisions of this Act relating to land acquisition, compensation, rehabilitation and resettlement, shall apply, when the appropriate Government acquires land for its own use, hold and control, including for Public Sector Undertakings and for public purpose, and shall include the following purposes, namely -
 - a. For strategic purposes relating to naval, military, air force, and armed forces of the Union, including central paramilitary forces or any work vital to national security or defence of India or State police, safety of the people; or
 - b. For infrastructure projects, which includes the following, namely-
 - i. All activities or items listed in the notification of the Government of India in the Department of Economic Affairs (Infrastructure Section) number 13/6/2009-INF, dated the 27th March 2012, excluding private hospitals, private educational institutions and private hotels;

- ii. Projects involving agro-processing, supply of inputs to agriculture, warehousing, cold storage facilities, marketing infrastructure for agriculture and allied activities such as dairy, fisheries, and meat processing, set up or owned by the appropriate Government or by a farmers' cooperative or by an institution set up under a statute;
 - iii. Project for industrial corridors or mining activities, national investment and manufacturing zones, as designated in the National Manufacturing Policy;
 - iv. Project for water harvesting and water conservation structures, sanitation;
 - v. Project for Government administered, Government aided educational and research schemes or institutions;
 - vi. Project for sports, health care, tourism, transportation of space programme;
 - vii. Any infrastructure facility as may be notified in this regard by the Central Government and after tabling of such notification in Parliament;
- c. Project for project affected families;
- d. Project for housing, or such income groups, as may be specified from time to time by the appropriate Government;
- e. Project for planned development or the improvement of village sites or any site in the urban areas or provision of land for residential purposes for the weaker sections in rural and urban areas;
- f. Project for residential purposes to the poor or landless or to persons residing in areas affected by natural calamities, or to persons displaced or affected by reason of the implementation of any scheme undertaken by the Government, any local authority or a corporation owned or controlled by the State.
2. The provisions of this Act relating to land acquisition, consent, compensation, rehabilitation and resettlement, shall also apply, when the appropriate Government acquires land for the following purposes, namely—
- a. for public private partnership projects, where the ownership of the land

continues to vest with the government, for public purpose as defined in sub-section (1):

- b. for private companies for public purpose, as defined in sub-section (1)

Provided that in the case of acquisition for -

- a. private companies, the prior consent of at least eighty per cent of those affected families, as defined in sub-clauses (i) and (v) of clause (c) of section 3; and
- b. public private partnership projects, the prior consent of at least seventy per cent of those affected families, as defined in sub-clauses (i) and (v) of clause (c) of section 3, shall be obtained through a process as may be prescribed by the appropriate Government:

Provided further that the process of obtaining the consent shall be carried out along with the Social Impact Assessment study referred to in section 4 -

Provided also that no land shall be transferred by way of acquisition, in the Scheduled Areas in contravention of any law (including any order or judgment of a court which has become final) relating to land transfer, prevailing in such Scheduled Areas.

3. The provisions relating to rehabilitation and resettlement under this Act shall apply in the cases where -
 - a. a private company purchases land, equal to or more than such limits in rural areas or urban areas, as may be prescribed by the appropriate Government, through private negotiations with the owner of the land in accordance with the provisions of section 47;
 - b. a private company requests the appropriate Government for acquisition of a part of an area so prescribed for a public purpose:

Provided that where a private company requests the appropriate Government for partial acquisition of land for public purpose, then, the rehabilitation and resettlement entitlements under the Second Schedule shall be applicable for the entire area which includes the land purchased by the private company and acquired by the Government for the project as a whole.

The provision of the Act does not apply to acquisitions under 13 existing legislations.

DEFINITIONS:

affected area, affected family, agricultural land, displaced family, family, holding land, land owner, resettlement area, marginal farmer, small farmer.

S.4 Preparation of Social Impact Assessment Study

1. Whenever the appropriate Government intends to acquire land for a public purpose, it shall consult the concerned Panchayat, Municipality or Municipal Corporation, as the case may be at village level or ward level, in the affected area and carry out a Social Impact Assessment study in consultation with them, in such manner and from such date as may be specified by such Government by notification.
2. The notification issued by the appropriate Government for commencement of consultation and of the Social Impact Assessment study under sub-section (1) shall be made available in the local language to the Panchayat, Municipality or Municipal Corporation, as the case may be, and in the offices of the District Collector, the Sub-Divisional Magistrate and the Tehsil, and shall be published in the affected areas, in such manner as may be prescribed, and uploaded on the website of the appropriate Government:

Provided that the appropriate Government shall ensure that adequate representation has been given to the representatives of Panchayat, Gram Sabha, Municipality or Municipal Corporation as the case may be at the stage of carrying out the Social Impact Assessment study:

Provided further that the appropriate Government shall ensure the completion of the Social Impact Assessment study within a period of six months from the date of its commencement.

1. The Social Impact Assessment study report referred to in sub-section (1) shall be made available to the public in the manner prescribed under section 6.
2. The Social Impact Assessment study referred to in sub-section (1) shall, amongst other matters, include all the following, namely –

- a. assessment as to whether the proposed acquisition serves public purpose;
- b. estimation of affected families and the number of families among them likely to be displaced;
- c. extent of lands, public and private, houses, settlements and other common properties likely to be affected by the proposed acquisition;
- d. whether the extent of land proposed for acquisition is the absolute bare-minimum extent needed for the project;
- e. whether land acquisition at an alternate place has been considered and found not feasible;
- f. study of social impacts of the project, and the nature and cost of addressing them and the impact of these costs on the overall costs of the project vis-à-vis the benefits of the project:

Provided that Environmental Impact Assessment study, if any, shall be carried out simultaneously and shall not be contingent upon the completion of the Social Impact Assessment study.

3. While undertaking a Social Impact Assessment study under sub-section (1), the appropriate Government shall, amongst other things, take into consideration the impact that the project is likely to have on various components such as livelihood of effected families public and community properties, assets and infrastructure particularly roads, public transport, drainage, sanitation, sources of drinking water, sources of water for cattle, community ponds, grazing land, plantations, public utilities such as post offices, fair price shops, food storage godowns, electricity supply, health care facilities, schools and educational or training facilities, anganwadis, children parks, places of worship, land for traditional tribal institutions and burial and cremation grounds.
4. The appropriate Government shall require the authority conducting the Social Impact Assessment study to prepare a Social Impact Management Plan, listing the ameliorative measures required to be undertaken for addressing the impact for a specific component referred to in sub-section (3), and such measures shall not be less than what is provided under a scheme or programme, in operation in that area, of the Central Government or, as the case may be, the State Government, in operation in the affected area.

S.5 Public hearing for Social Impact Assessment

Whenever a Social Impact Assessment is required to be prepared under section 4, the appropriate Government shall ensure that a public hearing is held at the affected area, after giving adequate publicity about the date, time and venue for the public hearing, to ascertain the views of the affected families to be recorded and included in the Social Impact Assessment Report.

S.6 Publication of Social Impact Assessment study

1. The appropriate Government shall ensure that the Social Impact Assessment study report and the Social Impact Management Plan referred to in sub-section (6) of section 4 are prepared and made available in the local language to the Panchayat, Municipality or Municipal Corporation, as the case may be, and the offices of the District Collector, the Sub-Divisional magistrate and the Teshil, and shall be published in the affected areas, in such manner as may be prescribed, and uploaded on the website of the appropriate Government.
2. Wherever Environment Impact Assessment is carried out, a copy of the Social Impact Assessment report shall be made available to the Impact Assessment Agency authorised by the Central Government to carry out environmental impact assessment.

S.7 Appraised of Social Impact Assessment report by an Expert Group

1. The appropriate Government shall ensure that the Social Impact Assessment report is evaluated by an independent multi-disciplinary Expert Group, as may be constituted by it.
2. The Expert Group constituted under sub-section (1) shall include the following, namely –
 - a. two non-official social scientists;
 - b. two representatives of Panchayat, Gram Sabha, Municipality or Municipal Corporation, as the case may be;
 - c. two experts on rehabilitation; and
 - d. a technical expert in the subject relating to the project.

3. The appropriate Government may nominate a person from amongst the members of the Expert Group as the Chairperson of the Group.
4. If the Expert Group constituted under sub-section (1), is of the opinion that—
 - a. the project does not serve any public purpose; or
 - b. the social costs and adverse social impacts of the project outweigh the potential benefits, it shall make a recommendation within two months for the date of its constitution to the effect that the project shall be abandoned forthwith and no further steps to acquire the land will be initiated in respect of the same:

Provided that the grounds for such recommendation shall be recorded in writing by the Expert Group giving the details and reasons for such decision -

Provided further that where the appropriate Government, in spite of such recommendations, proceeds with the acquisition, then, it shall ensure that its reasons for doing so are recorded in writing.

5. If Expert Group constituted under sub-section (1), is of the opinion that –
 - a. the project will serve any public purpose; and
 - b. the potential benefits outweigh the social costs and adverse social impacts, it shall make specific recommendations within two months from the date of its constitution whether the extent of land proposed to be acquired is the absolute bare-minimum extent needed for the project and whether there are no other less displacing options available:

Provided that the grounds for such recommendation shall be recorded in writing by the Expert Group giving the details and reasons for such decision

6. The recommendations of the Expert Group referred to in sub-sections (4) and (5) shall be made available in the local language to the Panchayat, Municipality or Municipal Corporation, as the case may be and the offices of the District Collector, the Sub-Divisional Magistrate and the Tehsil, and shall be published in the affected areas, in such manner as may be prescribed and uploaded on the website of the appropriate Government.

S.8 Examination of proposals for land acquisition and the Social Impact Assessment report by appropriate Government

1. The appropriate Government shall ensure that –
 - c. there is a legitimate and bona fide public purpose for the proposed acquisition which necessitates the acquisition of the land identified;
 - d. the potential benefits and the public purpose referred to in clause (a) shall outweigh the social costs and adverse social impact as;
 - e. only the minimum area of land required for the project is proposed to be acquired;
 - f. there is no unutilized land which has been previously acquired in the area;
 - g. the land, if any, acquired earlier remained unutilized, is used for such public purpose and make recommendations in respect thereof.
2. The appropriate Government shall examine the report of the Collector if any and the report of the Expert Group on the Social Impact Assessment study and after considering all the reports, recommend such area for acquisition which would ensure minimum displacement of people, minimum disturbance to the infrastructure, ecology and minimum adverse impact on the individuals affected.
3. The decision of the appropriate Government shall be made available in the local language to the Panchayat, Municipality or Municipal Corporation, as the case may be and the offices of the District Collector, the Sub-Divisional Magistrate and the Tehsil, and shall be published in the affected areas, in such manner as may be prescribed, and uploaded on the website of the appropriate Government:

Provided that where land is sought to be acquired for the purposes as specified in sub-section (2) of section 2, the appropriate Government shall also ascertain as to whether the prior consent of the affected families as required under the proviso to sub-section (2) of section 2, has been obtained in the manner as may be prescribed.

S.11 Publication of preliminary notification and power of officers thereupon

1. Whenever, it appears to the appropriate Government that land in any area is required or likely to be required for any public purpose, a notification

(hereinafter referred to as preliminary notification) to that effect along with details of the land to be acquired in rural and urban areas shall be published in the following manner, namely –

- h. in the Official Gazette;
 - i. in two daily newspapers circulating in the locality of such area of which one shall be in the regional language;
 - j. in the local language in the Panchayat, Municipality or Municipal Corporation, as the case may be and in the offices of the District Collector, the Sub-divisional Magistrate and the Tehsil;
 - k. uploaded on the website of the appropriate Government;
 - l. in the affected areas, in such manner as may be prescribed.
2. Immediately after issuance of the notification under sub-section (1), the concerned Gram Sabha or Sabhas at the village level, municipalities in case of municipal areas and the Autonomous Councils in case of the areas referred to in the Sixth Schedule to the Constitution, shall be informed of the contents of the notification issued under the said sub-section in all cases of land acquisition at a meeting called especially for this purpose.
 3. The notification issued under sub-section (1) shall also contain a statement on the nature of the public purpose involved, reasons necessitating the displacement of affected persons, summary of the Social Impact Assessment Report and particulars of the Administrator appointed for the purposes of rehabilitation and resettlement under section 44.
 4. No person shall make any transaction or cause any transaction of land specified in the preliminary notification or create any encumbrances on such land from the date of publication of such notification till such time as the proceedings under this Chapter are completed:

Provided that the Collector may, on the application made by the owner of the land so notified, exempt in special circumstances to be recorded in writing, such owner from the operation of this sub-section:

Provided further that any loss or injury suffered by any person due to his wilful violation of this provision shall not be made up by the Collector

5. After issuance of notice under sub-section (1), the Collector shall, before the issue of a declaration under section 20, undertake and complete the exercise of updating of land records as prescribed within a period of two months.

S.14 Lapse of Social Impact Assessment Report.

Where a preliminary notification under section 11 is not issued within twelve months from the date of appraisal of the Social Impact Assessment report submitted by the Expert Group under section 7, then, such report shall be deemed to have lapsed and a fresh Social Impact Assessment shall be required to be undertaken prior to acquisition proceedings under section 11:

Provided that the appropriate Government, shall have the power to extend the period of twelve months, if in its opinion circumstances exist justifying the same:

Provided further that any such decision to extend the period shall be recorded in writing and the same shall be notified and be uploaded on the website of the authority concerned.

S.15 Rescission of preliminary notification.

Where no declaration is made under section 20 within twelve months from the date of preliminary notification, then such notification shall be deemed to have been rescinded.

S.16 Hearing of objections.

1. Any person interested in any land which has been notified under sub-section (1) of section 11, as being required or likely to be required for a public purpose, may within sixty days from the date of the publication of the preliminary notification, object to—
 - a. the area and suitability of land proposed to be acquired;
 - b. justification offered for public purpose;
 - c. the findings of the Social Impact Assessment report.

2. Every objection under sub-section (1) shall be made to the Collector in writing, and the Collector shall give the objector an opportunity of being heard in person or by any person authorised by him in this behalf or by an Advocate and shall, after hearing all such objections and after making such further inquiry, if any, as he thinks necessary, either make a report in respect of the land which has been notified under sub-section (1) of section 11, or make different reports in respect of different parcels of such land, to the appropriate Government, containing his recommendations on the objections, together with the record of the proceedings held by him along with a separate report giving therein the approximate cost of land acquisition, particulars as to the number of affected families likely to be resettled, for the decision of that Government.
3. The decision of the appropriate Government on the objections made under sub-section (2) shall be final.

S.17 Preparation of Rehabilitation and Resettlement Scheme by the Administrator.

1. Upon the publication of the preliminary notification under sub-section (1) of section 11 by the Collector, the Administrator for Rehabilitation and Resettlement shall conduct a survey and undertake a census of the affected families, in such manner and within such time as may be prescribed, which shall include—
 - a. particulars of lands and immovable properties being acquired of each affected family;
 - b. livelihoods lost in respect of land losers and landless whose livelihoods are primarily dependent on the lands being acquired;
 - c. a list of public utilities and Government buildings which are affected or likely to be affected, where resettlement of affected families is involved;
 - d. details of the amenities and infrastructural facilities which are affected or likely to be affected, where resettlement of affected families is involved; and
 - e. details of any common property resources being acquired.
2. The Administrator shall, based on the survey and census under sub-section (1), prepare a draft Rehabilitation and Resettlement Scheme, as prescribed which shall include particulars of the rehabilitation and resettlement entitlements of each land owner and landless whose livelihoods are primarily dependent on

the lands being acquired and where resettlement of affected families is involved-

- a. a list of Government buildings to be provided in the Resettlement area;
 - b. details of the public amenities and infrastructural facilities which are to be provided in the resettlement area.
3. The draft Rehabilitation and Resettlement scheme referred to in sub-section (2) shall include time limit for implementing Rehabilitation and Resettlement Scheme;
 4. The draft Rehabilitation and Resettlement scheme referred to in sub-section (2) shall be made known locally by wide publicity in the affected area and discussed in the concerned Gram Sabhas or Municipalities.
 5. A public hearing shall be conducted in such manner as may be prescribed, after giving adequate publicity about the date, time and venue for the public hearing at the affected area:

Provided that in case where an affected area involves more than one Gram Panchayat or Municipality, public hearings shall be conducted in every Gram Sabha and Municipality where more than twenty-five per cent. Of land belonging to that Gram Sabha or Municipality is being acquired:

Provided further that the consultation with the Gram Sabha in Scheduled Areas shall be in accordance with the provisions of the Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996
 6. The Administrator shall, on completion of public hearing submit the draft Scheme for Rehabilitation and Resettlement along with a specific report on the claims and objections raised in the public hearing to the Collector.

S.20 Publication of declaration and summary of Rehabilitation and Resettlement.

1. When the appropriate Government is satisfied, after considering the report, if any, made under sub-section (2) of section 16, that any particular land is needed for a public purpose, a declaration shall be made to that effect, along

with a declaration of an area identified as the “resettlement area” for the purposes of rehabilitation and resettlement of the affected families, under the hand and seal of a Secretary to such Government or of any other officer duly authorised to certify its orders and different declarations may be made from time to time in respect of different parcels of any land covered by the same preliminary notification irrespective of whether one report or different reports has or have been made (wherever required).

2. The Collector shall publish a summary of the Rehabilitation and Resettlement Scheme along with draft declaration referred to in sub-section (1):

Provided that no declaration under this sub-section shall be made unless the summary of the Rehabilitation and Resettlement Scheme is published along with such declaration:

Provided further that no declaration under this sub-section shall be made unless the Requiring Body deposits an amount, in full or part, as may be prescribed by the appropriate Government toward the cost of acquisition of the land:

Provided also that the Requiring Body shall deposit the amount promptly so as to enable the appropriate Government to publish the declaration within a period of twelve months from the date of the publication of preliminary notification under section 11.

3. In projects where land is acquired in stages, the application for acquisition itself can specify different stages for the rehabilitation and resettlement, and all declarations shall be made according to the stages so specified.
4. Every declaration referred to in sub-section (1) shall be published in the following manner, namely –
 - a. in the Official Gazette;
 - b. in two daily newspapers being circulated in the locality, of such area of which one shall be in the regional language;
 - c. in the local language in the Panchayat, Municipality or Municipal Corporation, as the case may be, and in the offices of the District Collector, the Sub-Divisional Magistrate and the Tehsil;
 - d. uploaded on the website of the appropriate Government;

- e. in the affected areas, in such manner as may be prescribed.
5. Every declaration referred to in sub-section (1) shall indicate, -
 - a. the district or other territorial division in which the land is situated
 - b. the purpose for which it is needed, its approximate area; and
 - c. where a plan shall have been made for the land, the place at which such plan may be inspected without any cost.
 6. The declaration referred to in sub-section (1) shall be conclusive evidence that the land is required for a public purpose and, after making such declaration, the appropriate Government may acquire the land in such manner as specified under this Act.
 7. Where no declaration is made under sub-section (1) within twelve months from the date of preliminary notification, then such notification shall be deemed to have been rescinded:

Provided that in computing the period referred to in this sub-section, any period or periods during which the proceedings for the acquisition of the land were held up on account of any stay or injunction by the order of any Court shall be excluded:

Provided further that the appropriate Government shall have the power to extend the period of twelve months, if in its opinion circumstances exist justifying the same:

Provided also that any such decision to extend the period shall be recorded in writing and the same shall be notified and be uploaded on the website of the authority concerned.

S.22 Notice to persons interested.

1. The Collector shall publish the public notice on his website and cause public notice to be given at convenient places on or near the land to be taken, stating that the Government intends to take possession of the land, and that claims to compensations and rehabilitation and resettlement for all interests in such land may be made to him.

2. The public notice referred to in sub-section (1) shall state the particulars of the land so needed, and require all persons interested in the land to appear personally or by agent or advocate before the Collector at a time and place mentioned in the public notice not being less than thirty days and not more than six months after the date of publication of the notice, and to state the nature of their respective interests in the land and the amount and particulars of their claims to compensation for such interests, their claims to rehabilitation and resettlement along with their objections, if any, to the measurements made under section 21.
3. The Collector may in any case require such statement referred to in sub-section (2) to be made in writing and signed by the party or his agent.
4. The Collector shall also serve notice to the same effect on the occupier, if any, of such land and on all such persons known or believed to be interested therein, be entitled to act for persons so interested, as reside or have agents authorised to receive service on their behalf, within the revenue district in which the land is situate.
5. In case any person so interested resides elsewhere, and has no such agent, the Collector shall ensure that the notice shall be sent to him by post in letter addressed to him at his last known residence, address of place or business and also publish the same in at least two national daily newspapers and also on his website.

S.24 Enquiry and land acquisition award by Collector.

On the day so fixed, or on any other day to which the enquiry has been adjourned, the Collector shall proceed to enquire into the objections (if any) which any person interested has stated pursuant to a notice given under section 22, to the measurements made under section 21, and into the value of the land at the date of the publication of the notification, and into the respective interests of the persons claiming the compensation and rehabilitation and resettlement, shall make an award under his hand of—

- a. the true area of the land;

- b. the compensation as determined under section 28 along with Rehabilitation and Resettlement award as determined under section 32 and which in his opinion should be allowed for the land; and
- c. the apportionment of the said compensation among all the persons known or believed to be interested in the land, or whom, or of whose claims, he has information, whether or not they have respectively appeared before him.

S.26 Period within which an award shall be made.

The Collector shall make an award within a period of twelve months from the date of publication of the declaration under section 20 and if no award is made within that period, the entire proceedings for the acquisition of the land shall lapse:

Provided that the appropriate Government shall have the power to extend the period of twelve months if in its opinion, circumstances exist justifying the same:

Provided further that any such decision to extend the period shall be recorded in writing and the same shall be notified and be uploaded on the website of the authority concerned.

S.27 Determination of market value of land by Collector.

1. The Collector shall adopt the following criteria in assessing and determining the market value of the land, namely –
 - a. the market value, if any, specified in the Indian Stamp Act, 1899 for the registration of sale deeds or agreements to sell, as the case may be, in the area, where the land is situated; or
 - b. the average sale price for similar type of land situated in the nearest village or nearest vicinity area; or
 - c. consented amount of compensation as agreed upon under sub-section (2) of section 2 in case of acquisition of lands for private companies or for public private partnership projects, whichever is higher:

Provided that the date for determination of market value shall be the date on which the notification has been issued under section 11.

Explanation 1 -the average sale price referred to in clause (b) shall be determined taking into account the sale deeds or the agreements to sell registered for similar type of area in the near village or near vicinity area during immediately preceding three years of the year in which such acquisition of land is proposed to be made.

Explanation 2 -For determining the average sale price referred to in Explanation 1, one-half of the total number of sale deeds or the agreements to sell in which the highest sale price has been mentioned shall be taken into account.

Explanation 3-While determining the market value under this section and the average sale price referred to in Explanation 1 or Explanation 2, any price paid as compensation for land acquired under the provisions of this Act on an earlier occasion in the district shall not be taken into consideration.

Explanation 4 -While determining the market value under this section and the average sale price referred to in Explanation 1 or Explanation 2, any price paid, which in the opinion of the Collector is not indicative of actual prevailing market value may be discounted for the purposes of calculating market value.

- a. The market value calculated as per sub-section (1) shall be multiplied by factor to be specified in the First Schedule.
2. Where the market value under sub-section (1) or sub-section (2) cannot be determined for the reason that—
- a. the land is situated in such area where the transactions in land are restricted by or under any other law for the time being in force in that area; or
 - b. the registered sale deeds or agreements to sell as mentioned in clause (a) of sub-section (1) for similar land are not available for the immediately preceding three years; or
 - c. the market value has not been specified under the Indian Stamp Act, 1899 by the appropriate authority, the State Government concerned shall specify the floor price or minimum price per unit area of the said land based on the price calculated in the manner specified in sub-section (1) in respect of similar types of land situated in the immediate adjoining areas:

Provided that in a case where the Requiring Body offers its shares to the owners of the lands (whose lands have been acquired) as a part compensation, for acquisition of land, such shares in no case shall exceed twenty-five per cent. of the value so calculated under sub-section (1) or sub-section (2) or sub-section (3) as the case may be:

Provided further that the Requiring Body shall in no case compel any owner of the land (whose land has been acquired) to take its shares, the value of which is deductible in the value of the land calculated under sub-section (1):

Provided also that the Collector shall, before initiation of any land acquisition proceedings in any area, take all necessary steps to revise and update the market value of the land on the basis of the prevalent market rate in that area:

Provided also that the appropriate Government shall ensure that the market value determined for acquisition of any land or property of an educational institution established and administered by a religious or linguistic minority shall be such as would not restrict or abrogate the right to establish and administer educational institutions of their choice.

S.29 Parameters to be considered by Collector in determination of award.

In determining the amount of compensation to be awarded for land acquired under this Act, the Collector shall take into consideration –

firstly, the market value as determined under section 27 and the award amount in accordance with the First and Second Schedules;

secondly, the damage sustained by the person interested, by reason of the taking of any standing crops and trees which may be on the land at the time of the Collector's taking possession thereof;

thirdly, the damage (if any) sustained by the person interested, at the time of the Collector's taking possession of the land, by reason of severing such land from his other land;

fourthly, the damage (if any) sustained by the person interested, at the time of the Collector's taking possession of the land, by reason of the acquisition injuriously

affecting his other property, movable or immovable, in any other manner, or his earnings;

fifthly, in consequence of the acquisition of the land by the Collector, the person interested is compelled to change his residence or place of business, the reasonable expenses (if any) incidental to such change;

sixthly, the damage (if any) bona fide resulting from diminution of the profits of the land between the time of the publication of the declaration under section 20 and the time of the Collector's taking possession of the land; and

seventhly, any other ground which may be in the interest of equity, justice and beneficial to the affected families.

S.30 Determination of value of things attached to land or building.

1. The Collector in determining the market value of the building and other immovable property or assets attached to the land or building which are to be acquired, use the services of a competent engineer or any other specialist in the relevant field, as may be considered necessary by him.
2. The Collector for the purpose of determining the value of trees and plants attached to the land acquired, use the services of experienced persons in the field of agriculture, forestry, horticulture, sericulture, or any other field, as may be considered necessary by him.
3. The Collector for the purpose of assessing the value of the standing crops damaged during the process of land acquisition, may use the services of experienced persons in the field of agriculture as may be considered necessary by him.

S.31 Award of solatium.

1. The Collector having determined the total compensation to be paid, shall, to arrive at the final award, impose a "Solatium" amount equivalent to one hundred per cent of the compensation amount.

Explanation -For the removal of doubts it is hereby declared that solatium amount shall be in addition to the compensation payable to any person whose land has been acquired.

2. The Collector shall issue individual awards detailing the particulars of compensation payable and the details of payment of the compensation as specified in the First Schedule.
3. In addition to the market value of the land provided under section 27, the Collector shall, in every case, award an amount calculated at the rate of twelve per cent. per annum on such market value for the period commencing on and from the date of the publication of the notification of the Social Impact Assessment study under sub-section (2) of section 4, in respect of such land, till the date of the award of the Collector or the date of taking possession of the land, whichever is earlier.

Illustration on Valuation under the Act:

1. Under LARAR Act of 2013 valuer will have to work out Land rate for compensation in a very unique manner. Sec 26(1) of new Act says that last 3 years highest rates in the locality are to be selected as basis for compensation. Sec. 26(1)(B) says average of these highest rate to be paid as compensation. These provisions will mean that after considering hundreds of sales of last 3 years, valuer will have to select highest rates land sales for preceding 3 years for the average.

Following example indicates method. As only land rate estimation is complex, example restricts only on that aspect of compensation.

- 1.1 Government acquired 1000 SM land in suburban area of a city (urban area) in year 2017. Calculate fair land rate for compensation.

Solution: As per old act, 3 or 4 sales of year 2017 will be sufficient to arrive at fair market value. But as per new act of 2013, valuer will have to select 3 highest sales for each of year i.e. 2015/2016/2017. Out of say 200 sales that has taken place in locality for each year. Following 3 sales are highest rate sales in each year. Total sales for consideration are as under.

LAND RATE

(1) March 2015	: 1500 SM	Sold for	Rs. 33 Lacs	Rs. 2200/SM
(2) July 2015	: 1800 SM	Sold for	Rs. 37 Lacs	Rs.2055/SM
(3) Oct 2015	: 450 SM	Sold for	Rs. 14 Lacs	Rs. 3111/SM
(4) Jan 2016	: 800 SM	Sold for	Rs. 22 Lacs	Rs. 2750/SM
(5) May 2016	: 2000 SM	Sold for	Rs. 58 Lacs	Rs. 2900/SM
(6) Nov 2016	: 1750 SM	Sold for	Rs. 53 Lacs	Rs. 3028/SM
(7) April 2017	: 1150 SM	Sold for	Rs. 33 Lacs	Rs. 2870/SM
(8) June 2017	: 750 SM	Sold for	Rs. 23 Lacs	Rs. 3066/SM
(9) August 2017	: 2500 SM	Sold for	Rs. 71 Lacs	Rs. 2840/SM
(10) Sept 2017	:1100 SM	Sold for	Rs. 32 Lacs	Rs. 2909/SM

Now these 10 sales have to be arranged in order of their rates irrespective of year.

2015	Rs. 3111	
2017	Rs. 3066	
2016	Rs 3028	
2017	Rs 2909	
<u>2016</u>	<u>Rs. 2900</u>	= 15,014

2017	Rs. 2870	
2017	Rs. 2840	
2016	Rs. 2750	
2015	Rs. 2200	
<u>2015</u>	<u>Rs. 2055</u>	= 12,715

Now top 5 highest rates sales (50 % of top sales) have to be selected for consideration of compensation rate & bottom 5 lower rates (Balance 50 % lower rate sales) sales should be rejected.

Average rate of top 5 highest rate sales works out = $1/5 \times 15014$
= Rs. 3002 / SQMT.

Hence Compensation to be awarded = 1000×3002 = **Rs. 30,02,000**

Now you will observe that for year 2017 average of 4 sales is Rs. 2921 / SM, yet claimant will be paid at the rate of Rs. 3002 / SM + Solatium.

Just see the impact of the change in law. New knowledge is required to be obtained by the Valuers to comply with revised norms under new Acts & Development.

1.2 Sec. 3(x) (iv) of LARAR Act defines word 'Person interested' and it includes person having tenancy rights under the relevant state laws. This provision will make apportionment of compensation very difficult. Share of land owner and tenant will be very difficult exercise.

UNIT - II

General Building Rules and Regulations

INTRODUCTION

The knowledge of Development Control Rules (D.C.R.) framed by local authorities is essential for valuers of real estate because they have a very vital impact on market value of the real properties, mainly through regulation controlling the type and quality of use and the intensity of use of properties.

The states have their own Town Planning Acts and under the provisions of these Town Planning Acts, the local authorities (municipalities, corporations etc.) prepare their Master Plans / Development Plans, Town Planning Schemes etc. for better planning of towns and cities. Development Control Rules and Regulations are part of these planning proposals. The planning proposals are enforced by the authorities through control over the development being carried out within their planning boundaries. This authoritative control is provided by the DCR. Planning proposals can be successfully executed and the objectives of the Master Plan be achieved in two ways viz. (i) by exercising control over development through D.C.R.s i.e. enforcement and (ii) by implementing planning proposals by acquisition and undertaking development works i.e. implementation.

The DCR contain the procedure for obtaining permission from the local authority for the new development work, rules for controlling use and intensity of use of land and properties and the detailed building byelaws for convenience and safety of occupants and miscellaneous rules. By study of these regulations, a valuer can judge whether the property under valuation is built up properly and fully utilizing its potentiality i.e. highest and best use permissible as per rules or is a illegal structure, partly or wholly. Sometimes, a building is built as per rules but without obtaining proper permission from the concerned Local Planning Authority (L.P.A.) or the Local Authority (L.A.). All such information will help him in estimating the fair market value of a property. The DCR also contain provisions regarding penalty or fees for regularizing certain types of developments with or without conditions. Knowledge of such rules and regulations would enable the valuer to correctly assess feasibility of regularizing the development as well as the estimated cost of such regularization. These provisions must therefore be carefully studied.

Land use and zoning regulations, floor space index (FSI) / floor area ratio (FAR), height restrictions, sizes of rooms, ventilation and marginal open spaces, safety regulations etc. are some of the important regulations which directly affect fair market values of real properties. With the change in these regulations, property values may change considerably. The D.C. Rules and the municipal building bye-laws are, therefore, required to be studied by a valuer.

STRUCTURE OF THE UNIT:

- 1.1** Objectives
- 1.2** General
 - 1.2.1** Necessity of DCR
 - 1.2.2** Classifications of DCRs
- 1.3** Zoning
 - 1.3.1** Types of Zoning
- 1.4** Land Use Zoning
 - 1.4.1** Objective
 - 1.4.2** Effect
 - 1.4.3** Performance Standard
 - 1.4.4** Non-Conforming Uses and Non-complying Buildings
 - 1.4.5** Land use classification
- 1.5** Density zoning and floor space index
 - 1.5.1** Objective
 - 1.5.2** Floor Space Index (FSI) / Floor Area Ratio (FAR)
 - 1.5.3** Marginal Spaces
- 1.6** Sub-division or layout regulations
 - 1.6.1** General
 - 1.6.2** Minimum Size of plots
 - 1.6.3** Internal Road width
 - 1.6.4** Common Amenity Plots
- 1.7** Building Bye - laws
 - 1.7.1** General
 - 1.7.2** Plinth Level
 - 1.7.3** Area and Dimensions of the Rooms, etc.
 - 1.7.4** Sanitary Accommodation
 - 1.7.5** Parking Requirement

1.1 OBJECTIVES

By the end of this unit, the students will learn about:

- Necessity of DCR
- Various DCR
- Some sample provisions of building bye-laws
- Effect of DCR on market value of real properties

1.2 GENERAL

1.2.1 Necessity of DCR

Growth is a natural phenomenon. With the ever-increasing trend of urban population, the towns and cities of India are growing by leaps and bounds. Construction of residential and other buildings, development of infrastructure services and facilities are needed for various activities of this population. Consequently, development works are taking place at a rapid pace. In case such development is not properly guided and regulated by the authorities, it may be very undesirable and haphazard resulting in unhygienic conditions due to over burdening of utility services and there will be no harmony among various activities of a town. The local authority properly guides the development and exercises the control over development with the DCR as a controlling tool.

The basic civic amenities and utility and services like roads, water supply, sewerage disposal, drainage, solid waste disposal, street lighting etc. are provided by the local authority. The local authority would naturally like to make a fair and equitable distribution of these utility services and facilities. This can only be achieved by proper planning and enforcing the development control by the Local Planning Authority. Residential, commercial, industrial etc. activities are segregated with the help of land use zoning and land use classification provisions. Density of population is controlled by the FSI norms and vehicular traffic is regulated by providing norms for width of roads etc. Thus, these rules and regulations help in easing the pressure over urban infrastructure. In absence of the DCR, there would be excess pressure on the infrastructure at some places and their improper utilization at some other places. Each town and city must, therefore, have its Development Plan / Master Plan and development control rules and regulations.

1.2.2 Classification of D.C.R.s

Development Control Rules can be broadly classified in the five categories viz.

1. **Procedural Rules** These generally do not directly affect land/property values.
2. **Land Use Zoning** These have effect of settling floating values on respective zones, e.g. residential value, commercial value etc. on lands in respective zones.
3. **F.S.I. / F.A.R. & Density** These have effect on intensity of use and thereby on values of lands and properties.
4. **Convenience of Occupants** These include rules regarding sizes and height of rooms, provision of utility services, provisions for light and ventilation including area of window openings and marginal open spaces, specifications for staircases, parking, building bye-laws and specifications for construction etc. These ensure convenience and safety of occupants and have major effect on level of rents and income from properties.
5. **Safety Regulations** Rules regarding firefighting, fire escapes, location of staircases, structural safety etc. These have some effect on level of rents and income.

1.3 ZONING

1.3.1 Types of Zoning

Zoning means arranging or distributing lands and properties according to particular features or characteristics, purposes, users etc. In urban and regional planning zoning can be of various types depending on the objectives. There are as many as ten types

of zoning of which the first two and the newly added last one, are common in urban and regional planning. These are –

1. **Lane Use Zoning** Distribution of land uses – Qualitative
2. **Density Zoning (including F.S.I.)** Controlling intensity of development and thereby population in an area.
Helpful in provision of utility services.
3. **Height and Mass Zoning**
4. **Special Purpose Zoning**
5. **Spot Zoning** Used in exceptional cases and occasionally
6. **Aesthetic Zoning**
7. **Cultural Area Zoning**
8. **Bulk Zoning**
9. **Free Zones**
10. **TDR Generating and Receiving Zones** Zones in which Transfer of Development Right (TDR) is generated and zones in which it can be used i.e. received.

1.4 LAND USE ZONING

1.4.1 Objectives

The objectives of Land Use Zoning are mainly two-folds. **Firstly**, as in the case of urban and regional planning, to ensure that the land, a scarce resource, is put to the best possible use to which it is suitable; and **Secondly**, to segregate incompatible users i.e. users which cannot go together. In this type of zoning lands and properties are zoned according to the users to which they can be put, such as residential, commercial, industrial, agricultural, mixed users, no development etc.

1.4.2 Effects

Prior to finalization of proposals for such zoning, lands could be put to any use and hence values of land like residential value, commercial value etc. are not settled over any particular land and are floating all over an area, especially an urban area – “Floating Values”. The effect of finalizing the proposals regarding land use zoning is that such floating values settle down on lands included in particular zones, i.e. residential or commercial, values get settled on lands included in residential or commercial zones respectively.

In land use zoning, adequate areas of appropriate locations are zoned for development of residential, commercial, industrial, public and semipublic uses and various other types of development considering requirements of population in future, in next 20 to 25 years.

The maximum permissible density / intensity of development in terms of:

- (i) persons per unit area (acre or hectare);or
- (ii) dwellings per unit area; or
- (iii) habitable rooms per unit area; or persons per habitable room (P.P.R.)

1.4.3 Performance Standards

Land use zoning also aims at segregating users which normally cannot or do not go together, i.e. segregation of incompatible users such as residential and industrial users. Such incompatibility of users is usually based on ‘Performance Standards’ or in simple words on capacity of making or generating nuisance. Apart from general classification of industries according to size of industry such as small scale, medium or large scale etc., industries are also classified as safe or unsafe, obnoxious or non-obnoxious, hazardous or non-hazardous etc. Instead of classifying industries on the basis of general knowledge or subjective notions, it is better to classify them objectively on the basis of their qualitative performance, whether or not causing nuisance by polluting water or air or by noise pollution, generation of heavy traffic etc. apart from their other requirements, especially regarding those burdening utility services. Even in industrial zones, special zones be carved out for obnoxious or hazardous industries, with special control regulations, on the basis of their performance standards.

It may be pointed out that on the basis of performance standards, Information Technology (I.T.) Industry is generally permitted in residential or/and commercial areas. However due to their working in late night hours and attracting considerable traffic, planners have started rethinking in the matter.

1.4.4 Non-Conforming Uses and Non-complying Buildings

A 'Non-conforming Use' is any lawful use, whether of a land or a building or other structure, which does not conform to any one or more of the use regulations for the zone or area in which it is located e.g. a residential building located in an industrial zone and vice versa.

Non-conforming uses of lands and buildings are required to be gradually relocated in appropriate zones and closed without inflicting undue hardships upon the occupiers. The owner of a non-complying building is normally allowed to keep the building in a state of good repair; but is not allowed to extend, enlarge or improve the building, with condition to discontinue non-conforming use within stipulated time. This will have effect on the market value of such property.

1.4.5 Land Use Classification

The following use zone table gives an idea about the kind of land uses permissible in different land use zones.

Sr. No.	Land Use Zone	Use permitted in the Zone	Uses permissible on approval by Area Development Authority	Remarks
(1)	(2)	(3)	(4)	(5)
1.	Residential	All types of residential building, boarding houses, hostels educational building, libraries, temples, mosques, churches and other places of worship, clinics dispensary and health center social and	Retail shops, offices, poultry, house hold industry, local and service shops, flour mill, petrol filling stations, service station for light vehicles, nursing	House-hold industry covers customary home occupation and cottage industries not involving the use of or

		cultural institutions, recreational uses, clubs and non-commercial lodges and guest house, public utility service buildings, parking plots.	homes, hospital, places of public assembly such as an auditorium or town-hall.	installation of any machinery driven by power of and kind which do not create noise vibration dust etc. provided such household industries shall not be permissible in the tenant dwellings or flats.
2.	Commercial	All uses of residential zone; retail shops, departmental stores, business and professional offices, service shops like barbers, tailors, laundry and repair shops; restaurants, banks, petrol filling stations, lighthouse hold industries, specialized markets, whole sale markets, mandis, clinics, nursing homes, hospitals, sanitarium, light workshops printing presses, entertainment places like cinema theatres, public halls, repairing garages.	Wholesale warehouses, godowns, timber depots, saw mill, cattle market all the clean light industries up to 40 employees.	

3.	Industrial	<p>All types of factories and industries (excluding obnoxious and hazardous industries), godowns, grain market, saw mill, timber depots, retail shops, business building, banks, restaurants, hotels, petrol filling station service station, places of entertainments, pulse mills, medical and health facilities.</p>	<p>Obnoxious and hazardous industries), residential buildings for industrial workers / other public utility service staff whose presence is essentially required for all the twenty-four hours within the industrial premises.</p>	
4.	Agricultural	<p>All types of agricultural uses, nurseries, flower gardens, and fruit farms, zoo, poultry farms, dairy, animal husbandry, stables, salt manufacturing centre, storage of fertilizers and cultivating appliance, agro based industries, farm houses, cremations, graveyards, quarry stone crusting places.</p> <p>Individual bungalow, fun farm houses located in plot of not less than 2,000 sq. mts. And the built-up area of which should not exceed 2% of the plot area building to be constructed at distance of not less than 30 mts. From the road on which the plot abuts.</p>	<p>Sewing farms, trenching grounds, brick kilns and pottery manufacturing extractive industries, warehousing, godowns, cold storage, educational and institutional uses.</p>	

5.	Recreational	Recreational uses such as parks, playgrounds, stadium, swimming pools, cold cube play fields, summer camps for recreation of all types, race fractals, shooting range, zoo, stud farm forestry, mela grounds, exhibition grounds, other recreational uses requiring extensive open space.	Open air restaurants circus, indoor stadium, open air theatres.	
6.	Gauthan	All uses as permissible in residential and commercial zone	Light industries, service establishment (residential).	

While valuing any property, a valuer should verify whether the use of the property is in conformity with the prescribed uses or not.

1.5 DENSITY ZONING AND FLOOR SPACE INDEX

1.5.1 Objectives

The main objective of Density Zoning and Floor Space Index (F.S.I.) is to indirectly limit the population or total number of people that should normally live in a particular area i.e. neighborhood, sector etc. Limiting, though approximately, the total number of people staying in particular areas of a town/city helps in designing for and providing utility services including water supply, sewerage, roads (catering for the traffic generated by the population in the area) etc.

In density zoning maximum number of tenements or rooms permissible in a unit area, say per hectare, is prescribed for a particular part of a town/city and may differ from locality to locality. This practice is followed till recently in cities like Delhi etc. By limiting the number of tenements or rooms in a particular area, the number of people who can normally reside in that area is indirectly limited. In some towns / cities density is prescribed in terms of number of people residing in a unit area say per

hectare and such member may be different for different parts of a town or city, depending on local conditions or circumstances.

In Floor Space Index (F.S.I.) and Floor Area Ratio (F.A.R.), maximum permissible ratio of (a) total floor area which can be built in a neighbourhood or a plot to (b) the total area of neighbourhood or plot i.e. (a) ÷ (b), is prescribed.

In Floor **Space Index** the **ratio** prescribed is that of (a) the **total built-up area** on all the floors in all the buildings which can be constructed **in a neighbourhood** (or Sector) to (b) the **total space of a neighbourhood** which includes total area of plots, areas under all roads, gardens, playgrounds and such other public areas and also areas under half the widths of roads surrounding that neighbourhood.

In the Floor **Area Ratio**, maximum permissible ratio of (a) total **built-up area** on all the floors **in a building** to be constructed **in a plot to** (b) the area of **a plot**, is prescribed.

The effect of prescribing F.S.I. or F.A.R. is limiting the total built-up area permissible and thereby limiting population in a particular area.

The density zoning and F.S.I. / F.A.R. prescribe the permissible **intensity of use** and thereby have effect on market values of properties.

1.5.2 Floor Space Index (FSI) / Floor Area Ratio (FAR)

FSI (FAR in Indian practice carries the same meaning as FSI) is defined as the ratio of total built-up area on all the floors to the plot area.

$$\text{i.e. F.S.I. / F.A.R.} = \frac{\text{Total built up floor area}}{\text{Total plot area}}$$

e.g. If area of a particular plot is 100 sq. mt. and permissible F.S.I. is 1.2, it means that maximum permissible built-up area on all the floors of the building proposed/existing should not exceed 120 sq. mt. (100 x 1.20)

If F.S.I. is increased, more built-up area would be permissible on the same plot and vice versa.

F.S.I. is thus a tool used by the municipal authorities to regulate the density of floor space and thereby the population in respective localities of a town.

Many planning authorities do not prescribe variable FSI linked with ground coverage. Normally uniform FSI for all plots in a zone is prescribed and the maximum ground coverage and maximum height is regulated by other rules in that respect.

1.5.3 Marginal Spaces

‘Open marginal spaces around the structure’ is another important bye-law. This is prescribed to ensure adequate light and ventilation in the building i.e. convenience of the occupants and sufficient space for circulation in the periphery of the building. Any part of the building constructed in this minimum marginal space is treated as unauthorized construction and is liable to be demolished by the local authority at any time. The widths of marginal spaces can be either same or can vary according to height of a building so as to ensure proper angle of light (normally 60% or so) with horizontal, from boundary of plot to the top of building / floor to ensure proper light and ventilation.

Norms for open marginal spaces depend mainly upon the type of the building, i.e. residential (flat, bungalow, tenement etc.), commercial (shopping complex, cinema, hotel etc.), institutional (school, college, town hall etc.) and industrial (light industry, heavy industry etc.). Permissible projections – their width and minimum height from ground level are also prescribed.

1.6 SUB-DIVISION OR LAYOUT REGULATIONS

1.6.1 General

Any sub-division of land i.e. a layout of any land within municipal limits [and also outside municipal limits controlled by the revenue authorities as per rules framed under the Land Revenue Code] has to conform with the Layout and Sub-division regulations forming part of the D.C. Rules. These rules mainly provide for the minimum sizes of plots, minimum widths for internal layout roads depending on lengths of such road, minimum areas for common open space and other common amenities for the residents of the layout area etc. These regulations are also aimed at

convenience of the occupants and have therefore effect on the level of rent in view of general quality of environment.

1.6.2 Minimum Size of Plots

The minimum size of plot for residential layout has relation with requirement of space/accommodation for an average family size and varies according to the income groups, social groups, etc. and also vary according to localities, towns and cities. The minimum size of plots varies from 50 to 100 sq. meters for slum dwellers and low income group to 1000 sq. meters or more for high income group.

The minimum sizes of plot for commercial use and industrial use vary according to requirements of types of shops, offices, commercial establishments etc. in commercial areas and according to requirements of various types of industries in industrial area.

1.6.3 Internal Road Width

Width of internal roads in a layout is prescribed depending upon their length e.g. for residential layouts, minimum road width (up to the length of 75 m) is 6 m, for road length between 75 m to 150 m, the minimum road width is 7.5 m and so on. These criteria are different for residential, commercial and industrial layouts. In commercial and industrial layouts minimum width of a road is 12 m and more. Criteria for road junctions and turning circles are also prescribed along with that for road widths.

1.6.4 Common Amenity Plots

In large residential, commercial and industrial layouts, 10 to 15% of the total plot area is required to be provided as common amenity plot. This can be used as garden, playground, parking, post and banks, fire fighting etc. Provisions for common plot are applicable for plots having some minimum area as prescribed in the D.C. Rules. Some portion (generally 1/10th or 10%) of the common plot can be used for construction of public purpose building, for common use. e.g. community building, common hall, gymnasium or indoor sports, swimming pool amenities etc. Norms for common plot and buildable area in it may be different for different local authorities.

1.7 BUILDING BYE-LAWS

1.7.1 General

Detailed building bye-laws regarding internal planning of the building are laid down which include the following aspects:

- Plinth height
- Floor height
- Minimum size of different rooms
- Sanitary accommodation
- Ventilation (minimum area of openings)
- Height of building
- Height of compound wall

Some typical building bye-laws for a residential building are mentioned below. These details are only **indicative** and are **not specific** for any one municipality. Norms prescribed by each local authority in respect of these bye laws may be quite different than those shown below.

1.7.2 Plinth Level

- (a) No person shall construct any building with its plinth less than 45 C.Mts. above the nearest existing or proposed road level or ground level where the ground level is higher than the road level.
- (b) In case of bathrooms, water closets, coal room, staircase room, pump room, shops and their stores attached to a building godown and warehouses abutting on roads shall have their plinth not less than 30 C. Mts. above the nearest existing or proposed road level or the ground level where ground level is higher than the road level.
- (c) In case of garages and cycle sheds, they can be at road or ground level whichever is higher.
- (d) In flood affected area the plinth should be at least 50 C.Mts. above the high flood level in that area and a cellar will be allowed in such area provided that

the sill of the opening such as windows, fan, lights, etc. are kept 30 cm above high flood level in that area.

- (e) Provided that the ground floor of a building may be permitted on pillars instead of on solid plinth subject to the condition that at no point the height of the slabs of the ground floor over the ground level shall be less than 2.40 mts. and further that this space shall at all times be kept free from any enclosure except for a genuine staircase and sanitary blocks.

1.7.3 Area and Dimensions of the Rooms, etc.

Living room

- (i) A living room shall by definition include a bedroom, drawing room, a ladies room, a library room, a sitting room, a servant quarter room, dining room, study room, or any habitable room, but shall not include kitchen, store room, puja room and lavatory block.
- (ii) The minimum floor area of a living room shall be 9.5 sq. m.
- (iii) The minimum width of it shall be 2.4 m.
- (iv) The minimum height of a plinth shall be 45 cm.
- (v) The minimum floor height shall be 2.7 m.
- (vi) The minimum percentage of ventilation in living room through windows, vents and door shall be 10% of the floor area.

Kitchen

- (i) The minimum floor area shall be 5.4 sq. m.
- (ii) The minimum width shall be 1.8 m.
- (iii) The minimum floor height shall be 2.7 m.
- (iv) The minimum percentage of ventilation in kitchen and dining room through windows, vents, and doors shall be 10% of the floor area.

Bathroom, Puja room, Pump room, Water room, Coal room

- (i) The area shall not be less than 1.35 sq. m. and not more than 4.5 sq. m. With no side less than 90 cm.
- (ii) The minimum percentage of ventilation through vents and windows shall be 10% of the floor area.

- (iii) The minimum floor height shall be 2.0 m clear.

Store

- (i) Minimum size of storeroom shall not be less than 5.4 sq. m. with no side less than 1.8 m.
- (ii) The minimum floor height shall be 2.7 m.

Staircase room

1. The minimum width of a staircase for a residential building shall be 90 cm.
- 2A. The minimum floor area for internal staircase room or a gap for double flight R.C.C. stair with, 90 cm. width and landing at the end of each flight, shall be 1.00 m x 3.00 m.
- 2B. The minimum floor area for internal staircase room or a gap for single flight R.C.C. stair, with 90 cm width and landing at the end shall be, 4.2 x 0.75 m.
3. The minimum clear head way shall be 2.0 m.
4. The minimum ventilation of staircase room shall be 1.0 sq. mt. per floor.
5. The staircase shall be of fire resisting materials.
6. The maximum height of rise and the minimum width of a tread shall be 20 cm and 25 cm respectively.
7. Every person who erects a building intended to be used as dwelling house or for carrying out any trade or business in which a number of people exceeding 40 may be staying or employed or place of public resort, shall provide in such building more than one staircase each extending from the ground floor to the highest floor in the building. Lobbies, corridors, passages, staircases and landings in such a building shall be at least 1.2 m in width.

Garage

1. The minimum area for a motor garage shall be 13.5 sq. m.
2. The minimum width of it shall be 2.7 m.
3. For a detached garage the minimum and the maximum height to be permitted shall be 2.0 m and 3.0 m respectively. For attached garage the minimum height shall be 2.0 m.
4. The detached garage shall be in a corner of a plot away from the road.
5. For plot abutting on single road frontage, two corner garage shall be provided one in each of the rear corner of the plot. For corner plot having roads on two

sides, two garages are permitted touching each other in rear corner not abutting on the road.

6. The area covered by such permissible garage at the rear corners of a plot shall not be taken into account while calculating the built-up area of a plot and floor space index.
7. Windows shall not be permitted in the wall on common boundaries.
8. Floor shall not be permitted above the garage at the corner.

Mezzanine floor

1. The minimum floor area of mezzanine floor shall be 10 sq. m. And the maximum floor area of it shall be 25% of the permissible built-up area or 50 sq. m. whichever is less.
In this calculation area comprised in staircase flights and landing shall not be included.
2. The minimum height shall be 2.0 m from its floor level to the bottom of the ceiling of the next floor.
3. The minimum width of it shall be 2.4 m.
4. It shall be permitted at the minimum height of 2.0 m from the floor level of a room.
5. The minimum percentage of ventilation through window and vents shall be 10% of the floor area.

Loft

1. A loft shall be permitted in a room to cover an area up to 10 sq. m. subject to rule 2 below.
2. The maximum permissible area shall be 1/3 of the area of a room.
3. It shall be 2.0 m above the floor level.
4. A loft shall be permitted over bath, w.c. and store room, to cover full area.

Cellar

In a building unit, the cellar may be permitted on following conditions:

1. Height of the cellar shall not be less than 2 m clear from top of the flooring to the bottom of the ceiling.

2. The floor area of the cellar shall be considered in computation of total built up area for floor space index prescribed under any other regulations.
3. Width of the stair leading to the cellar shall not be less than 1.2 m.
4. All the stairs to be constructed leading to the cellar shall be of any material other than wood.
5. The minimum opening through ventilation required for the cellar should be 1/10 of the floor area of the cellar.
6. The materials of the constructions and fixtures of the cellar should be of fire resisting nature and in no case; the timber shall be allowed to be used as structural part of the cellar and any fixtures thereof.
7. No water connection or drainage connection shall be permitted in the cellar.
8. If the cellar is to be constructed in less than one half of the permissible built-up area of the plot, the condition no.2 shall not be applicable and if it is to be constructed below the residential unit, the condition no.3 shall also be not applicable.
9. Provided that if the cellar is constructed so as to form more than one storey under the ground level, all additional floors shall be considered towards floor space index, even if constructed up to the full extent of permissible built-up area.
10. Notwithstanding anything contained in the above regulation no.9 if the cellar is to be used for the parking purpose or for purpose of safe deposit vaults and its allied uses in a Bank premises, it shall not be considered towards the floor space index.
11. The use of the cellar shall be according to the use zones prescribed in the development plan regulations.
12. The cellar shall not be allowed for the storage of inflammable materials.

Terrace floor or Barasati

1. The minimum floor area for a terrace floor or a Barasati shall be 10 sq. m. and the maximum built-up area shall be 25% of the permissible built-up area or 50 sq. m. whichever is less. In this calculation area comprised in staircase flights and landing shall not be included. Anything covered except this shall be counted for this purpose.
2. The minimum width shall be 2.4 m.
3. The minimum height shall be 2.7 m.

Lobbies, corridor, passage and verandah

1. The minimum width of lobby, corridor, passage and verandah shall be 90 cm. The minimum width of a passage leading to W.C., and bathroom may be 75 cm.
2. The minimum plinth height shall be 45 cm.
3. The minimum floor height shall be 2.0 m.

Gallery or balcony

Aerial projection of gallery or balcony above 2.4 m from the ground level or paving subject to maximum of 1.2 m width shall be permitted as under:

1. 1.2 m on the side margins of 3 m and road side margins.
2. $\frac{1}{2}$ of the surplus open space between two building beyond 2.7 m.
3. The balconies and galleries shall not be allowed to be enclosed for any purpose.

Height of floors

1. Except as provided below no floor shall have clear height of less than 2.7 m provided that where a building or a part thereof is to be air-conditioned, a false ceiling at clear height of 2.4 m may be permitted in the portion to be air-conditioned, and that such building shall not be allowed to be used or occupied unless it is air-conditioned.
2. In case of sloping roof the height of lowest point of the roof in an upper floor in a building shall not be less than 2.4 m from the floor immediately below it but average height shall not be less than 2.7 m.
3. Clear height of cellar shall not be less than 2.0 m.
4. Mezzanine floor shall not have height less than 2.0 m.
5. The lofts not exceeding $\frac{1}{3}$ the area of a room may be allowed at a clear height of 2.0 m from floor level. The height of loft shall not exceed 1.2 m.
6. The height of the verandah passages, sanitary block, store, and garage shall be 2.0 m clear.

7. Staircase cabins not exceeding 9.5 sq. m. on terraced floor shall have minimum height of 2.0 m.
8. In case of business and office building the clear height shall not be less than 3.0 m.
9. In any room in an office or business building is sub-divided by a screen or partition the height of such screen or partition shall not exceed 2.4 m and half the height of such screen or partition shall be glazed.

General requirements

Parapet wall

The maximum permissible height of a parapet wall or grille shall be 90 cm.

Doors

1. The minimum width of a door shall be 75 cm for all rooms and for W.C. and bath minimum width shall be 60 cm.
2. The minimum height of it shall be 2 m.

Windows and ventilation

1. The minimum area for window and vents shall be equal to the minimum percentage of ventilation prescribed for each room.
2. No room intended for human habitation shall have for the purpose of ventilation windows whose aggregate area of openings clear of the frame shall not be less than one tenth of the floor area of such room.
3. No room in a business or an office or industrial unit shall have for the purpose of ventilation windows whose aggregate area of opening clear of the frames shall not be less than one seventh of the floor area of such room.
4. For the admission of light and air each window or vent shall directly face external air or side open to sky or a chowk open to sky having area not less than 5.6 sq. m. and width not less than 1.8 m or verandah having depth not more than 1.8 m.

Ottas and paving

1. The maximum height of ottas and paving shall be equal to the plinth level of a building.
2. It shall be allowed to cover all margins.

Lift

The provision of lift shall be compulsory beyond fourth floor i.e. after ground, first, second and third floor additional floor shall not be permitted if lift is not provided.

Open air space for high rise building

1. Every person who undertakes construction work on a building shall cause the whole or at least one side of every room except bona fide store room and puja room included in such work to abut, on an interior open air space of the width and shall fulfill the conditions hereinafter prescribed for such open air spaces or on an open verandah having a depth of not more than 2.5 m opening on to such an interior or exterior open air space as aforesaid.
 - (a) Every such interior or exterior open-air space shall not be less than the width prescribed in the following scale and may be provided at the plinth level or the floor level of every such room liner interpolation from a height not specified herein, will be permitted.

Building Adjoining does	Minimum width of open-air space throughout (in m)	Where Height of (above plinth the open air space not exceed) (in m)
	3	7
	4	10
	5	13
	6	16
	7	20
	8	24
	10	26
	12	30

Provided that in the case of building designed for artificial borrowed or indirect ventilation the above bye-law shall not apply.

Provided further that in such a case the owner shall have to produce a certificate from the supervisor of the building that this artificial ventilation is provided as per the national building code

- (b) Every such interior or exterior open air space, unless the later is a street, shall be maintained for the benefit of such building exclusively and shall be entirely within the owner's own premises.
- (c) For the purpose of the above bye-laws the depth of the room shall not be more than three times the width of the room which abuts on the air space.

1.7.4 Sanitary Accommodation

The sanitary accommodation for various types of building shall be provided as under:

- (i) One bathroom, one latrine for each dwelling unit.
- (ii) One latrine and two urinals for every six shops or stalls or for part thereof and one additional urinal for ladies.
- (iii) One latrine and two urinals for repairing garage and petrol pump with or without services station.
- (iv) For cinema theatre and lecture halls, one latrine for 100 seats or parts thereof and two urinals for 75 seat or parts thereof at each sitting level. The above provision so enforced should be suitably divided between the two sexes. For the purpose of determining the number of W.C. and urinals, each 0.45 sq. mt. of floor space exclusive of passage of an auditorium in a theatre or of the assembly hall shall be deemed to be occupied by one person.
- (v) One W.C., two urinals and one bathroom for godowns, factories, industrial building warehouse etc. per unit. For the purpose of determining numbers of unit each 90 sq. mt. of the gross floor space shall be deemed to be occupied by one person.

- (vi) One latrine and two urinals for the office building and public building, school and colleges. For determining the no. of units, each 4.5 sq. mt. of floor area in each room of such building shall be deemed to be occupied by one person.

1.7.5 Parking requirement

Parking requirement has become a very important criterion with ever increasing vehicular population. To avoid the traffic jam situation on roads, strict parking requirement are prescribed, especially for multi-storied residential and commercial buildings, cinema theatres, malls, schools, colleges, hospitals etc.

Requirement for parking space depends upon number of users of the building. In case of cinema theatres, town halls etc. it is decided based on number of seats and in case of institutional buildings like schools, colleges, etc. it depends upon number of students / occupants.

UNIT - III

Rent Control Laws

INTRODUCTION

Due to World War II and subsequently due to partition of India in the year 1947, there was influx of population in Urban area of India. This created housing shortage in large cities and also in small town areas of India. To safeguard against exploitation of tenants by landlords due to housing shortages, various State Governments resorted to freezing of rent by introducing Rent Control Acts in their respective states. These Acts also provided protection to the tenants against eviction from the rented premises. Bombay Rents, Hotel and Lodging House Rates Control Act of 1947 was one such act, provisions of which were followed more or less by the other States while enacting their Rent Acts. Small modifications were however made by the State Governments to suit the situation in their States.

The foundation for the present study is based on the applicable provisions of the Maharashtra Rent Control Act 1999 with an endeavor to have comparison for the purpose of relevancy wherever possible.

- 1.1** Objectives
- 1.2** Exemptions
 - 1.2.1** Section 3 of Maharashtra Rent Control Act, 1999
 - 1.2.2** Section 6
- 1.3** Definitions: Section 7
- 1.4** Standard rent fixation
 - 1.4.1** Section 8(1)
 - 1.4.2** Provisions of Other State Acts
 - 1.4.3** Section 10
- 1.5** Permitted Increase
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- 1.6** MISCELLANEOUS
 - 1.6.1** Section 14(1): Repairs
 - 1.6.2** Section 15(1): Possession
 - 1.6.3** Section 16: Recovery of Possession (Eviction of Tenant)
 - 1.6.4** Section (26)
 - 1.6.5** Section 30(1)
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- 1.7** Gujarat: Rent Control Act
 - 1.7.1** Introduction
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 - 1.7.4** Definition: Premises
 - 1.7.5** Rights and Duties of Tenants
 - 1.7.6** Recovery of Premises, Premium etc.
- 1.8** Effect of Rent Control Act on Valuation
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- 1.9** Valuation of rent controlled properties
 - 1.9.1** General
 - 1.9.2** Sale Transactions
 - 1.9.3** Land Value
 - 1.9.4** Analysis of Transactions
 - 1.9.5** Conclusion

1.1 OBJECTIVES

By the end of this unit the student will be able to understand:

- History of Rent Control Act.
- Need for controlling Rent.
- Various provisions of Rent Control Act as applicable to State of Maharashtra.
- Various provisions of Rent Control Act as applicable to State of Gujarat.
- Ill/Adverse effects of Rent Control Act on economy and on the society.
- Modifications required in present Rent Control Act.
- Effect of Rent Act on property valuations.

HISTORY OF RENT CONTROL ACTS

Due to ill effects of world war, there was acute shortage of accommodation in major cities and urban areas of India.

Due to acute housing shortage in cities there was possibility of charging of exorbitant rents to tenants and also ultimate eviction of poor tenants. To prevent exploitation of tenants by landlords, the Bombay Rent Restriction Act was enacted for the first time in the year 1938 as a temporary measure for 2 years period. The said Act was thereafter substantially modified in the year 1947 and the said Act was made applicable to several urban areas of Maharashtra and Gujarat. It was named Bombay Rents, Hotel and Lodging House Rates Control Act of 1947. This temporary Act initially having effect for five years was extended from time to time, at least 20 times till 1998. Two fundamental provisions made in the Act were -

- (i) Rent payable by tenant was frozen as on 1-9-1940 or rent fixed and charged at the time of first letting.
- (ii) Tenant, and after his death, even his heirs could not be ordinarily evicted from the rented premises if tenant is ready and willing to pay Standard Rent to the landlord.

1.2 EXEMPTIONS

1.2.1 Section 3 of Maharashtra Rent Control Act, 1999

This Act shall not apply –

- (a) to any premises belonging to Government.
- (b) to any premises let or sub-let to banks or any public sector undertakings or any corporation established by or under any Central or State Act or foreign missions, international agencies, multinational companies and private limited companies and public limited companies having a paid-up share capital of rupees one crore or more.

The effect of this provision will be that landlords will be able to charge market rent to all those tenants who lost protection of the Rent Act u/s. 3(1)(b). All public limited companies with paid up capital of 1 crore or more will have to pay market rent even if they were paying very low controlled Standard Rent for the rented premises up to 31-3-2000. Thus value of properties occupied by such tenants will increase substantially in open market. Cases of all these tenants will be governed by provisions of the Transfer of Property Act, 1982 and not by the Rent Act.

1.2.2 Section 6

Notwithstanding anything contained in this Act, from the commencement of this Act, the provisions relating to standard rent and permitted increase shall not apply to any premises let or given on licence in a building, whether newly constructed or otherwise where such premises were not let or given on licence for a continuous period of one year.

The effect of this provision is that value of any premises falling vacant for a continuous period of one year even if once let out or given on licence will not be now governed by the provisions regarding Standard Rent or permitted increase. Prior to the 1999 Act frozen rent was linked with premises. Now it will be linked with outgoing tenants and period of vacancy. Earlier, rent could not be increased at the time of change of tenancy. Now market rent could be charged to the new tenant, instead of old frozen rent of the premises, if landlord keeps the premises vacant for one year.

1.3 DEFINITIONS: SECTION 7

Section 7(3): Landlord: Any person entitled to receive rent of any premises let to tenant.

Section 7(5): Licensee: Person who is in occupation of premises under subsisting agreement for license but does not include paying guest.

Section 7(9): Premises: Any building or part of a building let or given on license.

Section 7(14): Standard Rent:

Standard Rent means -

- (a) Standard Rent fixed by Court.
- (b) (i) Rent at which premises were let on 1st October 1987 or thereafter or
- (b) (ii) Where premises were not let on 1-10-1987, the rent at which they were last let before that date plus one time increase of 5% of said rent.

Effect of this 7(14) is that maintainable rent to be adopted for rental method of valuation should be same as rent fixed on date of the first letting. However for premises let before 1-10-1987, original rent could be increased by 5% of such basic rent.

Section 7(15): Tenant: Person by whom rent is payable for any premises. It includes deemed tenant as prescribed under Section 15-A of repealed Rent Act viz. Rent Control Act of 1947 with amendment under Maharashtra Act 18 of 1987. It also includes sub-tenant in occupation prior to 1968 as laid under Section 25 of 1999 Act. It also includes a member of the family residing with the tenant at the time of his death.

1.4 STANDARD RENT FIXATION

1.4.1 Section 8(1)

Court may, upon an application made to it for the purpose, fix the standard rent at such amount as, having regard to the provisions of this Act and the circumstances of the case, the Court deems just.

Thus a landlord or a tenant can go to the Court for fixation of 'Standard Rent'. If contractual rent is found high by the Court, it will order for reduced rent as Standard Rent. Dispute between landlord and tenant in respect of permitted increase in rent is also fixed by the Court under this section. It is seen that this section does not lay down any methodology for fixation of Standard Rent. It is entirely left to the discretion of the

Court who will decide, on the basis of evidence of experts and submissions of the parties concerned, about the methodology for arriving at the standard rent of the rented premises.

1.4.2 Provisions of Other State Acts

However, some of the States have provided basis for of fixation of Standard Rent by prescribing investment basis in the respective State Rent Control Acts.

Tamil Nadu

As per Section 4 of The Tamil Nadu Buildings Lease and Rent Control Act, 1960, Fair Rent (Standard Rent) for any residential building shall be 9% gross return per year on the total cost of such building. Fair Rent for non-residential building shall be 12% gross return per year on total cost of such building. Total cost of building shall consist of market value of the site (Land), the cost of construction of the building and cost of amenities as on the date of application for fixation of fair rent.

Delhi

Delhi Rent Control Act, 1995 (Reenacted in 1995 but not yet implemented) also adopts this investment basis. Section 7(1) of said act provides that the Standard Rent of rental premises should be calculated at 10% of the cost of land and building construction/improvements.

The Bombay Courts also accept the investment basis. In the case of Sorab Talati V/s Joseph Michem, the Bombay Court accepted this theory for determining Standard rent of the rent-controlled premises (Vide appeal No.101 decided on 15-12-49). The rate of return is, however, not fixed in the Maharashtra Rent Act as in the other State Acts and it is left to the Courts to fix fair rate of return depending upon date of letting and prevalent circumstances at the said relevant period of time.

1.4.3 Section 10

It shall not be lawful for landlord to claim or receive on account of rent, for any premises any increase above Standard Rent. This is however subject to 11(1) provision which is permissible.

1.5 PERMITTED INCREASE

1.5.1 Section 11(1): Annual increase in basic rent (Standard Rent)

After commencement of Act (i.e. 31-3-2000), a landlord shall be entitled to make an increase of 4% per year in the rent of premises let for any purpose.

1.6 MISCELLANEOUS

1.6.1 Section 14(1): Repairs

Every landlord shall be bound to keep the premises in good and tenantable repaired condition. If the tenanted building is in disrepair condition, while estimating value by rental method, the valuer should deduct cost of repairs to put the premises in tenantable condition.

1.6.2 Section 15(1): Possession

A landlord shall not be entitled to the recovery of possession of any premises so long as the tenant pays, or is ready and willing to pay, the amount of the standard rent and permitted increases. Thus, tenant cannot be ordinarily evicted if he pays frozen rent regularly.

1.6.3 Section 16: Recovery of Possession (Eviction of Tenant)

Landlord can recover possession of the premises (from tenant) in the following situations / circumstances.

A. Section 16(1)(a)

Tenant commits act contrary to Cl.(o) of Section 108 of Transfer of Property Act, 1882 viz. carry out alteration which causes damage to building and is permanently injurious to premises.

B. Section 16(1)(b)

Tenant has erected any permanent structure on premises without permission from the landlord.

C. Section 16(1)(e)

Tenant has after 1-2-1973, sublet or given on licence whole or part of the let-out premises.

D. Section 16(1)(g)

Let out premises are reasonably and bona fide required by landlord for personal use.

E. Section 16(1)(i)

Let out premises are reasonably and bona fide required by the landlord for demolishing for the purpose of erecting new building.

F. Section 16(1)(n)

Let out premises have not been used for a continuous period of six months prior to the date of the suit.

Study of these provisions will enable a valuer to decide as to how many tenants in the building can be evicted for breach of these provisions.

G. Section 16(6)(c)&(d)

Provides for circumstances under which Court may pass decree of possession for reconstruction of old let-out premises.

(i) New building to be erected by the landlord containing residential tenements not less than the number of existing tenements sought to be demolished.

(ii) Plans for new building include new premises for such tenant with carpet area equivalent to the area of the old premises in his occupation, with variation of 5% in area.

- (iii) Landlord has adequate money for new construction.

These provisions would enable a valuer to estimate, with fair degree of accuracy, land values under redevelopment projects by estimating re-housing costs for existing the sitting tenants in an old building.

H. Section 20(a)

In case of Court decree for eviction for reconstruction, the tenant shall give notice to the landlord of his intention to occupy a tenement in the new building on condition that he shall pay the Standard Rent in respect of the tenement in the new building.

This provision would also enable a valuer to fairly estimate the rental values of premises in a new building under redevelopment project and for valuation of the property to be valued or to estimate fair market value of land (to be purchased) by residual method.

I. Section 24(1)

A licensee in possession of premises on licence for residence shall deliver possession of such premises to the landlord on expiry of the period of licence, and on failure of the licensee to so deliver the possession of licensed premises, a landlord shall be entitled to recover possession by making application to the Competent Authority.

J. Section 24(2)

Any licensee who does not deliver the possession to landlord on expiry of licensed period and continues possession shall be liable to pay damages at double the rate of the licence fee fixed under the agreement of licence, till he vacates the premises for which the maximum period is six months.

This provision would enhance the value of a property given on leave and licence as rental value is not frozen and eviction is assured. However this provision, it appears, is not applicable for commercial and industrial premises given on leave & licence basis.

1.6.4 Section (26)

It shall not be lawful for any tenant to sub-let or give on licence the whole or any part of premises let to him.

1.6.5 Section 30(1)

A landlord shall not use or permit, to be used for a commercial purpose any premises which, were used for a residential purpose.

1.6.6 Section 55(1)

Any agreement for leave and license or letting of any premises, with effect from 31-3-2000 shall be in writing and shall be registered under the Registration Act, 1908. Responsibility of registration shall be on landlord.

1.6.7 Section (56): Charging Premium etc.

- (i) It shall be lawful for the tenant to claim or receive any sum or any consideration, as a condition of the relinquishment, transfer or assignment of tenancy of any premises.
- (ii) It shall be lawful for the landlord to receive any fine, premium or other like sum or deposit or any consideration in respect of grant, or renewal of a lease of any premises, or for giving consent to the transfer of a lease to any other person.

This is a very vital provision or amendment in Rent Act. As per Section 18(1) of 1947 Act with amendments of 1987 (now repealed), any landlord receiving premium or other like sum or any consideration other than standard rent from tenant was punishable with 6 months imprisonment. Now under section 56(ii) of 1999 Act such receipt of sum by landlord is made legal. Up to 30-3-2000 accepting premium (pugree) was criminal offence but on and after 31-3-2000 acceptance of pugree is legal and is not an offence. This acceptance of government's failure to control market forces by introducing rent control legislation for long period i.e. by artificially controlling market rent for long period is important. The government seems to have now recognized power of market (economic) forces after 60 years of implementation of Rent Control Act.

This provision however may have effect on valuation of rented property only to some extent since the protection to tenants from eviction and provision of control of rent still continue even under this 1999 Act.

Up till now occupancy rights had no value in law, but now it will have some value at the time of creation of new tenancies as well as at the time of transfer of tenancies, since charging of sum by tenant while vacating the premises and demanding premium by landlord while letting the premises have been legalized.

It must be remembered that in spite of legalising of premium money (pugree) for occupancy rights, this right is not freely transferable or assignable in the market like ownership premises. It is subject to landlord's will and tenant's willingness. Unless either party enters into written and registered contract for transfer of tenancies to prospective new tenant, this occupancy right has no value in the open market. Landlord has right to reject and refuse transfer of tenancies even if offered considerable amount as premium/pugree. Hence tenants occupancy right is a non-marketable right. It has only value in use and no value in exchange.

1.7 GUJARAT: RENT CONTROL ACT

1.7.1 Introduction

The Bombay Rent Control Act, 1947 has been amended under Gujarat Acts 26 & 27 of 2001 as applicable to the State of Gujarat. It is worthwhile to study the same.

Most of the old provisions of the Bombay Rent Control Act of 1947 have been retained as they were, even after amendments of Gujarat Act of 2001, which is effective from 5-9-2001. It is therefore thought fit to discuss only those sections which are different from the Maharashtra Rent Control (M.R.C.) Act, 1999. Provisions of 1999 Act which have not been included in the Gujarat Act, 2001 are also discussed, hereunder.

As stated, before the Bombay Rent Control Act of 1947 was adopted for the State of Gujarat under Gujarat Adaptation of Laws Order of 1960. By enacting the Bombay Rent Control (Gujarat Extension and Amendment) Act, 1963 (Gujarat Act 57 of 1963), substantial amendments have been made to the adopted principal Rent Control Act of

1947.

1.7.2 Section 3(2): Period

This section was introduced in Gujarat Amended Rent Act, 1963, by Gujarat Act 26 of 2001. It states: Rent Act shall remain in force up to and inclusive of 31-3-2011. This provision is not existing in the 1999 Act of Maharashtra as it is no more a temporary act but a permanent Act.

1.7.3 Exemptions

Section 4

Exemptions i.e. non-applicability of the Rent Act to certain premises.

Section 4(1)

The Act shall not apply to any premises belonging to Government or a local authority.

Section 4(1A) (a)

The Act shall not apply, to any premises constructed on or after the commencement of Gujarat Rent Control, Second Amendment, Act 2001 (The Gujarat 27 of 2001 is effective from 5-9-2001), for a period of ten years from 5-9-2001.

Section 4(1A)(b)

The Act shall not apply, to any existing premises which are self-occupied by the owner or are vacant on or after the commencement of Second Amendment Act of 2001 and are let after such commencement (viz. after 5-9-2001), for a period of ten years from 5-9-2001.

This is an excellent provision made in the Rent Act. A person can let and lease the premises up to 4-9-2011 at market rent without any fear of rent reduction or non-ejectment, since the provisions of the Act are not applicable to such premises for a period of ten years w.e.f. 5-9-2001 i.e. up to 4-9-2001.

1.7.4 Definition: Premises

Section 5(8): Gujarat Act 1963

Premises means :-

- (a) any land not being used for agricultural purpose.
- (b) any building other than Farm building.

1.7.5 Rights and Duties of Tenants

Section 11(B) of Amendment Act of 2001

This provision gives right to the tenants in a new building when the premises are damaged or destroyed due to natural calamity like earthquake, flood, cyclone etc.

Section 11(A) of Gujarat Act, 1963

This is very unusual provision in the Rent Control Acts. It states that whereby the reason of any riot or violence of a mob, any material part of the premises in a disturbed area is wholly destroyed or rendered permanently unfit for the purpose for which it was let.

- (a) The landlord shall erect the new building at the original site subject to provisions of rules of local authority, not later than 15 months from the date of such destruction of the building due to riot or violence of mob.
- (b) The tenant shall have the right to occupy a tenement in the new building erected at the original site by the landlord.

Section 11(B)

This is a similar provision for house destroyed due to natural calamity. Reconstruction period is however fixed at 12 months.

Section 15-A of Gujarat Act, 1963

It shall not be lawful for any tenant to give premises or any part thereof on licence for monetary consideration without the previous permission of the landlord.

Section 17-D (1)(a)

Where a landlord fails to erect a new building within 15 months as specified u/s. 11A and within 12 months in case of situations specified u/s. 11B, the property shall vest in the State Government free from all encumbrances for the purpose of erection of new building to provide accommodation to the tenants, and there shall be paid, to the landlord, such compensation for such site as may, by order, be determined by the Collector.

1.7.6 Recovery of Premises, Premium etc.

In Gujarat Rent Act, there is no provision of recovery of possession of premises given on license by the landlord to the licensee. Sec. 24(1) of Maharashtra Act, 1999 provides for Competent Authority enforcing the recovery of possession from licensee.

There is also no provision for legalizing of acceptance of premium amount for tenancy of premises by landlord/tenant in Gujarat Act like Section 56 of the Maharashtra Act, 1999. On the contrary Section 18 of the Gujarat Act, 1963 prohibits acceptance of premium by landlord and Section 19 of the Gujarat Act prohibits acceptance of premium by tenant for surrender or transfer of tenancies.

Section 25(1), Gujarat Act 1963 provides that a landlord shall not use or permit to be used for a nonresidential purpose, any premises which were used for residential purposes.

1.8 EFFECT OF RENT CONTROL ACT ON VALUATION

1.8.1 The Rent Control Acts have been in force since more than 60 years in various States of India. In some areas like rural areas and less populated towns it has less effect. However, in some other areas, particularly metropolitan towns, it had adverse effect on market values of properties, in particular and on the society as a whole in general. These ill effects of Rent Control Act can be summarized as under:

1. Due to frozen rent provision and meagre rent income from house properties, landowners are discouraged from constructing new buildings for letting purposes. This further aggravated already acute housing shortages in towns of India which had limited housing stock in the entire country.
2. In view of the low rental income and increased cost of repairs and maintenance, landlords discontinued maintaining and repairing buildings. This resulted into severe deterioration of the existing inadequate housing stock. Several old buildings collapsed and valuable human lives were lost.
3. An illegal system of payment of salami/pagdi/premium/key money to the landlord or to the tenant (especially for vacating the premises) came into existence to compensate for pegged down rent of the let out premises. This market practice resulted in generation and exchange of considerable unaccounted money.
4. The ad-hoc system of premium also damaged ethical and moral standards in the society in general. Even honest persons do not hesitate to give and take large sums of unaccounted / black money for creation or transfer of tenancies.
5. The social ill-effect as consequence of the Rent Control Acts is that the relations between landlords and tenants which were more or less cordial prior to the R.C. Acts, have become strained, if not hostile after the Acts. Such attitude has also then percolated to the society, in general.

1.8.2 The value of even newly built-up tenanted properties fell down substantially much below its cost of acquisition/construction. Such reduction in value and freezing rents at levels lower than a fair market rent was artificial and against natural open market forces.

The Rent Control Acts have also pegged down municipal revenue from property taxes since ratable values have been limited to “Standard Rent” or ‘controlled rent’ by many decisions of the Courts.

1.8.3 New provisions in Rent Control Acts are indicative of the fact that State Governments have started realizing the setback to the economy and development in general caused by the Rent Control Acts. Introduction of

Section 56 in Maharashtra Act, 1999 which legalized acceptance of premium by landlords/tenants is the proof of resistance of market forces to artificial controls and failure of Government in trying to control artificially rental market in the urban areas. Similarly provision of Section 4(1A)(a) & (b) in Gujarat Rent Control Act, 1963, in the year 2001, exempting tenancies in new constructions and owner occupied premises, for a period of 10 years from 5-9-2001 from Rent Act application, is an indication of need to scrap the Rent Control Acts. This provision will have good effect on rental market. Rental premises will be readily available on limited period tenancies at market rentals. Such premises will be governed by provision of Transfer of Property Act. Similarly Section 3(1)(a) of Maharashtra Act, 1999, exempting from the Rent Act, tenancies of limited companies having 1 crore paid up capital, is a first step in the right direction. Those who have ability to pay market rent have been excluded from the operation and the benefit of Rent Control Act and are subjected to market forces of demand and supply in the rental market.

Central Govt. also attempted to scrap age old Delhi Rent Control Act of 1958 by approving Delhi Rent Act of 1995. However due to heavy resistance of tenants in Delhi, this new act could not be enforced till today in spite of legislative approval and President's assent to this act on 23-8-1995.

1.8.4 Apart from loss to land owners and building owners, this act caused great economic loss to the local authorities, the State and Central Governments. This has been one of the major ill effect of Rent Control Acts. Property taxes levied by local authorities were directly linked with rental income, and since the rental income has been frozen under the Rent Acts; income to local authorities from property taxes has also remained frozen, in spite of the increased cost of services being provided to the citizens. To overcome this short fall, some local authorities increased the rates of property taxes as high as at 120 % of the rental values, which prima facie is absurd. The Central Government has also lost income tax on income from house properties due to low rental income from let out premises. It is also losing income from Wealth Tax due to low value of properties in view of frozen rents. The State Governments are also losing stamp duty income due to low sale prices of rented properties.

1.8.5 The Judiciary is also facing, unnecessary heavy burden due to thousands of eviction suits filed by landlords. Similarly, with a view to avoid eviction, tenants have filed Standard Rent or rent reduction cases in the Courts in large

numbers during last 60 years. It is absurd that tenants are paying Rs.20,000/- to a lawyer as his fees to fight a rent reduction case, mentioning in the rent reduction application that the rent of Rs.25/- per month for his tenement is high and it should be reduced and fixed at Rs.15/- per month.

The spurt in the activity of ownership apartment is partly due to non-availability to rental premises due to Rent Control Acts and partly due to high prices of land and higher construction costs. This seems to be the only good effect of the R.C. Acts.

In view of all such ill effects of Rent Control Acts on the economy in general and harm caused to housing and development activities, various committees appointed by the Central and State Governments have recommended to scrap the Rent Control Acts. It, however, seems that no Government has taken such bold step due to political reasons.

1.9 VALUATION OF RENT CONTROLLED PROPERTIES

1.9.1 General

The properties subjected to Rent Control Acts are fetching rents (income) that much less than the market rents. Such properties are also sold in the market, though at reduced prices. The rent-controlled properties are thus in the category of 'Income Fetching & Marketable' and can therefore be valued by 'Income Approach'. The two main questions then posed are (1) What rent or net income should be capitalized and (2) What should be considered as appropriate rate of interest for capitalization. Answers to these questions can be satisfactorily found, to some extent, by the study of the local market of such rent-controlled properties.

With a view to study the effect of Rent Control Acts on values of properties some students of Master of Valuation (Real Estate), Sardar Patel University, Vallabh Vidyanagar, Gujarat have undertaken study of rent controlled property markets in a few local areas of Nasik, Sholapur, Mumbai, Anand etc. These dissertations suggest possible answers and the method to find answers, to the above two vital questions.

1.9.2 Sale Transactions

Three types of sale transactions, in respect of properties occupied by tenants

protected under the Rent Control Act were generally noticed. In the first type developers/builders have purchased properties with encumbrance of tenants, either paid off the tenants or sold them flats at concessional rates, i.e. charging them only cost of new construction, and demolished old buildings and reconstructed new buildings.

In the second and third types of transaction either one of the tenants or the societies formed by the tenants have purchased the buildings with tenants and retained old buildings with or without repairs

In all the three types of transactions the information about consideration i.e. actual prices paid, including unaccounted money if any, could be obtained.

1.9.3 Land Value

In the first type of transactions, since the old buildings were demolished, the consideration paid to landlords represented the value of land but only partly. The other remaining part of the land value has been represented by the amounts paid to tenants either directly for buying them off or indirectly by way of cost of concessions given to the tenants in the form of difference between the market value of flats and the cost of construction of flats either partly or fully charged to the tenants.

Thus the land values virtually paid by builders / developers were the consideration actually paid to landlords plus the amounts paid directly or indirectly to the tenants by way of payoff or concessions.

It was noticed that the total land values thus virtually paid, including payoff and concessions given to tenants, were about 70% of fair market values of similar and comparable open lands in the respective localities.

1.9.4 Analysis of Transactions

For the purpose of analysis of sale instances gross and net income from tenanted properties was estimated firstly on the basis of controlled actual rents paid by tenants and secondly on the basis of fair market rents estimated by comparison with rents fetched by similar, comparable properties, particularly of similar type of construction, similar age and similar state of repairs, maintenance and services. Properties were compared more objectively following weightage system. Net income was estimated by deducting actual taxes, 10% for annual repairs and maintenance and 1% for insurance, management etc.

The consideration actually paid, including unaccounted money, was ascertained by inquiries with vendors or purchasers.

It was found that Y.P. on the basis of actual or standard rent varied from about 250 to about 300.

The Y.P. on the basis of estimated fair market rent varied from 12% to 14% indicating reduction of 30% to 40% in market value of properties as effect of or due to Rent Control Acts.

1.9.5 Conclusion

A valuer is advised to study the market of such rent-controlled properties in his area or areas of practice, analyze sale transactions involving such tenanted properties, and find out YPs and appropriate rates of interest (single or dual rate, as the case may be) for capitalization. Adopting ad hoc percentage deductions (i.e. notional assumptions) need to be discouraged and need to be avoided in any circumstances.

UNIT – IV

Easements and Licenses under Indian Easements Act, 1882

The Law of Easements is a necessary adjunct to the law of property. There is hardly any land conceivable which does not depend for its enjoyment, in one way or another, on the indulgence of the owners of the neighbouring lands.

In addition of the ordinary rights of the property, which are determined by the boundaries of a man's own soil, the law recognises the existence, as accessorial to these general rights, of certain other rights which may be exercised over the property of a neighbour and which impose a burden upon him. These rights in the property of another (*jura in re aliena*) are known as easements.

Rights of easements are as old as the day when the human race, first emerging from Barbarism, adopted the custom of living together in towns, or living as each other's neighbor's respecting each other's rights. The right of easement is the necessary consequence of the right of ownership of the land. As soon as men arrived at the determination that individuals were to be allowed exclusive ownership of property, they also came to realise on equitable principles that the good of the public lay in enjoying one's own property, so as not to disturb the enjoyment by the neighbour of his own property. The very gregarious nature of mankind which compels a neighbour to love and respect his neighbour and which binds society together is the foundation of the right. Along with the advantages of neighbourhood which a man enjoys, he has, also, to put up with disadvantages which his neighbour might impose on him in order to enjoy the reciprocal advantage of his neighbourhood. This kind of reciprocal relationship of the owners with respect to their property rights is governed by "The Indian Easements Act, 1882".

STRUCTURE OF THE UNIT

- 1.1** Objectives
- 1.2** Relevance of the law of easements in valuation of immovable properties
- 1.3** Definition and meaning of easement
- 1.4** Various types of rights which can be acquired by easement
 - 1.4.1** Right to way
 - 1.4.2** Right to light/air
 - 1.4.3** Right to support
 - 1.4.4** Right to dispose rain water
- 1.5** Essential qualities of easement
- 1.6** Easement distinguished from profits-e-prendre
- 1.7** Modes of Acquiring easement right
 - 1.7.1** Easement by grant
 - 1.7.2** Acquisition by necessity
 - 1.7.3** Acquisition by prescription
 - 1.7.4** Customary easements
- 1.8** Section 19: Transfer of dominant heritage passes easement
- 1.9** Section 28: extent of easements
 - 1.9.1** Easement of necessity
 - 1.9.2** Other easements
- 1.10** Extinction of easement right
- 1.11** Section 49: Suspension of easement
- 1.12** Licence
 - 1.12.1** Section 52: "Licence" defined
 - 1.12.2** The essential features of a licence
- 1.13** Difference between Easement and Licence
- 1.14** Difference between Profits e prendre and Licence
- 1.15** Difference between Lease and Licence

1.1 OBJECTIVES

By the end of this chapter student will learn about-

- What is easement and License
- Type of easements
- Modes of acquiring easement right
- Extinction of easement right
- Suspension of easement

1.2 RELEVANCE OF THE LAW OF EASEMENTS IN VALUATION OF IMMOVABLE PROPERTIES

It is always a prudence of a value of immovable properties to consider easement as one of the factors affecting market value of the property. It may be revealed by verification of the title documents as well as by the careful site inspection whether the two adjoining properties are affected by easement rights or not. If it is observed during the inspection of the site that neighbour's windows are opening in the subject property or vice versa; the neighbour is using the portion of the subject property for the access of his own property or vice versa; rain water from the neighbour's property passes through the subject property or vice versa etc. the valuer must suspect the existence of easement right and carefully assess its impact on the value of the property. Right to support the neighbour's property exists in all cases any how, which must be taken care of while developing any property.

1.3 DEFINITION AND MEANING OF EASEMENT

Section 4: "Easement" defined -

An easement is a right which the owner or occupier of certain land possesses, as such, for the beneficial enjoyment of that land, to do and continue to do something, or to prevent and continue to prevent something being done, in or upon, or in respect of certain other land not his own.

Dominant and servient heritages and owners

The land for the beneficial enjoyment of which the right exists is called the dominant

heritage, and the owner or occupier thereof the dominant owner; the land on which the liability is imposed is called the servient heritage, and the owner or occupier thereof the servient owner.

Explanation

In the first and second clauses of this section, the expression “land” includes also things permanently attached to the earth; the expression “beneficial enjoyment” includes also possible convenience, remote advantage, and even a mere amenity; and the expression “to do something” includes removal and appropriation by the dominant owner, for the beneficial enjoyment of the dominant heritage, of any part of the soil of the servient heritage, or anything growing or subsisting thereon.

Illustrations

- (a) A, as the owner of a certain house, has a right of way thither over his neighbour B’s land for purposes connected with the beneficial enjoyment of the house. This is an easement.
- (b) A, as the owner of a certain house, has the right to go on his neighbour B’s land, and to take water for the purposes of his household, out of a spring therein. This is an easement.
- (c) A, as the owner of a certain house, has the right to conduct water from B’s stream to supply the fountain in the garden attached to the house. This is an easement.
- (d) A, as the owner of a certain house and farm, has the right to graze a certain number of his own cattle on B’s field, or to take, for the purpose of being used in the house, by himself, his family, guests, lodgers and servants, water or fish out of C’s tank, or timber out of D’s wood, or to use, for the purpose of manuring his land, the leaves which have fallen from the trees on E’s land. These are easements.
- (e) A dedicates to the public the right to occupy the surface of certain land for the purpose of passing and re-passing. This right is not an easement.

- (f) A is bound to cleanse a watercourse running through his land and keep it free from obstruction for the benefit of B, a lower riparian owner. This is not an easement.

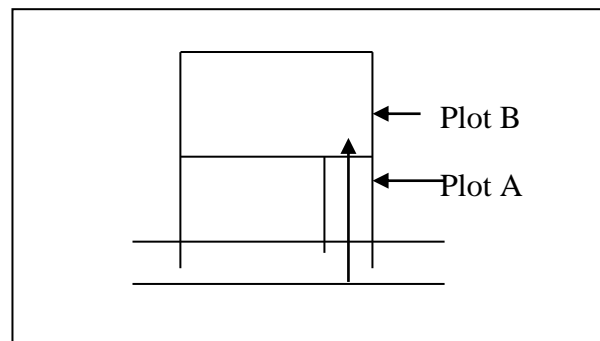
1.4 VARIOUS TYPES OF RIGHTS WHICH CAN BE ACQUIRED BY EASEMENT

The various rights which can be acquired by way of easement are –

- right to way,
- right to light/air,
- right to support
- right to dispose rain water
- right to draw water from other's channel etc.

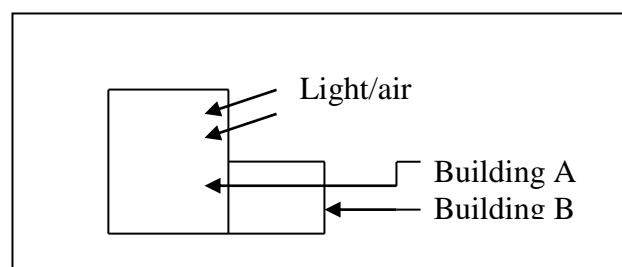
Some of these rights are explained with the help of sketches as mentioned below.

1.4.1 Right to way



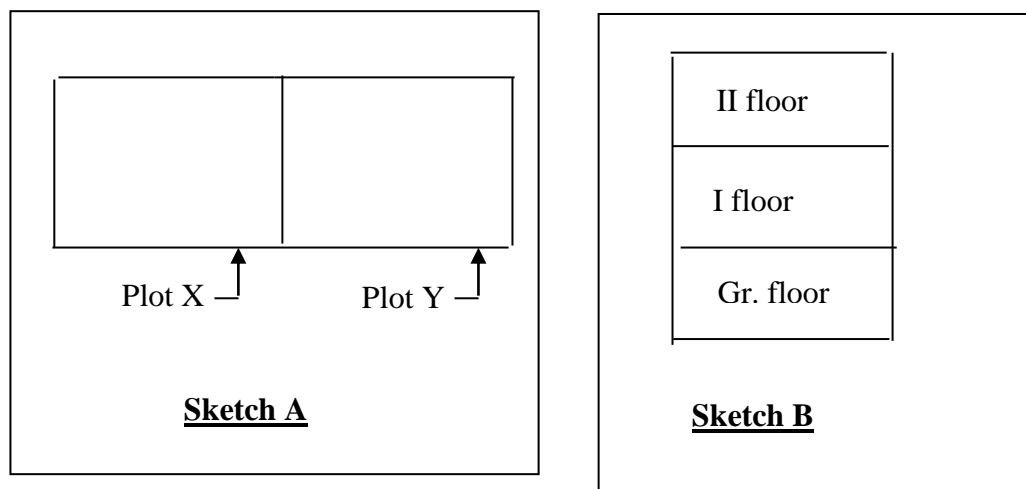
In the above sketch owner of Plot B has a right to pass through Plot A, which is an easement right of way. B is the dominant heritage and the owner of plot B is the dominant owner. Similarly, A is the servient heritage and owner of plot A is the servient owner.

1.4.2 Right to light/air



In the above sketch, light and air enters the building A through the open space above building B. This is the easement right enjoyed by the owner of building A over the owner of building B. Therefore, owner of building B cannot extend his building in such a way as it obstruct the light and air passing to building A. Here, A is the dominant heritage and the owner of building A is the dominant owner. Similarly, B is the servient heritage and owner of building B is the servient owner.

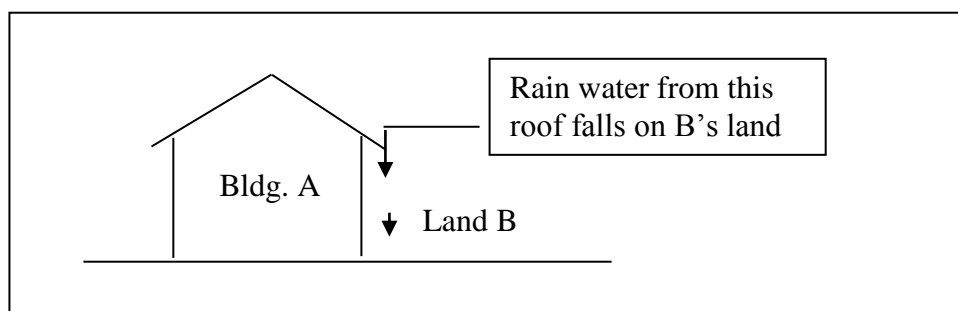
1.4.3 Right to support



In the above sketch A, Plot X and Plot Y are the two adjoining plots of land. Both the plots enjoy the right to support against each other in such a way that owner of neither plot can excavate his own land so as to endanger the other land.

In sketch B, there is a three storied building, wherein the owner of second floor enjoys the right to support over first floor and ground floor, and owner of first floor enjoys the same over the ground floor.

1.4.4 Right to dispose rain water

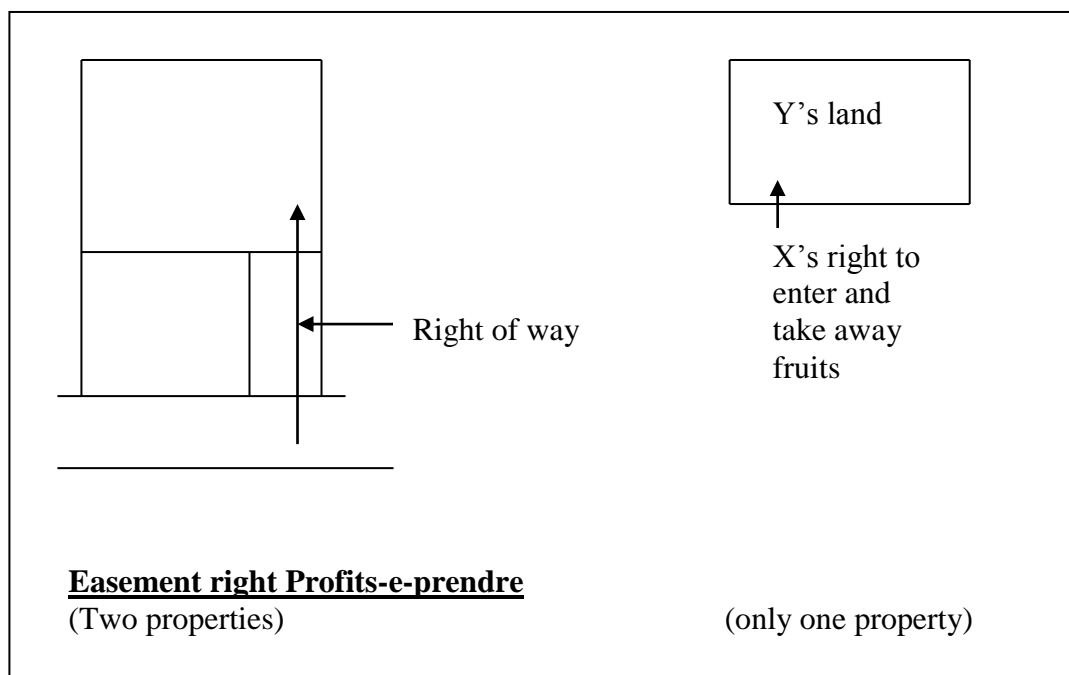


In the above sketch owner of building A has a right to dispose of the rain water through open land B. Owner of land B cannot develop his land in such a way that this disposal is obstructed. Here, A is the dominant heritage and the owner of building A is the dominant owner. Similarly, B is the servient heritage and owner of land B is the servient owner.

1.5 ESSENTIAL QUALITIES OF EASEMENT

- (i) there must be a dominant and a servient tenement
- (ii) an easement must accommodate the dominant tenement, i.e., be connected with its enjoyment and for its benefit,
- (iii) the dominant and servient owners must be different persons; and
- (iv) the right claimed must be capable of forming the subject-matter of a grant.

1.6 EASEMENT DISTINGUISHED FROM PROFITS-E-PRENDRE



'Profits-e-prendre' is a right to take something off the land of another person, or a right to enter upon the land of another and to take some profit of the soil, or portion of the soil itself for the use of the owner of the right, or to take something from or out of the land. e.g. a person X has a right to enter upon Y's land and take away the fruits from the trees, this is the right in the nature of profits-e-prendre and not easement, because this is a personal right enjoyed by X, not associated with any of his properties. Here, one of the essential requirements of easement right – 'there must be two

different properties and the right must be for the beneficial enjoyment of the dominant property' is not fulfilled since this right is beneficial to the person in his personal capacity.

1.7 MODES OF ACQUIRING EASEMENT RIGHT

There are following four modes of acquiring easement right –

1. by grant including lost grant, (sections 8 to 12)
2. by necessity, (section 13)
3. by prescription (section 15) and
4. customary easement (section 18)

These four modes are now discussed in detail in the following paragraphs.

1.7.1 Easement by grant

Section 8 - Who may impose easements

An easement may be imposed by any one in the circumstances, and to the extent, in and to which he may transfer his interest in the heritage on which the liability is to be imposed.

This section is based on the principle that 'you cannot give what you do not have'.

Illustrations

- (a) A is tenant of B's land under a lease for an unexpired term of twenty years, and has power to transfer his interest under the lease. A may impose an easement on the land to continue during the time that the lease exists or for any shorter period.
- (b) A is tenant for his life of certain land with remainder to B absolutely. A cannot, unless with B's consent, impose an easement thereon which will continue after the determination of his life interest.
- (c) A, B and C are co-owners of certain land. A cannot, without the consent of B and C, impose an easement on the land or on any part thereof.

- (d) A and B are lessees of the same lessor, A of a field X for a term of five years, and B of a field Y for a term of ten years. A's interest under his lease is transferable; B's is not. A may impose on X, in favour of B, a right of way terminable with A's lease.

Section 9 - Servient owners

Subject to the provisions of Section 8, a servient owner may impose on the servient heritage any easement that does not lessen the utility of the existing easement. But he cannot, without the consent of the dominant owner, impose an easement on the servient heritage which would lessen such utility.

Illustrations

- (a) A has, in respect of his mill, a right to the uninterrupted flow thereto, from sunrise to noon, of the water of B's stream. B may grant to C the right to divert the water of the stream from noon to sunset, provided that A's supply is not thereby diminished.
- (b) A has, in respect of his house, a right of way over B's land. B may grant to C, as the owner of a neighbouring farm, the right to feed his cattle on the grass growing on the way; provided that A's right of way is not thereby obstructed.

Section 10 - Lessor and mortgagor

Subject to the provisions of Section 8, a lessor may impose, on the property leased, any easement that does not derogate from the rights of the lessee as such, and a mortgagor may impose, on the property mortgaged, any easement that does not render the security insufficient. But a lessor or mortgagor cannot, without the consent of the lessee or mortgagee, impose any other easement on such property, unless it be to take effect on the termination of the lease or the redemption of the mortgage.

Explanation

A security is insufficient within the meaning of this section unless the value of the mortgaged property exceeds by one-third, or, if consisting of buildings, exceeds by one-half, the amount for the time being due on the mortgage.

Section 11 - Lessee

No lessee or other person having a derivative interest may impose on the property held by him as such an easement to take effect after the expiration of his own interest, or in derogation of the right of the lessor or the superior proprietor.

e.g. There is a lease having an unexpired period of five years. Lessee of this lease cannot impose an easement on this property to take effect after five years for the simple reason that at that time his right would have terminated.

Section 12 - Who may acquire easements

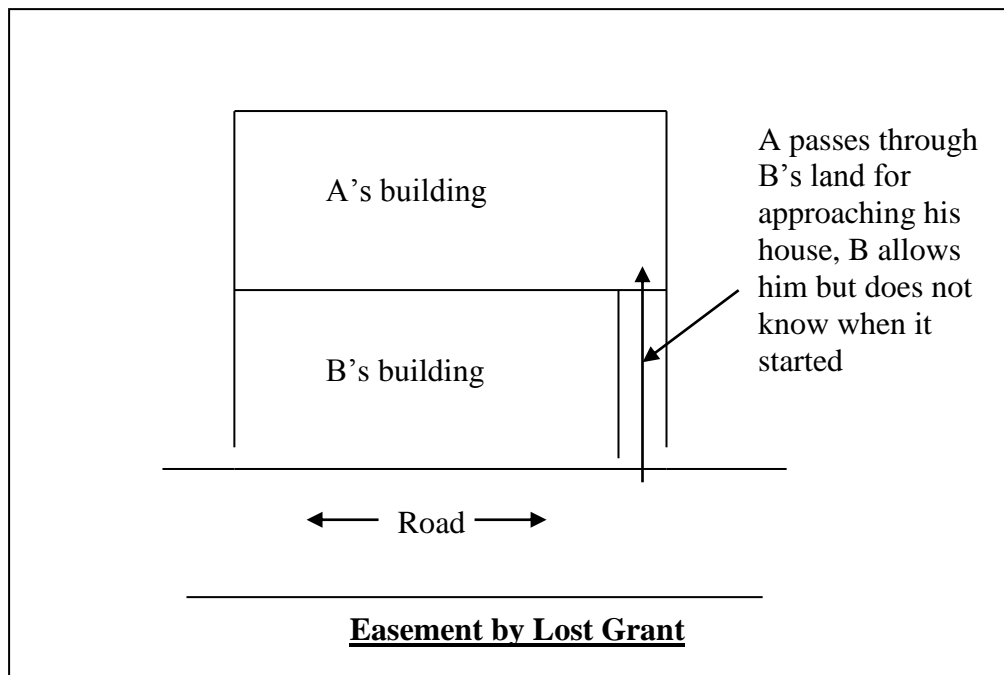
An easement may be acquired by the owner of the immovable property for the beneficial enjoyment of which the right is created, or on his behalf, by any person in possession of the same.

One of two or more co-owners of immovable property may, as such, with or without the consent of the other or others, acquire an easement for the beneficial enjoyment of such property.

No lessee of immovable property can acquire, for the beneficial enjoyment of other immovable property of his own, an easement in or over the property comprised in his lease.

Easement by lost grant

If the right of easement is enjoyed by the dominant owner for a very long period and it is beyond the memory of the dominant as well as the servient owner as to when this right originated, this kind of right is known as easement by lost grant. Here, the servient owner admits the grant but is unaware of the origin of the grant.



2. Easement by necessity

1.7.2 Acquisition by necessity

Section 13 - Easements of necessity and quasi-easements

Where one person transfers or bequeaths immovable property to another –

- (a) If an easement in other immovable property of the transferor or testator is necessary for enjoying the subject of the transfer or bequest, the transferee or legatee shall be entitled to such easement; or
- (b) If such an easement is apparent and continuous and necessary for enjoying the said subject as it was enjoyed when the transfer or bequest took effect, the transferee or legatee shall, unless a different intention is expressed or necessarily implied, be entitled to such easement;
- (c) If an easement in the subject of the transfer or bequest is necessary for enjoying other immovable property of the transferor or testator, the transferor or the legal representative of the testator shall be entitled to such easement; or

- (d) If such an easement is apparent and continuous and necessary for enjoying the said property as it was enjoyed when the transfer or bequest took effect, the transferor, or the legal representative of the testator, shall, unless a different intention is expressed or necessarily implied, be entitled to such easement.

Where a partition is made of the joint property several persons,

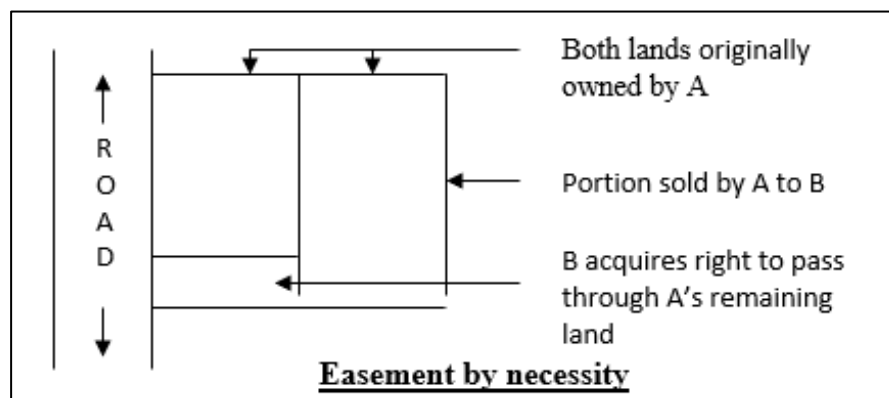
- (e) If an easement over the share of one of them is necessary for enjoying the share of another of them, the latter shall be entitled to such easement, or
- (f) If such an easement is apparent and continuous and necessary for enjoying the share of the latter as it was enjoyed when the partition took effect, he shall, unless the different intention is expressed or necessarily implied, be entitled to such easement.

The easements mentioned in this section, clauses (a), (c) and (e), are called easements of necessity.

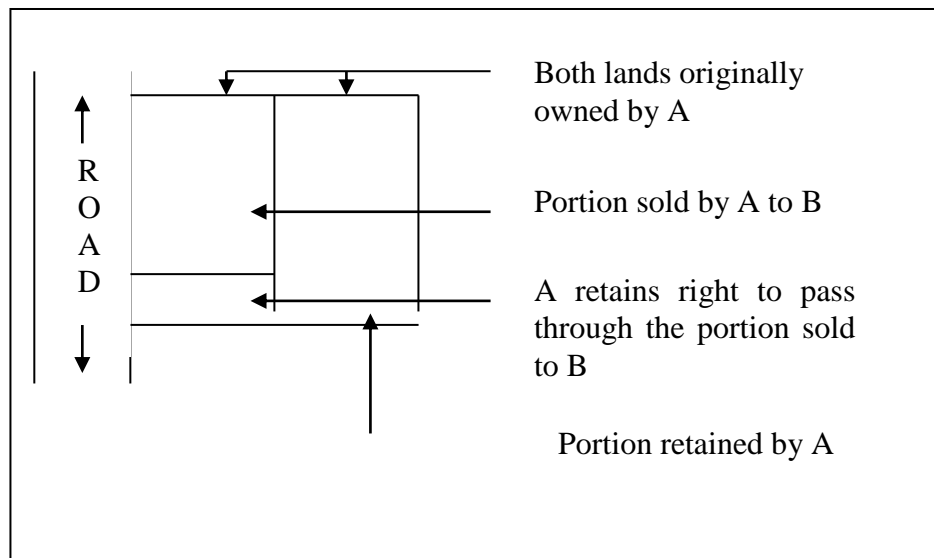
Where immovable property passes by operation of law, the persons from and to whom it so passes are, for the purpose of this section, to be deemed, respectively, the transferor and transferee.

Illustrations

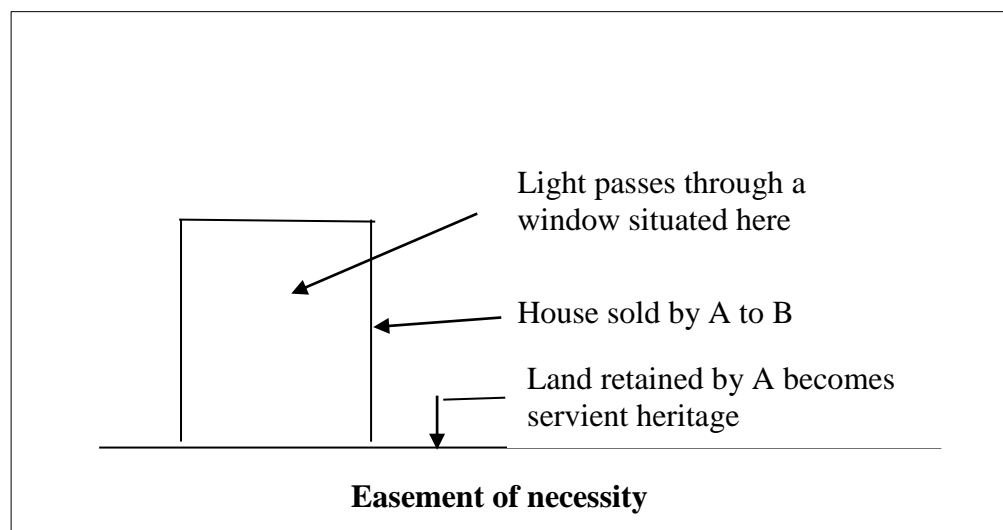
- (a) A sells B a field then used for agricultural purposes only. It is inaccessible except by passing over A's adjoining land or by trespassing on the land of a stranger. B is entitled to a right of way, for agricultural purposes only, over A's adjoining land to the field sold.



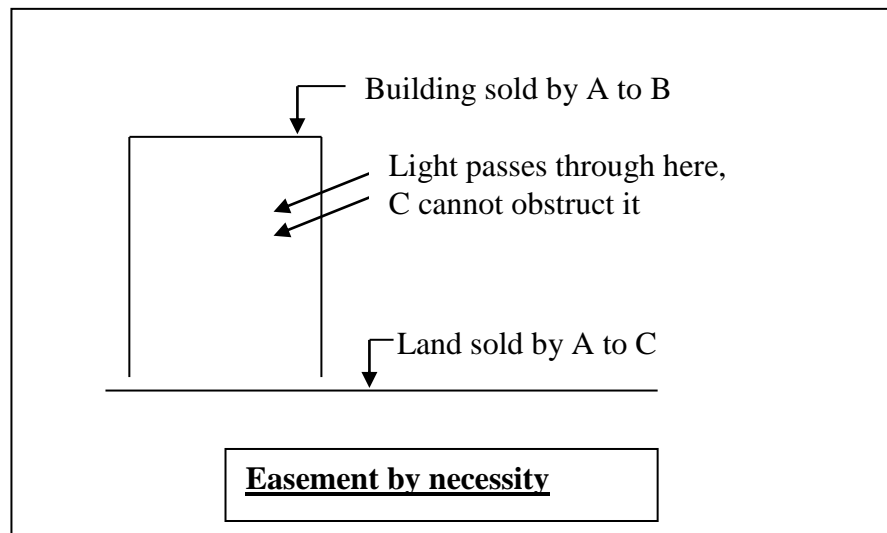
- (b) A, the owner of two fields, sells one to B, and retains the other. The field retained was, at the date of the sale, used for agricultural purposes only, and is inaccessible except by passing over the field sold to B. A is entitled to a right of way, for agricultural purposes only, over B's field to the field retained.



- (c) A sells B a house with windows overlooking A's land, which A retains. The light which passes over A's land to the windows is necessary for enjoying the house as it was enjoyed when the sale took effect. B is entitled to the light, and A cannot afterwards obstruct it by building on his land.



- (d) A sells B a house with windows overlooking A's land. The light passing over A's land to the windows is necessary for enjoying the house as it was enjoyed when the sale took effect. Afterwards A sells the land to C. Here C cannot obstruct the light by building on the land, for he takes it subject to the burdens to which it was subject in A's hands.



- (e) A is the owner of a house and adjoining land. The house has windows overlooking the land. A simultaneously sells the house to B and the land to C. The light passing over the land is necessary for enjoying the house as it was enjoyed when the sale took effect. Here A impliedly grants B a right to the light, and C takes the land subject to the restriction that he may not build so as to obstruct such light.
- (f) A is the owner of a house and adjoining land. The house has windows overlooking the land. A, retaining the house, sells the land to B, without expressly reserving any easement. The light passing over the land is necessary for enjoying the house as it was enjoyed when the sale took effect. A is entitled to the light, and B cannot build on thtoo obstruct such light.
- (g) A, the owner of a house, sells B a factory built on adjoining land. B is entitled, as against A, to pollute the air, when necessary, with smoke and vapours from the factory.
- (h) A, the owner of two adjoining houses, Y and Z; sells Y to B, and retains Z. B is entitled to the benefit of all the gutters and drains common to the two houses and necessary for enjoying Y as it was enjoyed when the sale took effect, and A

is entitled to the benefit of all the gutters and drains common to the two houses and necessary for enjoying Z as it was enjoyed when the sale took effect.

- (i) A, the owner of two adjoining buildings, sells one to B, retaining the other. B is entitled to a right to lateral support from A's building, and A is entitled to a right to lateral support from B's building.
- (j) A, the owner of two adjoining buildings, sells one to B and the other to C. C is entitled to lateral support from B's building, and B is entitled to lateral support from C's building.
- (k) A grants lands to B for the purpose of building a house thereon. B is entitled to such amount of lateral and subjacent support from A's land as is necessary for the safety of the house.
- (l) Under the Land Acquisition Act, 1870, a Railway Company compulsorily acquires a portion of B's land for the purpose of making a siding. The Company is entitled to such amount of lateral support from B's adjoining land as is essential for the safety of the siding.
- (m) Owing to the partition of joint property, A becomes the owner of an upper room in a building, and B becomes the owner of the portion of the building immediately beneath it. A is entitled to such amount of vertical support from B's portion as is essential for the safety of the upper room.
- (n) A lets a house and grounds to B for a particular business. B has no access to them other than by crossing A's land. B is entitled to a right of way over that land suitable to the business to be carried on by B in the house and grounds.

1.7.3 Acquisition by prescription

Section 15

Where the access and use of light or air to and for any building have been peaceably enjoyed therewith, as an easement, without interruption, and for twenty years,

and where support from one person's land, or things affixed thereto, has been peaceably received by another person's land subjected to artificial pressure, or by things affixed thereto, as an easement, without interruption, and for twenty years,

and where a right of way or any other easement has been peaceably and openly enjoyed by any person claiming title thereto, as an easement and as of right, without interruption, and for twenty years,

the right, to such access and use of light of air, support, or other easement, shall be absolute.

Each of the said periods of twenty years shall be taken to be a period ending within two years next before the institution of the suit wherein the claim to which such period relates is contested.

Explanation – I

Nothing is an enjoyment within the meaning of this section when it has been had in pursuance of an agreement with the owner or occupier of the property over which the right is claimed, and it is apparent from the agreement that such right has not been granted as an easement, or, if granted as an easement, that it has been granted for a limited period, or subject to a condition on the fulfilment of which it is to cease.

Explanation – II

Nothing is an interruption within the meaning of this section unless where there is an actual cessation of the enjoyment by reason of an obstruction by the act of some person other than the claimant, and unless such obstruction is submitted to or acquiesced in for one year after the claimant has notice thereof, and of the person making or authorizing the same to be made.

Explanation – III

Suspension of enjoyment in pursuance of a contract between the dominant and servient owners is not an interruption within the meaning of this section.

Explanation – IV

In the case of an easement to pollute water, the said period of twenty years begins when the pollution first prejudices perceptibly the servient heritage.

When the property over which a right is claimed under this section belongs to Government, this section shall be read as if, for the words “twenty years” the words “thirty years” were substituted.

Illustrations

- (a) A suit is brought in 1883 for obstructing a right of way. The defendant admits the obstruction but denies the right of way. The plaintiff proves that the right was peaceably and openly enjoyed by him, claiming title thereto, as an easement, and as of right, without interruption, from 1st January, 1862, to 1st January, 1882. the plaintiff entitled to judgement.
- (b) In a like suit the plaintiff shows that the right was peaceably and openly enjoyed by him for twenty years. The defendant proves that for a year of that time the plaintiff was entitled to possession of the servient heritage as lessee thereof and enjoyed the right as such lessee. The suit shall be dismissed, for the right of way has not been enjoyed “as an easement” for twenty years.
- (c) In a like suit the plaintiff shows that the right was peaceably and openly enjoyed by him for twenty years. The defendant proves that the plaintiff on one occasion during the twenty years had admitted that the user was not of right and asked his leave to enjoy the right. The suit shall be dismissed, for the right of way has not been enjoyed “as of right” for twenty years.

Section 17: Rights which cannot be acquired by prescription

Easements acquired under Section 15 are said to be acquired by prescription and are called prescriptive rights.

None of the following rights can be so acquired –

- (a) a right which would tend to the total destruction of the subject of the right, or the property on which, if the acquisition were made, liability would be imposed;

- (b) a right to the free passage of light or air to an open space of ground;
- (c) a right to surface-water not flowing in a stream and not permanently collected in a pool, tank or otherwise;
- (d) a right to underground water not passing in a defined channel.

1.7.4 Customary easements

Section 18

An easement may be acquired in virtue of a local custom. Such easements are called customary easements.

Illustrations

- (a) By the custom of a certain village every cultivator of village land is entitled, as such, to graze his cattle on the common pasture. A having become the tenant of a plot of uncultivated land in the village breaks up and cultivates that plot. He thereby acquires an easement to graze his cattle in accordance with the custom.
- (b) By the custom of a certain town no owner or occupier of a house can open a new window therein so as substantially to invade his neighbour's privacy. A builds a house in the town near B's house. A thereupon acquires an easement that B shall not open new windows in his house so as to command a view of the portions of A's house which are ordinarily excluded from observation, and B acquire a like easement with respect to A's house.

1.8 SECTION 19: TRANSFER OF DOMINANT HERITAGE PASSES EASEMENT

Where the dominant heritage is transferred or devolves, by act of parties or by operation of law, the transfer or devolution shall, unless a contrary intention appears, be deemed to pass the easement to the person in whose favour the transfer or devolution takes place.

Illustrations

A has certain land to which a right of way is annexed. A lets the land to B for twenty years. The right of way vests in B and his legal representatives so long as the lease continues.

1.9 SECTION 28: EXTENT OF EASEMENTS

With respect to the extent of easements and the mode of their enjoyment, the following provisions shall take effect:

1.9.1 Easement of necessity

An easement of necessity is co-extensive with the necessity as it existed when the easement was imposed.

1.9.2 Other easements

The extent of any other easement and the mode of its enjoyment must be fixed with reference to the probable intention of the parties, and the purpose for which the right was imposed or acquired.

In the absence of evidence as to such intention and purpose:

(a) **Right of way**

A right of way of any one kind does not include a right of way of any other kind;

(b) **Right to light or air acquired by grant**

The extent of a right to the passage of light or air to a certain window, door or other opening, imposed by a testamentary or non-testamentary instrument, is the quantity of light or air that entered the opening at the time the testator died or the non-testamentary instrument was made;

(c) **Prescriptive right to light or air**

The extent of a prescriptive right to the passage of light or air to a certain window, door or other opening is that quantity of light or air which has been accustomed to enter that opening during the whole of the prescriptive period irrespectively of the purpose for which it has been used;

(d) **Prescriptive right to pollute air or water**

The extent of a prescriptive right to pollute air or water is the extent of the pollution at the commencement of the period of user on completion of which the right arose; and

(e) **Other prescriptive rights**

The extent of every other prescriptive right and the mode of its enjoyment must be determined by the accustomed user of the right.

1.10 EXTINCTION OF EASEMENT RIGHT

Various modes of extinction of easement rights are as follows:

Section 37: Extinction by dissolution of right of servient owner

When, from a cause which preceded the imposition of an easement, the person by whom it was imposed ceases to have any right in the servient heritage, the easement is extinguished.

Exception

Nothing in this section applies to an easement lawfully imposed by a mortgagor in accordance with Section 10.

Illustrations

- (a) A transfers Sultanpur to B on condition that he does not marry C. B imposes an easement on Sultanpur. Then B marries C. B's interest in Sultanpur ends, and with it the easement is extinguished.
- (b) A, in 1860, let Sultanpur to B for thirty years from the date of the lease. B, in 1861, imposes an easement on the land in favour of C, who enjoys the easement peaceably and openly as an easement without interruption for twenty-nine years, B's interest in Sultanpur then ends, and with it C's easement.
- (c) A and B, tenants of C, have permanent transferable interests in their respective holdings. A imposes on his holding an easement to draw water from a tank for

the purpose of irrigating B's land. B enjoys the easement for twenty years. Then A's rent falls into arrear and his interest is sold. B's easement is extinguished.

- (d) A mortgages Sultanpur to B, and lawfully imposes an easement on the land in favour of C in accordance with the provisions of Section 10. The land is sold to D in satisfaction of the mortgage-debt. The easement is not thereby extinguished.

This section applies to the easements imposed under the provision of Sections 8 to 11 by an express grant.

Section 38: Extinction by release

An easement is extinguished when the dominant owner releases it, expressly or impliedly, to the servient owner.

Such release can be made only in the circumstances to the extent in and to which the dominant owner can alienate the dominant heritage.

An easement may be released as to part only of the servient heritage.

Explanation – I

An easement is impliedly released –

- (a) where the dominant owner expressly authorizes an act of a permanent nature to be done on the servient heritage, the necessary consequence of which is to prevent his future enjoyment of the easement, and such act is done in pursuance of such authority;
- (b) where any permanent alteration is made in the dominant heritage of such a nature as to show that the dominant owner intended to cease to enjoy the easement in future.

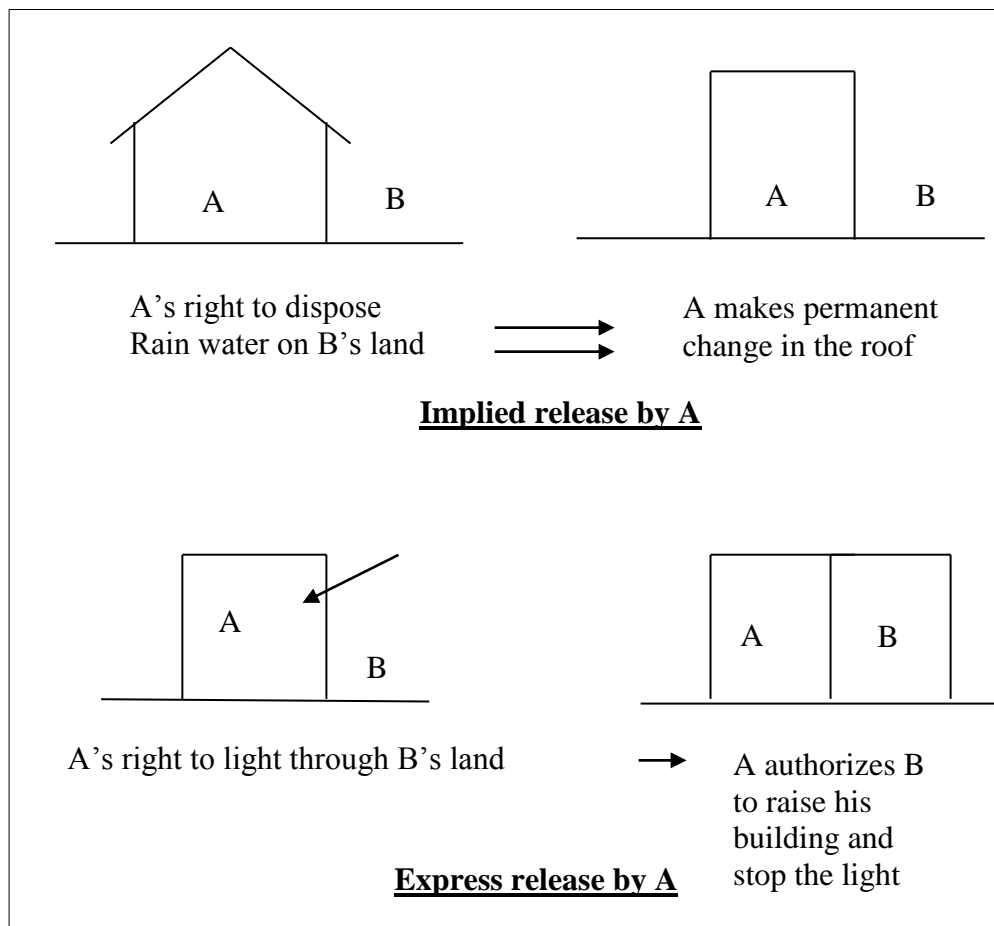
Explanation – II

Mere non-user of an easement is not an implied release within the meaning of this section.

Illustrations

- (a) A, B and C are co-owners of a house to which an easement is annexed. A, without the consent of B and C, releases the easement. This release is effectual only as against A and his legal representative.
- (b) A grants B an easement over A's land for the beneficial enjoyment of his house. B assigns the house to C. B then purports to release the easement. The release is ineffectual.
- (c) A, having the right to discharge his eaves droppings into B's yard, expressly authorizes B to build over this yard to a height which will interfere with the discharge. B builds accordingly. A's easement is extinguished to the extent of the interference.
- (d) A, having an easement of light to a window, builds up that window with bricks and mortar so as to manifest an intention to abandon the easement permanently. The easement is impliedly released.

A, having a projecting roof by means of which he enjoys easement to discharge eaves droppings on B's land permanently alters the roof so as to direct the rain-water into a different channel and discharge it on C's land. The easement is impliedly released.



Section 39: Extinction by revocation

An easement is extinguished when the servient owner, in exercise of power reserved in this behalf, revokes the easement.

Section 40: Extinction on expiration of limited period or happening of dissolving condition

An easement is extinguished where it has been imposed for a limited period, or acquired on condition that it shall become void on the performance or non-performance of a specified act, and the period expires or the condition is fulfilled.

Section 41: Extinction on termination of necessity

An easement of necessity is extinguished when the necessity comes to an end.

Illustrations

A grants B a field inaccessible except by passing every A's adjoining land. B afterwards purchases a part of that land over which he can pass to his field. The right of way over A's land which B had acquired is extinguished.

Section 42: Extinction of useless easement

An easement is extinguished when it becomes incapable of being at any time and under any circumstances beneficial to the dominant owner.

Section 43: Extinction by permanent change in dominant heritage

Where, by, any permanent change in the dominant heritage, the burden on the servient heritage is materially increased and cannot be reduced by the servient owner without interfering with the lawful enjoyment of the easement, the easement is extinguished unless –

- (a) it was intended for the beneficial enjoyment of the dominant heritage, to whatever extent the easement should be used; or

- (b) the injury caused to the servient owner by the change is so slight that no reasonable person would complain of it; or
- (c) the easement is an easement of necessity.

Nothing in this section shall be deemed to apply to one easement entitling the dominant owner to support of the dominant heritage.

Section 44: Extinction on permanent alteration of servient heritage by superior force

An easement is extinguished where the servient heritage is by superior force so permanently altered that the dominant owner can no longer enjoy such easement: Provided that, where a way of necessity is destroyed by superior force, the dominant owner has a right to another way over the servient heritage; and the provisions of Section 14 apply to such way.

Illustrations

- (a) A grants to B, as the owner of a certain house, a right to fish in a river running through A's land. The river changes its course permanently and runs through C's land. B's easement is extinguished.
- (b) Access to a path over which A has a right of way is permanently cut off by an earthquake. A's right is extinguished.

Section 45: Extinction by destruction of either heritage

A has a right of way over a road running along the foot of a sea-cliff. The road is washed away by a permanent encroachment of the sea. A's easement is extinguished.

Section 46: Extinction by unity of ownership

An easement is extinguished when the same person becomes entitled to the absolute ownership of the whole of the dominant and servient heritages.

Illustrations

- (a) A, as the owner of a house, has a right of way over B's field. A mortgages his house, and B mortgages his field to C. Then C forecloses both mortgages and becomes thereby absolute owner of both house and field. The right of way is extinguished.
- (b) The dominant owner acquires only part of the servient heritage : the easement is not extinguished, except in the case illustrated in Section 41.
- (c) The servient owner acquires the dominant heritage in connection with a person; the easement is not extinguished.
- (d) the separate owners of two separate dominant heritages jointly acquire the heritage which is servient to the two separate heritages; the easements are not extinguished.
- (e) The joint owners of the dominant heritage jointly acquire the servient heritage; the easement is extinguished.
- (f) A single right of way exists over two servient heritages for the beneficial enjoyment of a single dominant heritage. The dominant owner acquires only one of the servient heritages. The easement is not extinguished.
- (g) A has a right of way over B's road. B dedicates the road to the public. A's right of way is not extinguished.

Section 47: Extinction by non-enjoyment

A continuous easement is extinguished when it totally ceases to be enjoyed as such for an unbroken period of twenty years.

A discontinuous easement is extinguished when, for a like period, it has not been enjoyed as such.

Such period shall be reckoned, in the case of a continuous easement, from the day on which its enjoyment was obstructed by the servient owner, or rendered impossible by

the dominant owner; and, in the case of a discontinuous easement, from the day on which it was last enjoyed by any person as dominant owner :

Provided that if, in the case of a discontinuous easement, the dominant owner, within such period, registers, under the Indian Registration Act, III of 1877, a declaration of his intention to retain such easement, it shall not be extinguished until a period of twenty years has elapsed from the date of the registration.

Where an easement can be legally enjoyed only at a certain place, or at certain times, or between certain hours, or for a particular purpose, its enjoyment during the said period at another place, or at other times, or between other hours, or for another purpose, does not prevent its extinction under this section.

The circumstance that, during the said period, no one was in possession of the servient heritage, or that the easement could not be enjoyed, or that a right accessory thereto was enjoyed, or that the dominant owner was not aware of its existence, or that he enjoyed it in ignorance of his right to do so, does not prevent its extinction under this section.

An easement is not extinguished under this section –

- (a) Where the cessation is in pursuance of contract between the dominant and servient owners;
- (b) where the dominant heritage is held in co-ownership, and one of the co-owners enjoys the easement within the said period;or
- (c) where the easement is necessary easement.

Where several heritages are respectively subject to rights of way for the benefit of a single heritage, and the ways are continuous, such rights shall, for the purposes of this section, be deemed to be a single easement.

Illustration

A has, as annexed to his house, rights of way from the high road thither over the heritages X and Z and the intervening heritage Y. Before the twenty years expire, A exercises his right of way over X. His rights of way over Y and Z are not extinguished.

Section 48: Extinction of accessory rights

When an easement is extinguished, the rights (if any) accessory thereto are also extinguished.

Illustration

A has an easement to draw water from B's well. As accessory thereto, he has a right of way over B's land to and from the well. The easement to draw water is extinguished under Section 47. The right of way is also extinguished.

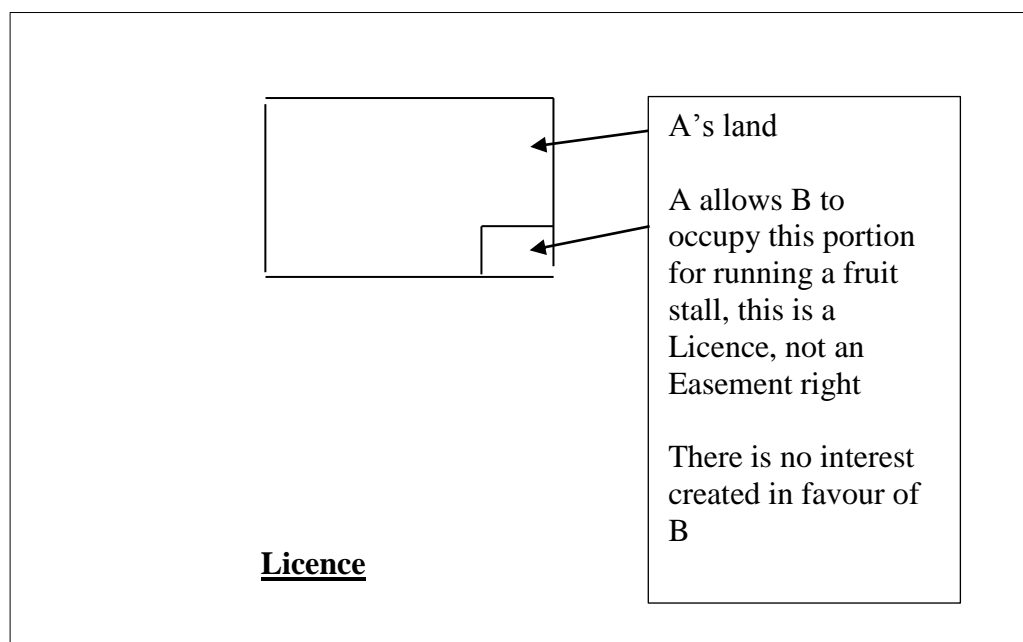
1.11 SECTION 49: SUSPENSION OF EASEMENT

An easement is suspended when the dominant owner becomes entitled to possession of the servient heritage for a limited interest therein, or when the servient owner becomes entitled to possession of the dominant heritage for a limited interest therein.

1.12 LICENCE

1.12.1 Section 52: "Licence" defined

Where one person grants to another, or to a definite number of other persons, a right to do, or continue to do, in or upon the immovable property of the grantor, something which would, in the absence of such right, be unlawful, and such right does not amount to an easement or an interest in the property, the right is called a licence.



1.12.2 The essential features of a licence

The following constitute the essential features of a licence:

- (i) A licence is not connected with ownership of any land, but creates only a personal right or obligation, hence, it cannot be assigned.
- (ii) It is purely permissive right arising only by permission, express or implies, and not by adverse exercise or in any other way, hence it is generally revocable at the will of the grantor.
- (iii) It only legalises a certain act which would otherwise be unlawful and does not confer any interest in the property itself in or upon or over which such act is allowed to be done.
- (iv) The amount paid by a licensee is only licence fee. Mere payment would not create any interest in the property.

1.13 Difference between Easement and Licence

Easement	Licence
- Cannot be revoked except in the manner prescribed by the Act (s. 37 to 46)	- Revocable at the will of the grantor
- It is attached with the property	- It is a personal matter, does not run with the land
- It is appurtenant to dominant Tenement	- It confers a privilege to do some act without passing any estate therein
-It possesses quality of inheritability and assignability	- These qualities are not present here

1.14 Difference between *Profits e prendre* and Licence:

Profits e prendre, though sometimes called 'licences' must be distinguished from licences which are not tenements and do not pass any interest, but only make an act lawful which otherwise would have been unlawful. A mere licence is not transferable, nor can it be perpetual, it is not binding on the tenement affected, but is a personal matter between the licensor and the entered revocable and merely excuses a trespass until it is revoked.

1.15 Difference between Lease and Licence:

The distinction between a lease and a licence has been well established. The cardinal distinction is that in a lease, there is a transfer of an interest in the property to enjoy it, whereas in the case of licence, there is no transfer of interest, although the licensee may acquire the right to occupy the land. One of the essential conditions of a tenancy is that the tenant should have the right to the exclusive possession of the premises.

An accepted principle both in England and India, for finding out whether an agreement between the parties creates the relationship of lessor and lessee or merely that of licensor and licensee, is to determine what was the intention of the parties. The character of a transaction turns on the operative intent of the parties. If an interest in immovable property, entitling the transferor's enjoyment is created, it is a lease; if permission to use the land without right to exclusive possession is alone granted, a licence is the legal result.

Under Section 105 of the Transfer of Property Act, a lease arises if the transfer is of a right to enjoy immovable property for a certain time for valuable consideration. If the requirements of the section are satisfied and a transaction lease is entered, then it is not permissible to say that a licence was created.

UNIT – V

Salient features of The Real Estate (Regulation and Development) Act, 2016 And Real Estate Regulating Authorities established under the Act

The real estate sector in India has witnessed a remarkable growth over the years in terms of volume of construction activities driven by the rise in demand both of the home seekers and the investors. However, the real estate market lacked regulatory framework, transparency and professionalism. There was a long felt need for a regulated market where the investor or end user consumer is protected and simultaneously, results in boost in investments in this sector.

The RERA Act is considered as one of the landmark legislations passed by the Indian Parliament. Its objective is to address grievances of buyers and to bring transparency and accountability in country's real estate sector. This is in line with the vast and growing economy of India as in future many people will be investing in real estate sector.

This Act establishes the Real Estate Regulatory Authority for regulation and promotion of the real estate sector and to ensure sale of plot, apartment or building, as the case may be, or sale of real estate project, in an efficient and transparent manner and to protect the interest of consumers in the real estate sector and to establish an adjudicating mechanism for speedy dispute redressal and also to establish the Appellate Tribunal to hear appeals from the decisions, directions or orders of the Real Estate Regulatory Authority and the adjudicating officer and for matters connected therewith or incidental.

FOLLOWING ARE THE MAIN FEATURES OF THIS LEGISLATION: -

1. According to the RERA, the developer can't make any changes to the plan without the written consent of the buyer. This provision will not allow the developer to increase the cost of their projects.
2. The law ensures that realty project is completed in time. If delayed, then the developer will have to pay interest on the amount paid by the buyer.

3. Registration is mandatory for all commercial and residential real estate projects where the land is over 500 square meters or includes eight apartments & which are under-construction.
4. As per the new act, every phase of apartment will be considered a standalone real estate project, and separate registration needs to be obtained for each project.
5. It is compulsory for a state to establish a State Real Estate Regulatory Authority as per the new act. Buyers could approach this body for redressal of their grievances.
6. The property will have to be sold to buyers based on carpet area and not on super built-up area which will become illegal under the new law.
7. Failing to register a property will attract a penalty up to 10% of the project cost and a repeated violation could send the developer in jail.
8. As per the new law, the developer will have to place 70% of the money collected from a buyer in a separate escrow account to meet the construction cost of the project. This will keep a check on developers who divert the buyer's money to start a new project, instead of finishing the one for which money was collected & also ensure that the respective project is completed in time.
9. If the buyer finds any shortcomings in the project then buyer can contact the developer in writing within one year of taking possession.
10. The law has a provision of a maximum jail term of three years with or without a fine, for a developer who violates the order of the appellate tribunal of the RERA.

ALLOTTEE:

Allottee” means the person to whom a plot, apartment or building, which has been

allotted, sold or otherwise transferred by the promoter.

Such transfer from the promoter is by way of allotment, sale, as consideration for services, exchange for development rights or by any other means.

Moreover, the building, apartment or plot transferred can be a freehold property as well leasehold property. Therefore, an allottee of a building, apartment or plot on a leasehold land is also an allottee. However, tenants are excluded from the definition of can be a freehold property as well as allottee.

Rights of the Allottees:

1. To know stage-wise time schedule of completion of the project and in relation to various services as agreed to be provided by the promoter to the allottee in accordance with the terms and conditions of the Agreement for Sale.
2. To claim possession once the project is completed by the promoter. Also, the Association of Allottees can claim possession of common areas.
3. To claim refund along with interest at prescribed rate and suspension or revocation of his registration under the provisions.
4. To obtain documents and plans, including that of common areas, after handing over the physical possession of the apartment or plot or building as the case may be, by the promoter.
5. To obtain information in relation to the promoter and the real estate project.

Duties of Allottees:

1. To make payment as per Agreement for Sale.
2. To pay interest at prescribed rate in case of delay in payments.
3. To participate towards formation of society / association.
4. To take physical possession of the apartment, plot or building as the case may be within a period of 2 months occupancy certificate issued for the said apartment, plot or building, as the case may be.
5. To participate in registration of conveyance deed.

Who is a Promoter?

He is a person who constructs independent building or building consisting of apartments or convert an existing building for the purpose of selling all or some of it to other person including his assignees.

Any person who act himself as a builder, coloniser, contractor, developer, estate developer or by any other name.

A person who claims to be acting as the holder of a power of attorney from the owner of the land on which the building or apartment is constructed or plot is developed for sale.

A person who constructs any building or apartment for sale to general public. Even if a person who sells the building is a different person from the person who constructs, converts the building or develop a plot, than both of them shall be deemed to be the promoters and shall be jointly liable as such for the functions and responsibilities specified.

A person who develops land into a project, and on such plot they constructs structures or not for purpose of selling to other persons all or some of the plots .

Any development authority or any other public body in respect of allottee of—

a. Buildings or apartments, as the case may be, constructed by such authority or body on lands owned by them or placed at their disposal by the Government;

or

b. Plots owned by such authority or body or placed at their disposal by the Government, for the purpose of selling all or some of the apartments or plots;

Or

An apex State level co-operative housing finance society and a primary co-operative housing society which constructs apartments or buildings for its Members or in respect of the allottees of such apartments or buildings

FUNCTIONS & DUTIES OF PROMOTERS:

Under the RERA Act, there is compulsory registration of Promoters and every project must be registered with the RERA. In order to protect the interest of allottees, the Act has imposed various obligations and restrictions on the Promoter to ensure fairness and transparency in their dealing with allottees.

Following are the functions and duties of the Promoter:

1. To get the proposed real estate project registered with the RERA;
2. To create a web page and display the project on the website of RERA so as to make the details therein available on public domain;
3. Not to advertise or make offer for sale without registering the project;
4. The Promoter shall make available certain documents at the time of booking and issue of allotment letter such as:

Sanctioned plans, layout plans, along with specifications, approved by the competent authority, by display at the site or such other place as may be specified by the regulations made by the Authority;

1. The stage-wise time schedule for completion of the project, including the provisions for civic infrastructure like water, sanitation, and electricity.
2. To obtain the completion certificate and the occupancy certificate from the relevant competent authority as per local laws or other laws for the time being in force and to make it available to the allottees individually or to the association of allottees, as the case may be.
3. To obtain lease certificate, where the real estate project is developed on a leasehold land, specifying the period of lease, and certifying that all dues and charges in regard to the leasehold land have been paid, and to provide the lease certificate to the association of allottees;
4. To refund the amount received in case of failure to give possession on time;

5. To compensate the allottees for loss due to defective title of the land etc.;
6. The Promoter shall not accept a sum more than ten percent of the cost of the apartment, plot, or building as the case may be, as an advance payment or an application fee, from a person without first entering into a written Agreement for sale, in the prescribed form, with such person.

Consequences in case of misleading advertisements/prospectus:

If any person who had made advance payment to the promoter based on the notice, advertisement, prospectus or model apartment suffers any loss or damages due to any incorrect or false statement in the such notice, advertisement or prospectus, or on the basis of any model apartment plot or building, then he shall be compensated by the promoter.

Whereas if a person who desires to withdraw from the proposed project then his entire investment he shall be returned.

No structural alteration:

If the Promoter wants to alter plans, structural designs and specifications of the land, apartment or building after the execution of an Agreement for Sale, than he should take prior consent of two-third of the allottees.

The Promoter is also not allowed to transfer or assign majority of its rights and liabilities in a project to a third party, without prior consent of two-third of the allottees, along with the RERA's prior written approval. The Promoter is responsible for structural defects or other deficiencies for a period of 5 years from the date of delivery of possession.

The Promoter cannot mortgage or create charge after the execution of Agreement for Sale:

The Promoter is prohibited from creating any charge or encumbrance on any apartment after executing an Agreement for the same. In case if such charge or encumbrance is created, it will not affect the right and interest of the concerned consumer.

Usage of Project Realizations

Seventy per cent of the amount realised for the real estate project from the allottees from time-to-time shall be deposited in the separate account to be maintained in a Schedule Bank to cover the cost of land and construction. The amount from this account shall be utilised for payment of land cost and for cost of construction. The safeguard is provided for proper utilisation of such project receivables, by permitting its withdrawal by the promoter only after certification by the Engineer, Architect or Chartered Accountant and that the withdrawal is in proportion to the percentage of the completion of the project. This is one of the best measures for protection of interest of the allottee. The fund from this account can be utilised for completing the project by the RERA or authorities or agency appointed by it.

No deposit or advance (more than 10% of the cost of apartment) can be taken by the promoter without first entering into an Agreement for Sale:

A promoter can accept only up to 10% of the cost of the apartment, plot or building, as the case may be as advance money or deposit or an application fee prior to entering into a written Agreement for Sale with the consumer.

Various assurances and insurance

The promoter is required to declare that it has legal title to the project land or authenticate validity of title, if such land is owned by another person. The promoter is also required to obtain insurance for title and buildings along with construction insurance.

To provide essential services till handing over to the association of allottees

Promoter shall be responsible for providing and maintaining the essential services, on reasonable charges, till the taking over of the maintenance of the project by the association of the allottees.

To execute conveyance in favour of allottees and their association

Promoter shall execute a registered Conveyance Deed of the apartment, plot or building, as the case may be, in favour of the allottee along with the undivided proportionate title in the common areas to the association of allottees or competent authority, as the case may be.

Pay all outgoings till transfer of physical possession

The promoter shall Pay all outgoings until he transfers the physical possession of the real estate project to the allottee or the associations of allottees, as the case may be, which he has collected from the allottees, for the payment of outgoings (including land cost, ground rent, municipal or other local taxes, charges for water or electricity, maintenance charges, including mortgage loan and interest on mortgages or other encumbrances and such other liabilities payable to competent authorities, banks and financial institutions, which are related to the project).

Moreover, if the promoter fails to discharge any other obligations imposed on him under the proposed legislation or the rules or regulations made thereunder, he shall be liable to pay such compensation to the allottees, in the manner as provided under the proposed legislation.

FUNCTIONS OF REAL ESTATE AGENTS UNDER RERA

- Compulsorily Agent / Broker RERA registration
- To maintain proper books of accounts and records as prescribed;
- Not to facilitate sale or purchase of area under an unregistered planning area;
- Not to engage itself in any unfair trade practices;
- To provide all documents/information to the allottees required at the time of booking; and to perform other functions as prescribed.

ADJUDICATING AUTHORITY FUNCTIONS:

The function of the adjudicating authority is to adjudge the compensation / damage for loss sustained due to:

1. Incorrect, false, misleading statement in the advertisement or prospectus,
2. Failure of the promoter to rectify the structural defect or any other defect in workmanship, quality or provision of service or any other obligations of promoter under the agreement for sale within 30 days
3. Failure of promoter to complete or inability to give possession of the apartment within stipulated period or due to defective title of the promoter to the land and
4. Failure of promoter to discharge his obligations under the Act, Rules or Regulations and in terms of the Agreement for sale.

Any aggrieved person can file a complaint against the promoter before RERA for the contraventions and violations of the provisions of this Act. If any party is aggrieved with the Order passed by the RERA then it can file an appeal within 60 days to the Real Estate Appellate Tribunal.

CONCLUSION

The Act is a standard-setting instrument for the real estate sector and performs the critical task of identifying and allocating risks associated with construction and development projects. The current approach of the Act is to uniformly regulate and promote different types and sizes of projects and its implementation will require significant capacity building at the state-level. The Act disrupts existing sector practices to raise efficiency of the real estate market and is likely to benefit all stakeholders by imposing financial and operational discipline, accountability and diligences.

UNIT - VI

Transfer of Property

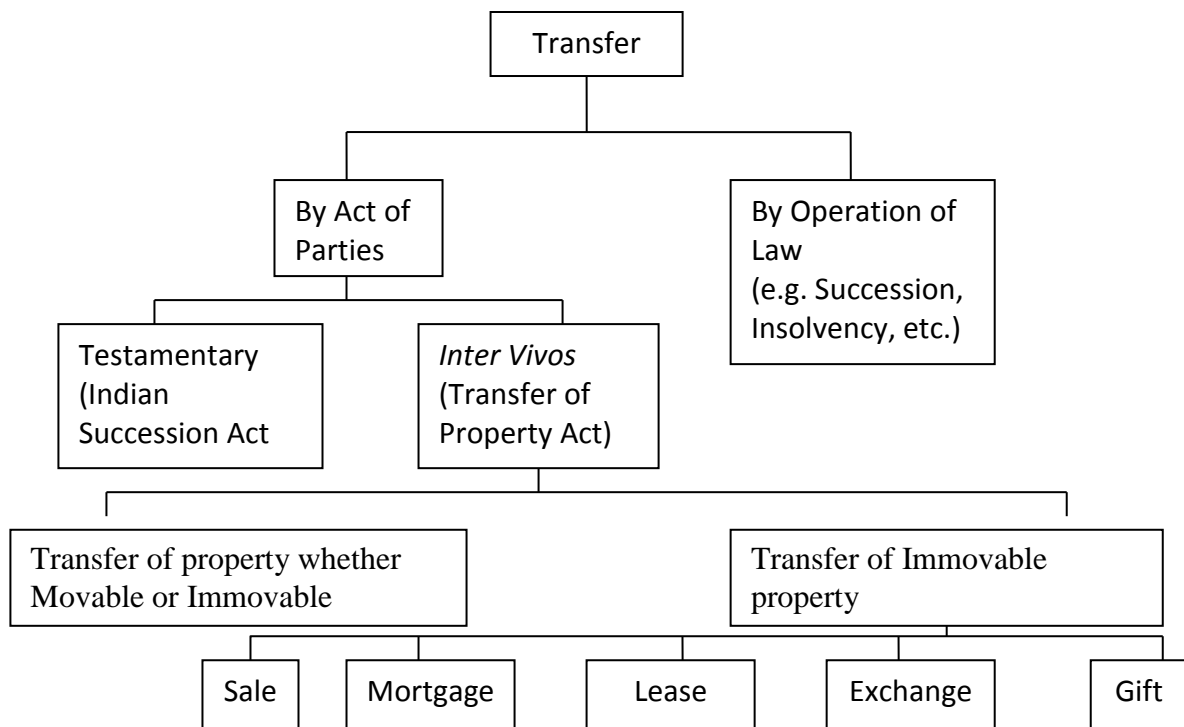
INTRODUCTION

The law relating to transfer of property by act of parties, not by operation of law, is dealt in the Transfer of Property Act, 1882. The main objects of the Act are-

- (i) to bring the rules which regulate the transfer of property between living persons.
- (ii) to complete the code of contract law, so far as it relates to immovable property.

The Act does not cover the entire dimension of transfer of property. It is limited to the transfer of property by act of parties, as distinguished from a transfer by operation of law, e.g. in case of inheritance, insolvency, etc. It relates to transfers of property inter vivos, voluntary transfer between living persons, and has no application to the disposal of property by Will.

The scheme of Transfer of Property Act



STRUCTURE OF THE UNIT

- 1.1** Definitions as Given in Transfer of Property Act,
- 1.2** Attestation
- 1.3** Immovable property
- 1.4** Standing timber
- 1.5** Instrument
- 1.6** Attached to the earth
- 1.7** Actionable claim
- 1.8** Notice
- 1.9** Section-4
- 1.10** Section-5 “Transfer of property” defined
- 1.11** Section-6 What may be transferred
- 1.12** Section-7 Persons competent to transfer
- 1.13** Section-25 Conditional transfer.
- 1.14** Section-26 Fulfillment of condition precedent
- 1.15** Section-27 Conditional transfer to one person coupled with transfer to another on failure of prior disposition.
- 1.16** Section-28 Ulterior transfer conditional on happening or not happening of specified event.
- 1.17** Section-29 Fulfillment of condition subsequent.
- 1.18** Section-53 Fraudulent transfer.
- 1.19** Section-53-A. Part performance.
- 1.20** Sale of immovable property (Ss. 54 to57)
- 1.21** Mortgages of immovable property and charges (ss. 58-104)
- 1.22** Leases of immovable property (ss. 105-117)
- 1.23** Exchanges (ss. 118-121)
- 1.24** Gifts (ss. 122-129)

1.1 DEFINITIONS AS GIVEN IN TRANSFER OF PROPERTY ACT,

In this Act, unless there is something repugnant in the subject or context, -

“immovable property” does not include standing timber, growing crops or grass;

“instrument” means a non-testamentary instrument;

“attested”, in relation to an instrument, means and shall be deemed always to have meant attested by two or more witnesses each of whom has seen the executant sign or affix his mark to the instrument, or has seen some other person sign the instrument in the presence and by the direction of the executant, or has received from the executant a personal acknowledgement of his signature or mark, or of the signature of such other person, and each of whom has signed the instrument in the presence of the executant; but it shall not be necessary that more than one of such witnesses shall have been present at the same time, and no particular form of attestation shall be necessary;

“registered” means registered in [any part of the territories to which the Act extends under the law for the time being in force regulating the registration of documents;

“attached to the earth” means –

- (a) rooted in the earth, as in the case of trees and shrubs;
- (b) imbedded in the earth, as in the case of walls or buildings; or
- (c) attached to what is so imbedded for the permanent beneficial enjoyment of that to which it is attached;

“actionable claim” means a claim to any debt, other than a debt secured by mortgage of immovable property by hypothecation or pledge of movable property, or to any beneficial interest in movable property not in the possession, either actual or constructive, of claimant, which the Civil Courts recognize as affording grounds, for relief, whether such debt or beneficial interest be existent, accruing, conditional or contingent;]

“a person is said to have notice” of a fact when he actually knows that fact, or when, but for willful abstention from an enquiry or search which he ought to have made, or gross negligence, he would have known it.

Explanation – I Where any transaction relating to immovable property is required by law to be and has been effected by a registered instrument, any person acquiring such property or any part of, or share or interest in, such property shall be deemed to have notice of such instrument as from the date of registration or, where the property is not all situated in one sub-district, or where the registered instrument has been registered under sub-section (2) of Sec. 30 of the Indian Registration Act, 1908 (16 of 1908), from the earliest date on which any memorandum of such registered instrument has been filed by any Sub-Registrar within whose sub-district any part of the property which is being acquired, or of the property wherein a share or interest is being acquired, is situated :

Provided that –

1. the instrument has been registered and its registration completed in the manner prescribed by the Indian Registration Act, 1908 (16 or 1908), and the rules made there-under,
2. the instrument [or memorandum] has been duly entered or filed, as the case may be, in books kept under Sec. 51 of that Act, and
3. the particulars regarding the transaction to which the instrument relates have been correctly entered in the indexes kept under Sec. 55 of that Act.

Explanation - II - Any person acquiring any immovable property or any share or interest in any such property shall be deemed to have notice of the title, if any, of any person who is for the time being in actual possession thereof.

Explanation - III - A person shall be deemed to have had notice of any fact if his agent acquires notice thereof whilst acting on his behalf in the course of business to which that fact is material :

Provided that, if the agent fraudulently conceals the fact, the principal shall not be charged with notice thereof as against any person who was a party to or otherwise cognizant of the fraud.

1.2 ATTESTATION

1.2.1 The three important requisites of attestation, as is clear from the section, are :

1. the signatories should be those who have seen the execution or received a personal acknowledgement from the executant of his having executed the document;
2. they sign their names in the presence of the executant; and
3. while so doing they had the animus to attest it.

1.2.2 Attestation means the act of witnessing the execution of a document and subscribing the name of the witness in testimony of such fact. Mere writing of a document does not mean execution. Execution means signing or affixing the mark of the person executing the document. Unless the document is executed, that is, signed or marked by the executant, the question of bearing witness to the execution does not arise. It is, therefore, evident that to constitute valid attestation a document must be executed before it is signed by the attesting witness.

1.2.3 The essential conditions of a valid attestation under Sec. 3 of the Transfer of Property Act are : (1) two or more witnesses have seen the executant sign the instrument or have received from him a personal acknowledgement of his signature; (2) with a view to attesting or to bearing witness to this fact each of them has signed the instrument in the presence of the executant. It is essential that the witness should have put his signature *animoattestandi*, that is, for the purpose of attesting that he has seen the executant sign or has received from him a personal acknowledgement of his signature.

1.2.4 The expression “attested” as defined in Sec. 3 of the Transfer Property Act would disclose that in order to constitute valid attestation the attesting witness must either see the executant of the document affixing his signature or mark on the document and then sign as attesting witnesses or the executant must have acknowledged his signature as attesting witnesses, that would be sufficient compliance of the provisions of Sec. 3 of the Act.

1.2.5 The definition will show that in order to constitute valid attestation the essential conditions are: (1) there must be two attesting witnesses; (2) each of them must have seen the executant signor affix his mark to the instrument;

and (3) each of the two attesting witnesses must have signed the instrument in the presence of the executant. The attestation consists in witnessing the fact of the execution of a document.

- 1.2.6** As will appear from the definition of the word “attested” in Sec. 3 of the Transfer of Property Act, the executant may execute the document by (1) signing it; (2) by affixing his mark to it; or (3) by asking some other person to sign it on his or her behalf.
- 1.2.7** It is essential that the witness should have put his signature *animo attestandi*, that is, for the purpose of attesting that he has seen the executant sign or has received from him a personal acknowledgement of his signature. If a person puts his signature on the document for some other purpose, e.g., to certify that he is a scribe or an identifier or a registering officer, he is not an attesting witness.
- 1.2.8** It is well-established principle that a party to a document cannot be valid attesting witness.
- 1.2.9** Though this definition expressly does not say that the attesting witnesses should sign the document after the executant has signed or affixed his mark to the instrument, yet it is implicit in the definition that the executant should have signed or affixed his mark first and then the attesting witnesses should have attested it. This flows from the words “each of whom has seen the executant sign or affix his mark to the instrument or seen some other person sign the instrument in the presence of and by the direction of the executant”.
- 1.2.10** An attesting person is also a witness. The only difference between a witness and an attesting witness is that whereas a witness sees the document executed, an attesting witness subscribes as a witness in the document itself. The affixing of signature in the presence of the executant is the mode of attestation as defined in Sec. 3 of the Transfer of Property Act. Attestation of a deed only estops a man from denying nothing whatever except that he witnessed the execution of the deed. The mere attestation of a document is no proof that the attesting witness is aware of the content of the document.

1.2.11 An attesting witness need not see the executant of a document sign the document in his presence. It is enough if he receives an acknowledgement from the executant of his having executed the document.

1.2.12 An attesting witness merely testifies that the executant of the document signed that document in his presence. He is not supposed to know the contents of the document which is executed by the executant.

1.2.13 The definition of attestation contained in Sec. 3 of the Act clearly lays down that the legal act of attestation involves two important bilateral aspects : (1) that the executant will sign the document in the presence of the attesting witnesses or that the executant will acknowledge his signature before the attesting witnesses; and (2) the further aspect which is equally important that the attesting witnesses will have to sign the document in the presence of the executant.

1.3 IMMOVABLE PROPERTY

1.3.1 The word “movable property” has not been defined in the Act but only lays down that standing timber, growing crops or grass shall not be included in the definition of “immovable property”. In the General Clauses Act, 1997, “immovable property” has been defined in Sec. 3(26) as under:

“Immovable property” shall include land, benefits to arise out of land, and things attached to the earth, or permanently fastened to anything attached to the earth”.

1.3.2 Under sub-clause (36), the word “movable property” has also been defined in the following terms:

‘Movable property’ shall mean property of every description, except immovable property”.

1.3.3 It will thus be seen that the definition of “movable property” is negative in nature and all that is not included, within the meaning of “immovable property” shall be treated to be “movable property.”

1.3.4 In the Registration Act, 1908, “immovable property” has been defined in Sec. 2(6) as under :

‘Immovable property’ includes land, buildings, hereditary allowances, rights to ways, lights, ferries, fisheries, or any other benefit to arise out of land, and things attached to the earth, or permanently fastened to anything which is attached to the earth, but not standing timber, growing crops, or grass”.

1.3.5 Sub-clause (9) of the section defines “movable property” as including standing timber, growing crops and grass, fruit upon and juice in trees and property of ever description, except immovable property. Similarly the Code of Civil Procedure, 1908, defines the word “movable property” in Sec. 2(13) as including growing crops. All these definitions would indicate that for purposes of various Acts, the definition of the two words differs in some way or the other, but the common factor is that” immovable property” does not include standing timber, growing crops or grass.

1.3.6 Before a tree can be regarded as ‘standing timber’ it must be in such a state that it cut, it could be used as timber, and when in that state it must be cut reasonably early. The rule is probably grounded on generation of experience in Forestry and Commerce and this part of the law may have grown out of that. It is easy to see that the tree might otherwise deteriorate and that its continuance in a forest after it has passed its prime might hamper the growth of the younger wood and spoil the forest and eventually the timber market. But, however, that may be the legal basis for the rule is that trees that are not cut continue to draw nourishment from the soil and that the benefit of this goes to the grantee.

1.3.7 “Standing tree” must be a tree that is in a state fit for these purposes and further a tree that is meant to be converted into timber so shortly that it can already be looked upon as timber for all practical purposes even though it is still standing. If not, it is still a tree because, unlike timber, it will continue to draw sustenance from the soil.

1.3.8 From the above, one thing would be obvious that in the larger definition of “immovable property” anything attached to the earth would normally be treated as immovable property and a tree which is attached to the earth and seeks its nourishment and sustenance from the soil in which it stands will be

deemed to be attached to the earth with the only distinction that if it was tree of a kind which is usually used as timber and was of sufficient size so as it could be used as such and is intended to be severed from the soil reasonably thereafter, it may be treated to be immovable property. Therefore, apart from the size of the trees, the relevant consideration would be the intention to cut the tree or to let it remain attached to the earth. In the former case, it will be termed as “standing timber” while in the latter it must remain immovable property.

1.3.9 The definition of “immovable of property” given in Sec. 3 para 1 of that Act is in the negative, and is not exhaustive. Therefore, the definition given in Sec. 3(26) of the General Clauses Act (X of 1897) will apply to the expression used in this Act, except as modified by the definition in the first clause of Sec. 3. According to the definition given in Sec. 3(26) of the General Clauses Act, “immovable property” shall include land, benefits to arise out of land, and things attached to the earth, or permanently fastened to anything attached to the earth. In short the expression “immovable property” comprehends, all that would be real property according to English law and possibly more. Thus, every interest in immovable property or a benefit arising out of land, will be “immovable property” for the purpose of Sec. 105 of Transfer of Property Act.

1.3.10 The term “immovable property” has not been defined in the Act, and unless there is anything in the subject or the context to suggest to the contrary, it can be given the same meaning as contained in the definition clause of the General Clauses Act. In Sec. 3(26) of the Central General Clauses Act, “immovable property” is defined to include “land, benefits to arise out of land, and things attached to the earth, or permanently fastened to anything attached to the earth.” The definition is clearly illustrative and not exhaustive and can cover buildings and benefits to arise out of buildings. Building is a thing attached to the earth and is by itself an immovable property. In the case of land, benefits to arise out of land are also “immovable property”, and consequently, in case of buildings, benefits to arise out of buildings can be deemed to be “immovable property”.

1.3.11 Benefits to arise out of building can be of various kinds depending upon the rights which can be enjoyed by the person. Owner of a building not in occupation thereof can exercise his proprietary rights by letting the accommodation to tenants and collecting rent from them. An owner in

occupation of the building enjoys not only the proprietary rights but also the right of occupation. A lessee including tenant also enjoys benefits arising out of the building. He has the right to occupy the building on payment of the lease money till the tenancy is determined by the lessor or lessee. When the lessee (tenant) enjoys certain rights in the buildings, he is a person who is in enjoyment of benefits arising out of the building and the tenancy right shall by itself be an “immovable property”.

1.3.12 The definition only expressly excludes ‘standing timber’. It is obvious that but for these provisions “standing timber” would have been treated as immovable property.

1.3.13 This section does not define “immovable property” but only interprets and limits by excluding from the definition occurring in the General Clauses Act “standing timber, growing crops or grass” which would otherwise be included in the category.

1.3.14 The definition of immovable property in the Registration Act though not exhaustive is certainly more helpful. The expression “immovable property” for the purpose of the Registration Act.

“includes land, building, hereditary allowances, rights to ways, lights, ferries, fisheries or any other benefit to arise out of land and things attached to the earth or permanently fastened to anything which is attached to the earth but not standing timber, growing crops or grass”

“Movable property”, according to the Registration Act –

“includes standing timber, growing crops and grass, fruits upon and juice in trees and property of every other description except immovable property”.

1.4 STANDING TIMBER

Trees are generally divisible into two classes : (1) Fruit bearing trees and (2) Timber trees; they are grown not for the sake of fruits but for the sake of their wood which is used as timber. A fruit-bearing tree is meant to remain standing, because it is only

when it is standing that it can bear fruits. A timber tree, on the other hand, is meant to be cut down; it is only after it is cut down that its trunk, etc. can be used as timber. A standing tree can never be used for timber and a felled tree can never be used for producing fruits. What is meant by standing timber in Sec. 2(6) of Registration Act is “a standing timber tree”.

1.4.1 While a tree, in order to come within the definition of immovable property, must be a standing tree, every standing tree is not immovable property; the Legislature has expressly excepted the definition standing timber trees growing crops and grass.

1.4.2 Similarly, a timber tree does not cease to be a timber tree, because its owner has no present intention of cutting or felling it. Whether a tree is a timber tree or not does not depend upon whether there exists an intention in somebody to cut it or not. It cannot be said that a timber tree comes into existence only when an intention to cut it sooner or later is formed and that there is no timber tree in existence prior to the formation of such an intention.

1.4.3 There are some trees which can be used both for fruits and for timber. A mango tree is such a tree. When a question arises whether such a tree is standing timber or not, one would have to go into the question whether it is meant to be used for timber or for fruits. If it is intended to be cut down and to be used as timber it would be held to be a timber tree. If, on the other hand, it is meant to be left standing for the purposes of yielding fruits, it would have to be held to be not a timber tree.

1.4.4 “Timber” means “wood fitted for building or other such use; wood capable of being used for structural purposes”. This meaning of timber takes into consideration only the fitness of the wood and not the use contemplated in the particular case. It is the nature of the wood that is decisive and not the particular use that its possessor intends to make of it. Wood of *sissham* and *neem* trees is fitted for building or structural purposes and, therefore, they are timber trees.

1.4.5 It will be observed that “trees” are regarded as immovable property because they are attached to or rooted in the earth. Section 2(6) of the Registration Act, expressly says so and, though the Transfer of Property Act does not define immovable property beyond saying that it does not include “standing timber,

growing crops or grass”, trees attached to earth (except standing timber) are immovable property, even under the Transfer of Property Act, because of Sec. 3(26) of the General Clauses Act. In the absence of a special definition, the general definition must prevail. Therefore, trees (except standing timber) are immovable property.

1.4.6 Timber is well enough known to be – “wood suitable for building houses, bridges, ships, etc., whether on the tree or cut and seasoned”.

“Growing crops” -Normally a growing crop is not immovable property.

1.5 INSTRUMENT

The term has been given special and restricted connotation for the purpose of this Act. From the nature of the Act, testamentary instruments are excluded from its consideration. In the Registration Act, the term was said to have been used on the understanding that “the writing is not merely an evidence of the transaction but is the transaction itself”.

“Signature or the insertion of the name, in any part of the writing in a manner to authenticate the instrument is sufficient” - A signature is the writing or otherwise affixing a person’s name or a mark to represent his name, by himself or by his authority with the intention of authenticating a document as being that of or as binding on the person whose name or mark is so written or affixed. The insertion of the name in any part of the writing in a manner to authenticate the instrument, is sufficient. Although the signature be in the beginning or middle of the instrument, it is binding as if at the foot of it. The question always is, whether the party, not having signed it regularly at the foot of it. The question always is, whether the party, not having signed it regularly at the foot yet meant to be bound by it as it stood, or whether it was left, so unsigned because he refused to complete it but when it is ascertained that he meant to be bound by it, as a complete contract, the signature is, for purposes of execution, effective.

1.6 ATTACHED TO THE EARTH

The expression “attached to the earth” occurs twice again in the Act, - in the last part of paragraph 2, Sec. 8, and in Cl. (h) of (B), Sec. 108. “Fixtures” under Sec. 8 pass with the property, and under Sec. 108 the lessee is entitled to remove all fixtures made by

him provided he leaves the property *in the state in which he received* it. “You shall not destroy the principal thing by taking away the accessory to it”. “Attached” includes the doors and window-shutters of a building.

1.6.1 The degree, manner, extent and strength of attachment of the chattel to the earth or building, are the main features to be regarded. All the three aspects, in the description, show that the attachment should be such as to partake of the character of the attachment of the trees on shrubs rooted to the earth, or the walls or buildings imbedded in that sense, the further test is whether, such an attachment is for the permanent beneficial enjoyment of the immovable property to which it is attached.

1.6.2 Trees and shrubs being rooted in the earth are deemed to be attached thereto and so long as they are so attached, they are immovable property, and form part of the soil to which they are affixed, but they lose their character immediately on severance. Hence, so long as they are not cut, they are *prima facie* to be taken as passing with the land on which they grow. The sale of a house and compound would then clearly comprise the trees thereon, unless they were expressly excepted.

1.6.3 In deciding whether a machinery attached to the land is or is not a movable property, the object with which the machinery is fixed to the land and the manner in which it is fixed have to be considered.

“If a thing is imbedded in the earth or attached to what is so imbedded for the permanent beneficial enjoyment of that to which it is attached, then it is part of the immovable property. If the attachment is merely for the beneficial enjoyment of the chattel itself, then it remains a chattel, even though fixed for the time being so that it may be enjoyed. The question must in each case be decided according to the circumstances. An engine installed in a factory may be immovable property or it may be chattel.”

“In order to determine what is and what is not immovable property as a result of attachment or annexation to land, two tests have been laid down viz., (1) the degree or mode of annexation and (2) the object of annexation”.

“If the degree of annexation is such that the fixture cannot be taken away without destroying the principle it would be regarded as permanent fixture”.

1.7 ACTIONABLE CLAIM

Actionable claim thus under definition included claims *recognized* by Civil Courts as affording grounds for relief either –

- (a) as to unsecured debts, or
- (b) as to beneficial interests in movable property not in possession, actual or constructive, whether present or future, conditional or contingent.

It cannot be disputed that the rights under a contract are beneficial interest in movable properties. They are certainly not things in possession and a right to the benefit of an obligation under a contract can only be and are enforced by an action at law. Right to benefit of a contract therefore falls within the definition of “actionable claim”.

1.7.1 The rights and benefits under a contract of carriage are an actionable claim under Sec. 3 of the Transfer of Property Act and are assignable.

1.7.2 A judgment debt is an actionable claim. There is no reason for thinking that the words “right to sue” connotes the same things as the words “actionable claim”. The terms “sue” and “suit” are well understood in India. They occur in the Code of Civil Procedure and have acquired a technical meaning. In Cl. (e) or Sec. 6, Transfer of Property Act, there is, therefore, a distinct reference to a right on the basis of which a suit can be brought.

1.7.3 The hypothecation bond is not an actionable claim as defined under the Transfer of Property Act.

1.7.4 A great deal, however, still depends upon what may be understood to be comprehended in the term “debt”, a claim to which is an “actionable claim”. In its primary sense a debt is liquidated money obligation, which is usually recoverable by suit. An action for debt is generally founded on some contract alleged to have taken place between the parties, or some matter of fact from which the law would imply a contract between them. It is an essential feature of an action for debt that it should be for a liquidated or certain sum of money.

1.7.5 Origin of debt -A debt may arise from any of the three species of contract; (i) As in the case of a sale where the vendee has not paid the price agreed upon, in which case, the vendor has a property in the price as a *chose in action*, by means of this contract of debt. (ii) In bailment, if the bailee loses or detains a sum of money bailed to him for any special purpose, he becomes indebted to the bailor for the same amount, upon his implied contract that he shall execute the trust reposed in him, or repay the money to the bailor. (iii) Upon hiring or borrowing, the hirer or borrower, at the same time that he acquires a property in the thing lent, may also become indebted to the lender, upon his contract to restore the money borrowed, to pay the price or premium of the loan, or the hire of the animal hired.

1.7.6 In short, any contract whereby a determinate sum of money becomes due to any person, and is not paid but remains in action merely, is a contract of debt. Debts are of two kinds, (i) payable at present, and (ii) payable in future, or debts (i) owing and (ii) accruing, or as they are sometimes also described as “(a) now due owing or (b) payable”. A debt of the latter kind is, however, an actually existing debt and not merely a debt which might or might not become due. A debt, which might or might not become due. A debt, which might or might not become due is not conditional or contingent but is uncertain, and is, therefore, no more than a mere expectancy or a mere right of suit which is not within the term.

1.7.7 Thus, a thing incapable of being estimated or valued, such as “all the claims of person against all his debtors, cannot be assigned. But where there is a balance, though unascertained, in the hands of the agent or vendee payable to the principal or vendor, it is both attachable and assignable.

1.8 NOTICE

The comprehensive, definition of “notice”, in this section as it stood prior to its amendment in 1929, was reproduced from its definition in Sec. 3 of the Indian Trusts Act, with a few verbal variations. It has since been much expanded, settling a judicial conflict and otherwise embodying the principle long settled by Courts both here and in England. The amendment does not have retrospective operation.

1.8.1 Notice of a fact means knowledge or cognizance or awareness of such fact. To give notice of a fact to a person is to bring that fact to his knowledge. When

the information conveyed in express and it brings home knowledge directly to a party the notice is said to be actual notice. “Actual notice” embraces all degrees and grades of evidence, from the most direct and positive proof to the slightest evidence from which a Court would be warranted in inferring notice. It is a question of fact and it may be proved by evidence like any other fact. That is as regards actual notice. When there is no allegation of proof of direct knowledge, in some cases law imputed notice to a person and that is called constructive notice. Constructive notice is a notice where knowledge of the fact is presumed from the circumstances of the case. This doctrine of constructive notice had its origin in equity. Subsequently the word “notice” was often defined in statutes and was defined to include constructive notice. There remained, however, a number of statutes where even though the word “notice” was used it was not defined.

1.8.2 In India, wherever it was intended to include constructive notice, “notice” was defined as including constructive notice such as in the Transfer of Property Act.

1.8.3 The law of constructive notice may now be said to have crystallized itself into certain well-defined rules and cases in which a party as deemed to be affected with notice. It is perhaps not equitable that all men should be measured by the uniform foot rule of a “prudent” or a “reasonable” man, for these qualities are, by no means, to be found in the same degree amongst all races.

1.8.4 Notice – Explained. – Section 3 of the Transfer of Property Act defines the expression, when the person is said to have notice. The relevant portion of the section of the Transfer of Property Act provides as under :

“A person is said to have notice of a fact when he actually knows that fact, or when, but for willful abstention from an inquiry or search which he ought to have made, or gross negligence, he would have known it. Where any transaction relating to immovable property is required by law to be and has been effected by a registered instruments, any person acquiring such property or any part of, or such instrument as from the date of registration or where the property is not all situated in one sub-district, or where the registered instrument has been registered under sub-section (2) of Sec. 30 of the Indian Registration Act, 1908, from the earliest date on which

may memorandum of such registered instrument has been filed by any Sub-Registrar within whose sub-district any part of the property which is being acquired, or of the property wherein a share of interest is being acquired is situated, provided that – The instrument has been registered and its registration completed in the manner prescribed by the Indian Registration Act, 1908, and the rule made there-under. The instrument (or memorandum) has been duly entered or held, as the case may be, in books kept under Sec. 51 of the Act, and the particulars regarding the transaction of which the instrument relates have been correctly entered in the Indexes kept under Sec. 55 of that Act”.

From the reading of this provision along with Explanation-I, it comes out that the person is said to have notice of a fact when he actually knows that fact, or when, but for willful abstention, from making such enquiry which a person normally ought to have made, he would have known it. In such cases, the persons can also be deemed to have notice. According to Explanation-I, where law requires a transaction to be recorded or to be entered into by registered instrument only, and the same has been completed by registered document, then persons shall be deemed to have knowledge of that instrument from the date of registration. The registration of the document has (*sic*) taken to complete notice to world at large. The agreements to sale of immovable property of value, of more than Rupees One Hundred, under the Transfer of Property Act, is required to be entered into by the registered document.

1.8.5 Actual notice. – Actual notice may be sub-divided into two classes, namely, (1) that required to be attended by some prescribed formality as writing and delivery in a particular way, or to a particular person in a manner usually directed by law, and (2) that in which no formula or mode of delivery is prescribed, but yet the notice has to be an actual notice as contradistinguished from a constructive notice to the presently considered. The question of actual notice is essentially one of fact which has to be determined on the evidence.

1.8.6 An actual notice, to constitute a binding notice, must be of definite information given by a person interested in the property, for it is a settled rule that a person is not bound to attend to vague rumors or to statements by mere strangers, and that a notice to be binding must proceed from some person

interested in the property. To hold otherwise, a person would have to attend to every gossip or flying report which may have been misleading or untrue. The notice, again, must be in the same transaction, for a person is not bound by notice given in a previous transaction which he may have forgotten. And it is not necessary that the notice should name the person who has an interest, but only that there is a person having such an interest. Thus, where the party charged has had actual notice that the property in dispute was in fact charged, encumbered, or in some way affected, the Court has thereupon bound him with constructive notice of facts and instruments, to a knowledge of which he would have been led by an inquiry after the charge encumbrance or other circumstance affecting the property of which he had actual notice. Mere inaccuracies as to notice do not exonerate a person from pursuing an inquiry once taken up.

1.8.7 But, where a man buys in the face of hostile claims, he runs the risk of those claims eventually turning out to be well-founded for, although, at the time of the purchase, he might have honestly believed that he could ignore them, still he cannot afterwards set himself up as an innocent purchaser without notice : he must then stand or fall by the strength of his own right as against that of the opening claimant. But a mere casual conversation, in which knowledge of an encumbrance is imparted, is not notice of it unless the mind of the person has in some way been brought to an intelligent apprehension of the nature of the encumbrance which has come upon the property, so that a reasonable man or any ordinary man of business would act upon the information and regulate his conduct by it. In other words, the party imputing notice must show that the other party had knowledge which would operate upon the mind of any rational man, or a man of business, and made him act with reference to the knowledge he has so acquired. The existence of suspicious circumstances or a general report are not themselves notice of the matter to which they relate. But where the vendee says he has bought and the vendor is silent, it is a good notice to a third person.

1.8.8 Notice by possession – Possession is the notice of title of the person to the whole world under Sec. 3 of the Transfer of Property Act. Therefore, the previous possession of a person in respect of the property has got to be protected in Courts of law against the whole world except the true owner unless the remedy of the true owner is barred by limitation.

- 1.8.9** Under the present Explanation-II notice is limited to the title of the person-in-possession and does not extend to the interest of such person under collateral agreement.
- 1.8.10** When a person other than the vendor is in actual possession of the property it behaves a prospective purchaser to ascertain what all rights the person in actual possession really has in respect of the property. And if omits to do so and if equities exist in favour of the person in possession the prospective purchaser would be bound by them.
- 1.8.11 Doctrine of Constructive notice** – The doctrine of constructive notice only applies where a man is guilty of gross or culpable negligence in not obtaining knowledge. Which, it was in his power to obtain. As such, it may arise: *first*, where a man has notice of the fact of an encumbrance, but does not make any inquiry as to its nature, and so does not obtain the knowledge which inquiry would have given him; or, *secondly*, where his conduct shows that he had a suspicion of the truth, but he willfully avoided inquiring into it. The limits of constructive notice must be narrowly watched, for “it is highly inexpedient for Courts of equity to extent the doctrine of constructive notice, that where a person has actual notice of any matter of fact, there can be no danger of doing injustice if he is held to be bound by all the consequences of that which he knows to exist. But, where he has not actual notice, he ought not to be treated as if he had notice, unless the circumstances are such as enable the Court to say, not only that he might have acquired, but also that he ought to have acquired, the knowledge with which it is sought to affect him; that he would have acquired it but for his gross negligence in the conduct of the business in question”. Constructive notice is resorted to from the necessity of finding a ground of preference between equities otherwise equal. It cannot be applied in support of a charge of direct personal fraud. According to Sec. 3 of the Transfer of Property Act a person is said to have notice of a fact when he actually knows that fact or when but for willful abstention from an enquiry or search which he ought to have made or gross negligence he would have known it. There are three explanations to this definition dealing with three contingencies when a person acquiring immovable property is to be deemed to have notice of certain facts.
- 1.8.12** The circumstances which by a deeming fiction impute notice to a party are based on his willful abstention to enquire or search, which a person ought to

make or, on his gross negligence. This presumption of notice is commonly known as constructive notice. Though originating in equity this presumption of notice is now a part of our statute and has to be interpreted as such willful abstention suggests conscious or deliberate abstention and gross negligence is indicative of a higher degree of neglect. Negligence is ordinarily understood as an omission to take such reasonable care as under the circumstances it is the duty of a person of ordinary prudence to take. In other words, it is an omission to do something which a reasonable man guided by considerations which normally regulate the conduct of human affairs would do or doing something which normally a prudent and reasonable man would not do. The question of willful abstention or gross negligence and, therefore, of constructive notice considered from this point of view is generally a question of fact or at the best mixed question of fact and law depending primarily on the facts and circumstances of each case and except for cases directly failing within the three explanations, no inflexible rule can be laid down to serve as a straight-jacket covering all possible contingencies.

1.8.13 Being a question depending on the behaviour of a reasonable prudent man the Courts have to consider it in the background of Indian conditions. Courts in India should, therefore, be careful and cautious in seeking assistance from English precedents which should not be blindly or too readily followed.

1.8.14 Constructive notice may be defined to the “knowledge which the Court imputes to a person from the circumstances of the case upon a legal presumption, so strong that it cannot be allowed to be rebutted, that the knowledge must exist, though it may not have been formally communicated”. The word “notice” is more comprehensive than “knowledge”. A person is said to have notice of a fact when he actually knows that fact or when, but for willful abstention from an inquiry or search which he ought to have made or gross negligence, he would have known it. If a person has actual knowledge of a fact he certainly has notice of it. But even when he has no knowledge of the fact he may be said to have notice of the same.

1.8.15 Notice may be either express or actual, or constructive or implied. Express notice is actual knowledge of a particular fact conveyed in writing or by word of mouth. Constructive notice is, on the other hand, knowledge imputed by inference. It may be considered to consist in those circumstances under which the Court concludes that notice must be imputed on grounds of public policy to

an innocent person, or that the party has been guilty of such a negligence in not availing himself of the means of acquiring it, as, if permitted, might be a cloak to fraud, which, therefore, the common interests of society require, should, in its consequences, be treated as equivalent to an actual notice.

1.8.16 The doctrine of constructive notice may apply in three cases : (i) where the party charged has notice that the property in dispute is encumbered, or in some way affected, in which case, he is deemed to have notice of the facts and instruments to a knowledge whereof he would have been led by due inquiry after the fact which he actually knows; (ii) where the conduct of the party charged evinces that he had a suspicion of the truth, and willfully or fraudulently determined to avoid receiving actual notice of it, (iii) where notice is implied from gross negligence and where the party is affected by notice to agent.

1.8.17 The subject of constructive notice may be generally divided into the following heads where it is inferred (i) from willful abstention from inquiry or search for or into title deeds and the registry; (ii) from gross negligence, as where an inquiry might have been pursued, but was not; and (iii) where notice is given to an agent. The English equitable doctrine of notice was applied to India even before its recognition by the Legislature.

1.8.18 A person is deemed to have constructive notice of facts which he had willfully and designedly abstained from inquiring into, and from which the Court may well infer that the abstention from inquiry was for the purpose of avoiding notice. The term would appear to comprise only such abstention from inquiry or search as would show want of *bona fide*, a willful blindness from which a fraudulent design is not too remote. But the willful abstention must be from an inquiry which one ought to have made, or in other words, which one was under law or duty bound to make, that is, willful omission of a duty, which may be evidence of fraudulent omission or gross negligence.

1.8.19 The registration of compulsorily registrable instrument creates the doctrine of constructive notice in law. This presumption of constructive notice could be successfully dislodged by him only when he satisfactorily proves that despite his honest enquiry and search of relevant registration records in the office of concerned Sub-Registrar, he could not come across the entries therein, disclosing the fact of prior registration of a document creating any charge on, encumbering the particular property in favour of any third person in any

manner, whatsoever. But for this doctrine to come into play, the legal requirements stipulated in proviso to Explanation-I, must be shown to have been duly complied with. These requirements are, that a compulsorily registrable instrument effecting conveyance of a right or interest in immovable property from transferor to the transferee, must be registered by the Registering Authority strictly in the manner prescribed by the Indian Registration Act, 1908; and the relevant entries thereof are duly entered or filed in accordance with Sec. 51 and 55 of the Act. Then alone that registration operates in law, as a notice to the subsequent transferee and presumption of implied or constructive notice, could be drawn against him.

1.8.20 Registration as notice – Explanation-I to Sec. 3 deals with the notice of the previous sale to the subsequent vendee. This Explanation provides that where any transaction relating to immovable property is required to be effected by a registered instrument, any person acquiring such property subsequently shall be deemed to have notice of such instrument from the date of registration or where the registration has been effected under Sec. 30(2) of the Registration Act, from the earliest date on which any memorandum of such registered instrument has been filed by the Sub-Registrar within whose jurisdiction any part of the property is situated. This provision of the Registration Act has no connection with the period of limitation regarding pre-emption suits. It has been enacted for the benefit of the subsequent vendees who happen to acquire property without knowledge of the previous transaction.

1.8.21 The registration of a document has the effect of notice to the world at large in respect of transaction relating to the property, but this doctrine of notice can have effect in a limited ambit only, the ambit being the one provided by the Transfer of Property Act. If a person wants to enter into a transaction in respect of the property, he has to be wary and circumspect. He has to make inquiries about the legal encumbrances subsisting over the property and if he has notice of these encumbrances he would be bound by the same. Registration of a document would amount to such a notice and hence, the person would be bound by such encumbrances which are registered encumbrances.

1.8.22 The notice contemplated under Explanation-1 of Sec. 3 of the Transfer of Property Act by registration of a document relates to transactions with regard to immovable property which is required by law to be and has been effected by

a registered instrument and that also for a person acquiring such property or any part or share or interest in such property. It is not a notice *in rem*. Testamentary documents do not come within the purview of the notice as contemplated by this section.

- 1.8.23** Then by Act XX of 1929, the present explanation was added with the result that where a document has been registered, a person must, as a matter of law, be deemed to have notice in circumstances and to the extent mentioned in the Explanation.
- 1.8.24** Registration of a document which is compulsorily registrable is deemed to be a notice to the person subsequently acquiring the property comprised in the instrument.
- 1.8.25** Where the deed is registered in the manner prescribed by the Registration Act a party cannot be heard to say that he searched the register without finding the necessary entry. He must take the consequences of his want to diligence in making the necessary search. His conduct can only be regarded as willful abstention from search which he ought to have made.
- 1.8.26** Notice of a deed is notice of all material facts affecting the property which appear on the face of the deed or can be reasonably inferred from its contents.
- 1.8.27** Even under Explanation-1 to Sec. 3 of the Transfer of Property Act, registration is made notice only to transferees subsequent to the registration. Registration of subsequent transaction is not notice of the transaction to prior transferees. How in the circumstances the registration of a deed of simple mortgage by the second defendant would amount to notice of the mortgage to the plaintiff who is not a subsequent transferee, it is difficult to comprehend.
- 1.8.28** A person who wants to take advantage of “notice” must see that the registration is completed and that proper entries in the books and indices are made. He will not be allowed to seek shelter under the mistakes of omissions and commissions of the registration office, because, even if it be so, an innocent person will not be affixed with notice when he could not obtain the information for no fault of his own.

1.8.29 Object of Explanation. – The object of the explanation to Sec. 3 Transfer of Property Act, is to safeguard the interests of a third party who has acquired a good title under a previous registered instrument but it does not in any way after or modify the criminal liability of a person who deliberately suppresses certain facts or misstates certain facts.

The Explanation provides that where any transaction relating to immovable property is required to be effected by a registered instrument, any person acquiring such property subsequently shall be deemed to have notice of such instrument from the date of registration or where the registration has been effected under Sec. 30(2) of the Registration Act, from the earliest date on which any memorandum of such registered instrument has been filed by the Sub-Registrar within whose jurisdiction any part of the property is situated. This provision of the Registration act has no connection with the period of limitation regarding pre-emption suits. It has been enacted for the benefit of the subsequent vendees who happen to acquire property without knowledge of the previous transaction.

1.8.30 Actual possession is notice. – Possession is *prima facie* evidence of title, and a person with a bad title is entitled to remain in possession until another person can disclose a better one. Indeed, the law affords its protection to possession so far that a party dispossessed otherwise than in due course of law may claim to be reinstated if he sues his dispossessor within six months from his ejection.

Under Explanation-II to the definition of the term “notice” contained in Sec. 3 of the Transfer of Property act, 1882, a person in actual possession is practically an owner, it is the duty of purchaser to enquire with possessor about her rights. Under the said provision, he should be deemed to have the notice of the rights of the possessor.

The inquiry under Explanation-II to Sec. 3 is limited to title only.

1.8.31 Notice of the deed is notice of its contents. – If one has actual notice of an instrument affecting one’s title, he is fixed with constructive notice of all other documents which an examination of the instrument would have brought to his knowledge. Since notice of a deed is notice of its contents, it follows that actual notice of a deed is also constructive notice of all the material facts

affecting the property which appear on the face of the deed or could be reasonably inferred from its contents.

1.9 SECTION-4

Enactments relating to contracts to be taken as a part of Contract Act and supplemental to the Registration Act – The Chapters and sections of this Act which relate to contracts shall be taken as part of the Indian Contract Act, 1872 (9 of 1872).

[And Secs. 54, paragraphs, 2 and Secs. 3, 59, 107 and 123 shall be read as supplemental to the Indian Registration Act, [1908 (16 of 1908)]]].

Combined effect of Secs. 4, 59 and 100 of the Act. – Section 4 of the Transfer of Property Act, 1882 (IV of 1882) as amended by Act 3 of 1885 lays down that Sec. 54, paras 2 and 3, 59, 107 and 123 of the Transfer of Property Act shall be read as supplemental to the registration Act, 1908 (16 of 1908). The combined effect of Secs. 4, 59 and 100 of the Transfer of Property Act is, therefore to make all charges in respect of immovable properties compulsorily registrable under the Registration Act provided that the amount secured exceeds Rs.100.

If the immovable property of a value of more than Rs.100 is mortgaged, it undoubtedly requires to be registered under Sec. 17 of the Registration Act, as well as by sec. 59 of the Transfer of Property Act. (Section 4 of the Transfer of Property Act says that, among other provisions Sec. 59 of the Act, shall be read as supplemental to the Indian Registration Act, 1908). Section 17(1) (b) requires any non-testamentary instrument, which purports or operates to create, declare, assign limit or extinguish, whether in present or in future, any right, title or interest, whether vested or contingent, of the value of one hundred rupees and upwards, to or in immovable property to be registered, and Sec. 49 declares that a document required by Sec. 17 to be registered, but not registered, shall not affect any immovable property comprised therein, nor shall it be received as evidence of any transaction affecting such property.

1.10 SECTION-5 “TRANSFER OF PROPERTY” DEFINED –

In the following sections “transfer of property” means an act by which a living person conveys property, in present or in future, to one or more other living persons, [or to himself] and one or more other living persons; and “to transfer property” is to perform such act.

[In this section “living person” includes a company or association or body of individuals, whether incorporated or not, but nothing herein contained shall affect any law for the time being in force relating to transfer of property to or by companies, associations or bodies of individuals].

Secs. 5 to 37 apply to all property whether movable or immovable. Section 5 of the Transfer of Property Act makes it clear that a transfer of property can effectively take place not merely where a person conveys property in present but also when a living person conveys property in future.

The word “transfer” – Definition of. – the word “transfer” is defined with the reference to the word “convey”. This word in English Law in its narrower and more usual sense refers to the transfer of an estate in land; but it is sometimes used in a much wider sense to include any form of an assurance *inter vivo*. The definition in Sec. 205(1) (ii) of the Law of Transfer of Property Act is – “Conveyance includes a mortgage, charge assent, vesting declaration, vesting instrument, disclaimer, release and every other assurance of property or of any interest therein, by any instrument except a Will. The word “conveys” in Sec. 5 of the Indian Act is obviously used in the wider sense referred to above. “A transfer of property” as defined in the present section does not necessarily involve the execution of an instrument of transfer or a conveyance. In the case of movables and generally in the case of immovable property of a value of less than Rs.100/-. A transfer may be effected by delivery of possession. The words “living person” exclude transfers by Will, for a Will operates from the death of the testator.

Meaning of transfer. – Like the word “property” the term “transfer” is also used in its widest and most generic sense as comprehending all the species of contracts which pass real rights in property from one person to another. What is a “transfer of property” has been defined in Sec. 5. It is an act by which a living person conveys property to one or more living persons. And the words “living person conveys property to one or more living persons. And the words “living person” have been defined in that provision to extend to a company or association or body of individuals, whether incorporated or not.

A deity is neither a “living person” within the natural meaning of those words nor is it so within the scope of their extended definition. The words must refer to a person who is capable of death. The word “living” is used in contradiction to “dead”. The entities mentioned in the extended definition are such as are capable of extinction. A

company, an association or body of individuals, whether they are incorporated or not, are all liable to dissolution. “Transfer” includes not only alienations amounting to a divestiture of the transferor’s rights, but also such limited and restricted alienations as are allowed by law.

In its general sense, the expression “transfer of property” connotes the passing of rights in the property from one person to another. In one case there may be a passing of the entire bundle of rights from the transferor to the transferee. In another case, the transfer may consist of one of the estates only out of all the estates comprising the totality of rights in the property. In a third case, there may be a reduction of the exclusive interest in the totality of rights of the original owner into a joint or shared interest with other persons. An exclusive interest in property is a larger interest than a share in that property. To the extent to which the exclusive interest is reduced to a shared interest it would seem that there is a transfer of interest. Therefore, when a partner brings in his personal asset into capital of the partnership firm as his contribution to its capital he reduces his exclusive rights in the asset to shared rights in it with the other partners of the firm. While he does not lose his rights in the asset altogether what he enjoys now is an abridged right which cannot be identified with the fullness of the right which he enjoyed in the asset before it entered the partnership capital.

Living person – “Living person”, as defined by this very section includes a company or association or body of individuals, whether incorporated or not. It does not clearly say that a living person includes also Hindu idol.

A transfer of property postulates at least two living persons, the transferor, and the transferee. A person cannot transfer property to himself, though he may create a trust in his own favour, but he may do so to himself conjointly with another. The conveyance may be in present or in future, but the property itself must be existent, at least potentially, as the property of the grantor. But the transfer of future property, though not dealt within in the Act, may still operate as a contract which may be specifically enforced as soon as the property comes into being. Again, as regards, the parties to a transfer, the term “living person” no doubt includes also juridical persons, such as corporations, idols, and the like, since such persons being the creatures of law, are regarded as standing on the same footing as other living beings.

“Transfer of property” according to the definition given in Sec. 5 of the Transfer of Property Act, means an act by which a living person conveys property in present or in

future to one or more other living persons or to himself, and one or more other living persons. True, these words excludes, transfer by Will, for a Will operates after the death of the testator.

“Conveyance” – The word “transfer” is defined in Sec. 5 with reference to the word “convey”. This word in English law in its narrower and more usual sense refers to the transfer of an estate in land; but it is sometimes used in a much wider sense to include any form of an assurance *inter vivos*. The definition in Sec. 205(1) (ii) of the English law of Property Act is :

“Conveyance includes a mortgage, charge, lease, assent, vesting declaration, vesting instrument, disclaimer, release and every other assurance of property or of any interest therein by any instrument except a Will”.

This is special definition adopted for the purposes of the law of Property Act, 1925. The word “conveys” in Sec. 5 of the Indian Act is obviously used in the wider sense referred to above.

Mode of creating an interest in immovable property – Apart from inheritance, title to immovable property could be acquired either under a testament or by way of transfer *inter vivos*. It is open to the full holder of an estate to bequeath his property by means of a testament or to convey it *in praesenti* by an instrument as required by the Transfer of Property Act. If a Hindu dies intestate, the property would devolve on his heirs.

What is family arrangement. – A family arrangement has been defined in 17 Halsbury’s *Laws of England* (Simonds Ed.) at page 215 as:

“An arrangement between the members of the same family intended to be generally and reasonably for the benefit of the family either by compromising doubtful or disputed rights or preserving family property or peace and security of the family by avoiding litigation or by saving its honour

“The agreement may be implied from a long course of dealing”.

The three requisites required for family arrangement, pointed out by Supreme Court

are these:

1. There must be an agreement amongst the various members of the family intended to be generally and reasonably for the benefit of the family.
2. The agreement should be with the object either of compromising doubtful or disputed rights or for preserving the family property or the peace and security of the family by avoiding litigation or for saving its honor.
3. Being an agreement, there is consideration for the same, the consideration being the expectation that such an agreement or settlement will result in establishing or ensuring amity and goodwill amongst the relations.

A deed of family arrangement is not a deed of transfer within the meaning of the word as defined in Sec. 5 of the Transfer of Property Act. In a case of transfer there must be an act by which a living person conveys property to another. A family settlement, as well settled, is a settlement between the several members of the family of their dispute, each one relinquishing all claims in respect of property in dispute other than that falling to his share and recognizing the right of the others to the portion allotted to them. The transaction thus recognizes rights and does not create new rights or new title.

The Law regarding family arrangement has been clearly summarized as follows:

“It is well settled that a compromise or family arrangement is based on the assumption that there is an antecedent title of some sort in the parties and the agreement acknowledges and defines what that title is, each party relinquishing all claims to property other than that falling to his share and recognizing the right of the others, as they had previously asserted it, to the portion allotted to them respectively. That explains why no conveyance is required in these cases to pass the title from the one in whom it resides to the person receiving it under the family arrangement. It is assumed that the title claimed by the person receiving the property under the arrangement had always resided in him or her so far as the property falling to his or her share is concerned and therefore no conveyance is necessary”.

Family settlement entered into by the parties bona fide for the purpose of putting an

end to the dispute among the family members does not amount to a transfer.

“In present or in future”. – Section 5 of the Transfer of Property Act defines a “transfer of property” as an act by which the transferor conveys property in present or in future to the transferee or transferees. A transfer of a decree by assignment in writing may be effected by conveying the decree in present or in future to the transferee. But even for the transfer to operate in future the decree which is the subject-matter of the transfer must be in existence at the date of the transfer. The words “in present or in future” qualify the word “conveys” and not the word “property” in the section and it has been held that a transfer of property that is not in existence operates as a contract to be performed in the future which may be specifically enforced as soon as the property comes into existence.

1.11 SECTION-6 WHAT MAY BE TRANSFERRED.

Property of any kind may be transferred, except as otherwise provided by this Act or by any other law for the time being in force, -

- (a) The chance of an heir-apparent succeeding to an estate, the chance of a relation obtaining a legacy on the death of a kinsman, or any other mere possibility of a like nature, cannot be transferred.
- (b) A mere right of re-entry for breach of a condition subsequent cannot be transferred to any one except the owner of the property affected thereby.
- (c) An easement cannot be transferred apart from the dominant heritage.
- (d) An interest in property restricted in its enjoyment to the owner personally cannot be transferred by him.
- [[dd)] A right to future maintenance, in whatsoever manner arising, secured or determined, cannot be transferred.]
- (e) A mere right to sue cannot be transferred.
- (f) A public officer cannot be transferred, nor can the salary of public officer, whether before or after it has become payable.
- (g) Stipends allowed to military, [naval], [air-force] and civil pensioners of the [Government] and political pensions cannot be transferred.

- (h) No transfer can be made (1) in so far as it is opposed to the nature of the interest affected thereby, or (2) [for an unlawful object or consideration within the meaning of Sec. 23 of the Indian Contract Act, 1872 (9 of 1872)] or (3) to a person legally disqualified to be transferee.
- (i) Nothing in this section shall be deemed to authorize a tenant having an untransferable right of occupancy, the farmer of an estate in respect of which default has been made in paying revenue, or the lessee of an estate, under the management of a Court of Wards, to assign his interest as such tenant, farmer or lessee.]

Transfer of future property. – Under Sec. 6 of the Transfer of Property Act, an expectancy is not transferable. The property which obtains legal recognition so as to endow it with a transferable character must, in the first place, be existent. For there can be no transfer of a thing which is non-existent.

A property which is not in existence on the day of the contract but would be available in due course of time becomes potential property and a sale in respect of such a property is established by contract. The title in such property passes unto the purchaser, although it is held by the seller in the capacity of a trustee.

Section 6(a) deals with certain kinds of interests in property mentioned therein, and prohibits a transfer *simpliciter* of those interests.

The chance of an heir-apparent. – The Legislature prohibits certain transfers either out of policy or because it has in view the benefit of particular individuals. In the former case, the transfer is void, the prohibition being construed literally and strictly, whereas in the latter case it would be open to the persons benefited to waive the benefit, introduced in their favour, and on such waiver, the transfer would be given effect to.

The interest of reversioner is a *spessuccessionis* within the meaning of Sec. 6 of the Transfer of Property Act. A transfer of a *spessuccessionis* is a nullity and it has no effect in law.

It is indisputable law that no one can have any estate or interest, at law or in equity, contingent or otherwise, in the property of a living person to which he or she hopes to succeed as heir at law, or next-of-kin of such living person. During the lifetime of such

person no one can have more than a *spessuccessionis* is an expectation or hope of succeeding to the property. Such an interest is not assignable at law. Only present rights can be dealt with as property and not inchoate future rights, such as *spessuccessionis*.

Distinction between *spessuccessionis* and contingent interest. – A chance of succession is nothing more than a hope of succession (*spessuccessionis*) and cannot be transferred.

In this country the chances of an expectant heir are declared to be inalienable. Similarly, the interest of a Hindu reversioner expectant upon the death of a Hindu female cannot be validly mortgaged or otherwise transferred by the reversioner. It is no more than a mere *spessuccessionis* which is neither property nor clothed with the attribute of alienability incident thereto. It is established beyond doubt that during the lifetime of the widow, the reversioner has no interest *in praesenti* in the suit property. Her right is only *spessuccessionis* or a mere chance of succession, within the meaning of Sec. 6 of the Transfer of Property Act. It is not a vested interest, but only an interest expectant on the death of a limited heir. It cannot therefore, be sold, mortgaged or assigned, nor can it be relinquished. That a transfer of a *spessuccessionis* is a nullity, and has no effect in law.

The chance of legacy. – There can be no transfer of an expectant interest in property. As such, the bequest of a legacy is a mere chance or a possibility which is from its very nature untransferable, for it may be defeated any moment by the testator, or lapse, if the legatee does not survive the testator.

Right of re-entry. – This clause refers to a right which, as between landlord and tenant, the former possesses against the latter.

A provision for re-entry vacates a lease, and it has accordingly been held that no man shall be permitted to re-enter for a forfeiture, but the person then legally entitled to the rent or to the reversion.

Easement cannot be transferred. – An easement which may be transferred apart from the dominant heritage would be an easement *in gross*, the transfer of which is recognized neither in this country, nor in England, for an easement or servitude is not a separable right of property from the dominant heritage. The right is parasitical and cannot be detached from the dominant heritage. It goes with it, as is indeed expressly

so provided in the Indian Easement Act. An easement as such may be transferred within limits. For instance the dominant owner may release it expressly or impliedly to the servient owner, and when it is expressly released, it amounts to an alienation.

Interest restricted to personal enjoyment. – The general rule is that property is transferable and there should be free alienation and circulation of property, but there are certain exceptions to this rule and Sec. 6 comes in that context. Clause (d) of that section envisages that an interest in property which is restricted in its enjoyment to the owner personally is by its very nature not transferable unless the restriction is void under Sec. 10 of the Transfer of Property Act.

The object of this clause is self-evident. An interest restricted to personal enjoyment cannot be transferred, inasmuch as if its transfer were allowed, it might defeat the object underlying the restriction, and it would be manifestly inconsistent with the presumed intention of its founder.

Right to future maintenance. – It may be noted at once that the provisions contained in Sec. 6 (d), as well as in Sec. 6 (dd), Transfer of Property Act, relate to transfers *inter vivos* by act of parties. The prohibition contained therein can, therefore, apply only to voluntary transfers and not to transfers by operation of law, i.e., by sale in execution of a decree. Strictly speaking, therefore, what is declared to be non-transferable in Sec. 6, Transfer of Property Act, may or may not be attachable or and saleable under the provisions of the Civil Procedure Code.

A right to future maintenance is not attachable under Sec. 60(1) (n) of the Code of Civil Procedure.

Maintenance grants. – A right to future maintenance, if its amount is fixed by agreement or by a decree, cannot be transferred is now placed beyond controversy by the insertion of a clause to that effect.

In so far as arrears of the maintenance have accrued due, it would be in the nature of property which is assignable and heritable, but a right to future maintenance is, however, not property, which may be transferred by virtue of the amendment to Sec. 6 of the Transfer of Property Act by the addition of Cl. (dd), where it is provided that “a right to future maintenance, in whatsoever manner arising, secured or determined, cannot be transferred”.

Clause (dd) – Object – Section 60 (i) (n), C.P.C., and Sec. 6 (dd) of the Transfer of Property Act were enacted for a limited purpose. They were intended to protect maintenance-holders against themselves and to see that they are not deprived of their livelihood. The scope for confusion between Sec. 6 (d) of the Transfer of Property Act and Sec. 60 (1) (n) of the Civil Procedure Code, arises in cases where the right to future maintenance is charged upon immovable property, or where possession of immovable property is given to the maintenance holder in lieu of his right to future maintenance. In such a case, the court has to apply the doubt test, namely (1) is it an arrangement to secure the right to future maintenance; (2) is it an interest in property restricted in its enjoyment to the owner personally? Evidently, to remove a conflict that may arise in the application of these two provisions of law, the Legislature incorporated Cl. (dd) to Sec. 6 of the Transfer of Property Act by Act 20 of 1929. That clause is to the effect that a right to future maintenance, by whatsoever manner arising, second or determined cannot be transferred.

Mere right to sue. – To “sue” means to make a legal claim or to take legal proceedings against any person. It does not necessarily imply institution of a suit by means of a plaint, such as is referred to in the Code of Civil Procedure. It rather implies the taking of any legal proceedings in matters of any kind.

With this clause may be compared Sec. 60 (e) of the Civil Procedure Code, which prohibits the attachment or sale in execution of a decree of a “mere right to sue for damages” and under which it has been held that the right to bring a suit or prefer an appeal is not transferable. But the right to claim specific performance of an agreement to transfer land is, being property, held under the Code to be attachable. Where the subject-matter of the assigned is property with an incidental remedy for its recovery, the assignment is not an assignment of a mere right to sue for damages, and, as such, is not hit by Sec. 6 (e) of the Transfer of Property Act.

Under Section 6 (e) of the Transfer of Property Act, 1882, a bare right of action for claims to damages for breach of contract or claims to damages for tort cannot be transferred because the law does not recognize the transaction which may savour of maintenance of champerty.

Section 6 (e) of the Transfer of Property Act provides that a mere right to sue cannot be transferred. It is necessary to remember and stress the word “mere”.

The object of this clause is to prevent the abuse resulting from trafficking in litigation

and speculation.

What amounts to a bare right to sue. – The expression “a mere right to sue” means a right to sue unconnected with the ownership of any property. Mere right to sue is not property but is merely a right to get future property where the right to recover damages in respect of a property is transferred with the property itself, the transfer does not consist of mere right to sue. The transfer of a right to sue for damages is in such a case incidental to the property itself, it is intimately connected with the enjoyment of the property.

It may then be taken to establish the following propositions (a) that there may be a valid transfer of property for the purposes of financing a suit upon the terms that the property or the proceeds realized from the litigation shall be divided between the transferor and the transferee irrespective of the fact whether or not there was any agreement for the payment of consideration “win or lose”. (b) That in a case where both the assignor and assignee support the assignment, it is not competent to a stranger to plead its invalidity upon any of the grounds upon which the assignor could have successfully impeached his assignment, (c) That the fact that the assignment is in favour of an officious intermeddler, and is made with the immediate object of instituting the suit, which but for that assistance would never have been instituted are all *directly* immaterial and insufficient to invalidate the transfer, but they are, nevertheless, indirectly material; inasmuch as they have a distinct bearing upon the points relevant in such cases which are (a) that the intermeddling was in the nature of gambling, (b) or intended to injure or oppress one’s adversary, (c) or that the transfer was intended to encourage an unrighteous suit so as to be contrary to public policy. But the rule does not prevent persons from charging the subject-matter of the suit, in order to obtain the means of prosecuting it.

Public office and salaries. – In India a public office is deemed to be a position of trust and Sec. 6 (f) of the Transfer of Property Act provides that a public office cannot be transferred, nor can the salary of a public officer. The opinion has been expressed that an office of worship in a temple, which is heritable and partible, is not a public office within the meaning of Sec. 6 (f) of the Transfer Property Act.

The rule here enacted is grounded on public policy, since a person is appointed to fill a public office on the ground of confidence reposed in him and in his personal capacity, which therefore, cannot be transferred to another by him without reference to the superior authority responsible for his appointment.

The clause interdicts the assignment of “a public office” and the salary of “a public office” – terms which have been nowhere defined in the Act. The term “public office” is defined in the Code of Civil Procedure which again is an adaptation of the definition of “public servant” as given in Sec. 21 of the Indian Penal Code. It is possible that every public servant is not necessarily public office for the term “officer” means “some person employed to exercise to some extent and in certain circumstances, a delegated function of Government. He is either armed with some authority or representative character, or his duties are immediately auxiliary to those of some person who is so armed”, but the narrower definition of the term “public officer” which finds place in the Code of Civil Procedure should be a fair index of what is meant by that expression here. The word “salary” primarily means the recompense or consideration stipulated to be paid to a person periodically for services and it may be doubted whether it is intended to include other sums such as travelling and cartage allowances paid to public officers in excess of their fixed stipends. In this respect the Code of Civil Procedure is more explicit, it confirms the view that the clause is restricted merely to a salary as such.

Pensions. – The word “pension” in the Pensions Act, 1871, Sec. 60 (1) (g) of the Code of Civil Procedure, 1908, and Sec. 6 (g) of the Transfer of Property Act, 1882, implies periodical payments of money by Government to the pensioner. Pension, gratuity and provident fund are three distinct types of retirement benefits. But the word “pension” *pensionem* (payment) in its widest etymological sense can be construed as including all payments of every kind and description to a retiring Government servant. The term “pension” is frequently, particularly in recent years, used in the broad sense of retirement allowance or adjusted compensation for services rendered. It has received the wider connotation in the definition sections of many modern statutes. To give a few illustrations, the word “pension” includes “any payment of a lump sum in respect of a person’s employment. Sec. 2 (2) “a superannuation allowance” Sec. 2 (6) a “gratuity” and a return of contributions to a pension fund with or without interest thereon or any other addition thereto. The prohibition enacted in this clause renders invalid any assignment of all pensions whether political, civil or military.

Opposed to the nature of the interest. – This clause means that no transfer can be made of property which from its character, cannot be transferred, as, for example, air, light, water, the oceans and things which are nobody’s property (*nullius in partem*), and to the use of which all are equally entitled and in this sense, such things are often spoken of as *res communes*. As regards the use of water, however, it must be added

that water contained in a pool and tank or a canal may be and usually is the subject of private ownership. Thus, no one has a right to tap another's canal and abstract the water therefrom for his own land unless he has acquired that right by grant or prescription. While a riparian proprietor may deal with a natural water-course as freely as with any portion of his land he must not be so doing sensibly disturb the natural condition of the stream as it exists within the limits of other proprietors, whether above or below, or on the opposite side. But the owner of an artificial water-course has a right to allow or deny he use of water flowing through it to other persons, unless they have also a clearly defined right enabling them to control the water and convent it to their own use – a right clearly found to have originated in some grant or valid contract, or immemorial user from which such title may be presumed. Water may then in such cases be the subject of private dominion, and even an interest therein may be created as where the right of fishery, etc., are leased out.

Transfer forbidden by law. – The term “law” used in this connexion means the substantive law, and not merely procedural law, such as the Code of Civil Procedure. But while all contracts intended to stifle or resulting in stifling prosecution are void, there is no objection to take security for payment of a debt even though the debt itself should have arisen out of a criminal offence and the creditor has threatened prosecution for that offence, provided that the security was not the consideration for non-prosecution. The rule is that, where the plaintiff cannot make out his case except through an immoral transaction to which he was party he will fail.

Transfer for unlawful object. – In Indian law, a transfer of an unlawful object or consideration within the meaning of Sec. 23 of the Indian Contract Act is prohibited by Sec. 6 (h) Cl. 2 of the Transfer of Property Act. Such a transfer is void and need not be set aside.

In Indian law, the transferee cannot recover the property on the strength of such a transfer.

This clause is negative in its wording. It prohibits certain classes of transfers, but it must not be understood to imply that a contract or a transfer if obnoxious to it is necessarily valid, since it may be invalid under some other law. As a rule all transfers are legal of which specific performance is possible. This clause enumerates cases of transfers in which no legal right can accrue.

Transfers made in furtherance of an unlawful object are *ipso facto* void. Thus,

transfers founded on past cohabitation are void. But a transfer made out of gratitude for or with the idea of recompensing past cohabitation is not *per se* void, under Sec. 6 (h), read with Sec. 23 Contract Act. The sale of goods for the purpose of smuggling them out of British territory is void. But a gift to which an immoral condition is attached, remains a good gift, while the condition is void.

A transfer made for an unlawful object is void, the effect of which is, that all collateral transactions relating thereto are similarly vitiated.

Transfers placing a restriction on the ordinary rights of parties are generally bad, unless the restriction is for their benefit. But the restriction then must not be indefinite and uncertain.

Excepted transfers. – The clause “nothing in this section” provides that by virtue of this section alone no transfer can be validated which otherwise be forbidden or void under any other law.

1.12 SECTION-7 PERSONS COMPETENT TO TRANSFER

Every person competent to contract and entitled to transferable property, or authorized to dispose of transferable property not his own, is competent to transfer such property either wholly or in part, and either absolutely or conditionally, in the circumstances, to the extent, and in the manner, allowed and prescribed by any law for the time being in force.

This is an enabling section and enacts that persons lawfully capable of transferring property may do so in the manner allowed and prescribed by any law for the time being in force.

Meaning of words. – “*Every person*” would include a corporation, society, a firm of partners or the like, *to dispose of property not his own,*” e.g., manager, guardian, receiver, curator, trustee or the like; “*is competent to transfer*”, the question whether it renders the transfer wholly void will have to be examined in the sequel.

Application of the section– It is a thoroughly well recognized principle that where the transferor himself has no title to the property he must at least have the authority to transfer it. Under Sec. 7 of the Transfer of Property Act only a person authorized to dispose of transferable property not his own is competent to transfer it either wholly

or in part. According to Sec. 6 (h) of the Transfer of Property Act, no transfer can be made to a person legally disqualified to be transferee. Section 7 of the said Act provides that every person competent to contract and entitled to transferable property, or authorized to dispose of transferable property not his own, its competent to transfer such property either wholly or in part. There is nothing in the Transfer of Property Act according to which it can be said that a minor is disqualified to be a transferee. There is no question of application of Sec. 7 as the minor is not the transferor. Section 11 of the Indian Contract Act, 1872, would not come in the way of transfer of property in favour of the minor. But when a lease is created, it is not the transfer of immovable property, or interest therein simpliciter in favour of a minor. The same is coupled with an obligation on the part of the minor to pay stipulated rent, and when obligation is created against a minor by such transfer, one has to consider whether the minor is bound by such transfer. Ordinarily, in a gift or other transfer of property in favour of a minor there is no reciprocal obligation cast on the minor, but in a lease reciprocal obligation is cast on the lessee (minor) to perform several obligation as mentioned in Sec. 108 (B) of the Transfer of Property Act.

Competency to contract. – The first requisite of a valid transfer is that the transferor must possess the power to contract, and for that purpose he must be (i) a major, (ii) of sound mind, and (iii) free from any other legal disqualification.

Minor can be transferee but not a transferor of immovable property. – Section 6 (h) of the Transfer of Property Act provides, *inter alia*, that no transfer can be made “to a person legally disqualified to be transferee”. Under Sec. 7 of the Transfer of Property Act every person competent to contract is competent to transfer property to the extent and in the manner allowed and prescribed by any law for the time being in force. The result is that a minor can be a transferee but not a transferor of immovable property.

1.13 SECTION-25 CONDITIONAL TRANSFER

An interest created on a transfer of property and dependant upon a condition fails if the fulfillment of the condition is impossible, or is forbidden by law, or is of such a nature that, if permitted, it would defeat the provisions of any law, or is fraudulent, or involves or implies injury to the person or property of another, or the Court regards it as immoral or opposed to public policy.

Illustration

- (a) A lets a farm to B on condition that he shall walk a hundred miles in an hour. The lease is void.
- (b) A gives Rs.500 to b on condition that he shall marry A's daughter C. At the date of the transfer C was dead. The transfer is void.
- (c) A transfers Rs.500 to B on condition that she shall murder C. The transfer is void.
- (d) A transfers Rs.500 to his niece C, if she will desert her husband. The transfer is void.

Principle. – It being the obvious policy of the law to discourage transfers in which impossible or illegal conditions play a part, it has been enacted that an interest dependant upon such a condition shall fail. The condition only is not void, in which case it would produce no effect, but it has the effect of nullifying the transfer itself. The transfer becomes illegal, because a condition upon the performance of which it depends is or has become illegal.

Meaning of words. – “Dependant upon a condition” is not the same as a condition attaching to the transfer, for in such a case, the transfer is good although the condition is ignored as if non-existent. The condition contemplated is a condition *precedent* as contradistinguished from a condition *subsequent*. “*Dependant*” means that the condition must be performed before the estate can vest or be enlarged.

“*Fails*”: the interest “fails” means that, in the event mentioned, no interest is ever vested in the transferee. “*Condition*” means the condition *precedent*. Condition and contingency are often used synonymously. In general, however, the word “*contingency*” has reference to the happening of an event, whereas the word “*condition*” has reference to the doing or forbearance from doing the same act.

“*If fulfillment is impossible*” : the condition itself may not be illegal or impossible, but if its *fulfillment* is impossible or illegal, the section would apply. An illegal condition, e.g., not to alien, not to marry or to abstain from a criminal prosecution is illegal, but its fulfillment may not be impossible.

Conditions – Precedent and subsequent. – Conditions are of two kinds – conditions precedent, and conditions subsequent. The former precedes the vesting of estate; the latter are to be performed after the estate has become vested, and if not performed, may, in many cases, cause interests already vested to be divested, or to be altogether void. Where the condition is precedent, the estate is not in the grantee until the condition is performed, but where the condition is subsequent, the estate vests immediately in the grantee and remains in him till the condition is broken. Whether the condition is precedent or subsequent is a point for construction in each case. As a rule where the condition precedent is impossible, the transfer is void; but where it is a condition subsequent, it is valid, the condition being ignored.

The fulfillment of a condition may be forbidden by any law of the land, and it is not necessary that the prohibition should be expressed. Fulfillment of conditions is restraint of marriage, or by which one is restrained from exercising a lawful profession, trade or business of any kind, or from enforcing his rights by the usual legal proceedings is forbidden by law. Uncertain agreements and wagering covenants also fall into the same category.

Implies injury to the person or property of another. – Under this head fall transfers in favour of servants in consideration of their influencing their masters. Transfers made *pendente lite* are bad as both forbidden by law, and as implying injury to the litigating plaintiff. So also is every agreement which “clogs the equity of redemption”.

Immoral or opposed to public policy. – Transfers which encourage a crime of desertion by wife of her husband are void, as are also transfers by way of bribe, or for the purpose of prostitution, though not consideration of past cohabitation. But where a person has been long in possession of property acquired in consequence of an immoral transfer, was held that such possession could not be disturbed. Sale and brokerage of public or sacerdotal offices are both illegal and opposed to public policy.

So are also transfers made to a foreign enemy, and transfers encouraging smuggling or illegally compromising offences which cannot be lawfully compounded; as also transfers restraining right of free enjoyment and alienation of property; and generally all transfers which are calculated to cause loss to the public and are *contra bonos mores*, are absolutely void.

1.14 SECTION-26 FULFILLMENT OF CONDITION PRECEDENT

Where the terms of a transfer of property impose a condition to be fulfilled before a person can take an interest in the property, the condition shall be deemed to have been fulfilled if it has been substantially complied with.

Illustration

- (a) A transfers Rs.5,000 to B on condition that he shall marry with the consent of C, D and E. E dies, b marries with the consent of C and D, B is deemed to have fulfilled the condition.
- (b) A transfers Rs.5,000 to B on condition that he shall marry with the consent of C, D and E. B marries without the consent of C, D and E, but obtains their consent after the marriage. B has not fulfilled the condition.

Principle. – This section is founded on the principle which favours the early vesting of estates. Where literal performance has become impossible or impracticable, the law assumes that the condition has been entirely fulfilled, if in fact, it has been fulfilled substantially in accordance with the wishes of the testator.

Meaning of words. – “A condition before the person can take an interest means a condition precedent as opposed to the condition subsequent. “*Substantially*” means in greater part, or as far as it is possible, or in other words *cy-pres*.

As rule, it has been held to be sufficient if the wishes of the transferor can be carried out *cy-pres*. This is especially so where it appears that transferor more looked to the end rather than to the means by which the condition is to be fulfilled. Ignorance of the condition is no excuse for not fulfilling it.

1.15 SECTION-27 CONDITIONAL TRANSFER TO ONE PERSON COUPLED WITH TRANSFER TO ANOTHER ON FAILURE OF PRIOR DISPOSITION

Where, on a transfer of property, an interest therein is created in favour of one person, and by the same transaction an ulterior disposition of the same interest is made in favour of another, if the prior disposition under the transfer shall fail, the ulterior disposition shall take effect upon the failure of the prior disposition, although

the failure may not have occurred in the manner contemplated by the transferor.

But, where the intention of the parties to the transaction is that the ulterior disposition shall take effect only in the event of the prior disposition failing in a particular manner, the ulterior disposition shall not take effect unless the prior disposition fails in that manner.

Illustration

- (a) A transfers Rs.500 to B on condition that he shall execute a certain lease within three months after A's death, and, if he should neglect to do so, to C. B dies in A's lifetime. The disposition in favour of C takes effect.
- (b) A transfer's property to his wife; but, in case she should die in his lifetime, transfers to B that which he had transferred to her. A and his wife perish together, under circumstances which make it impossible to prove that she died before him. The disposition in favour of B does not takes effect.

Principle. – The principle underlying this section is thus explained by Williams : “Instances have frequently occurred in which the Court has concluded from the context of the will, that the intention of the testator is effectually fulfilled by regarding a clause of apparent condition as a clause of conditional limitation, so as to require, as in the case of a gift on a condition, that the very event on which the gift is made contingent must be fulfilled with strict exactness, but paying regard, in the construction, to the substantial effect of the contingency specified and so to the real interest of the testator.”

Doctrine of acceleration. – Where the intention of the parties can be clearly ascertained effect is given to it, but otherwise to prevent against lapse, it is sufficient if their intention is substantially carried out. If the transferor provides against failure, the ulterior disposition will take effect in case of failure, although it may not have occurred in the manner contemplated by the parties.

1.16 SECTION-28 ULTERIOR TRANSFER CONDITIONAL ON HAPPENING OR NOT HAPPENING OF SPECIFIED EVENT

On a transfer of property an interest therein may be created to accrue to any person with the condition superadded that in case a specified uncertain event shall happen

such interest shall pass to another person, or that in case a specified uncertain event shall not happen such interest shall pass to another person. In each case the dispositions are subject to the rules contained in Secs. 10, 12, 21, 22, 23, 24, 25, and 27.

Defeasance clause. – It is only if an interest is created by a subsequent clause in an instrument of transfer in favour of another transferee conditional on the happening of a specified uncertain event that the subsequent clause can be taken as a clause in defeasance of an earlier clause creating an absolute interest and the absolute interest created by the earlier clause taken as a limited or life estate.

1.17 SECTION-29 FULFILLMENT OF CONDITION SUBSEQUENT

An ulterior disposition of the kind contemplated by the last preceding section cannot, take effect unless the condition is strictly fulfilled.

Illustration

A transfers Rs.500 to *B*, to be paid to him on his attaining his majority or marrying, with a proviso that, if *B* dies as minor or marries without *C*'s consent, the Rs.500 shall go to *D*. *B* marries when only 17 years of age, without *C*'s consent. The transfer to *D* takes effect.

Principle. – This is accordance with the English law where it is held that a condition subsequent must be strictly fulfilled. It will not occasion forfeiture if the fulfillment of the condition becomes impossible, if it is reasonably fulfilled.

1.18 SECTION-53 FRAUDULENT TRANSFER

(1) Every transfer of immovable property made with intent to defeat or delay the creditors of the transferor shall be voidable at the option of any creditor so defeated or delayed.

Nothing in this sub-section shall impair the rights of the transferee in good faith and for consideration.

Nothing in this sub-section shall affect any law for the time being in force relating to insolvency.

A suit instituted by a creditor (which terms includes a decree-holder whether he has or has not applied for execution of his decree) to avoid a transfer on the ground that it has been made with intent to defeat or delay the creditors of the transferor shall be instituted on behalf of, or for the benefit of, all the creditors.

(2) Every transfer of immovable property made without consideration with intent to defraud a subsequent transferee shall be voidable at the option of such transferee.

For the purposes of this sub-section no transfer made without consideration shall be deemed to have been made with intent to defraud by reason only that a subsequent transfer for consideration was made.

Principle. – this section is with a view afford the protection of past and future creditors both secured and unsecured, and only future transferees. Other clauses embody the settled rules of practice.

Meaning of words. – “*Every transfer of immovable property*” implies a transfer for or without consideration. Not only a transfer of property so-called but any dealing with property to defeat the claims of creditors is equally void, e.g., a remission of debt, relinquishment or surrender of coparcenary or widows, interest for inadequate or no consideration or a partition, so a fraudulent acquisition of property stands on the same footing, as when the debtor purchases property *benami* to defraud his creditors, his acquisition is as fraudulent as if he had transferred some of his property *benami* to another. The question whether the transaction was really a transfer of property or sham or simulated transaction must be decided on the facts and circumstances of each particular case. *With intent to defeat* : the word “intent” by its etymology seems to have metaphorical allusion to archery and implies “aim” and thus connotes not a casual or merely possible results – foreseen perhaps as a not improbable incident but not desired – but rather connotes that one object for which the effort is made, and this has reference to what has been called the dominant motive without which the action would not have been taken.

“*To defeat or delay creditors*”: The creditor may be secured or unsecured and his debt may be proved or unproved. “The transfer which defeats or delays creditors is not an instrument which prefers one creditor to another, but an instrument which removes

property from the creditors for the benefit of the debtor. The debtor must not retain a benefit for himself.

“Voidable at the option, etc.,” i.e. the transfer is not *ipso facto* void, or indeed, voidable at the instance of the transferor or his legal representatives. It can be avoided but only by the person named. As between the immediate parties thereto it is *prima facie* good and unavoidable except under certain circumstances discussed in the sequel.

“Nothing in this section” : This clause was suggested by a case in which the Court observed : “the acts of one man cannot show the mind and intention of another” and should not prejudice him. When it is said that a deed is not executed in *good faith*, what is meant is that it was executed as a mere cloak, the real intention of the parties being that the ostensible grantor should retain the benefit to himself.

“On behalf of or for the benefit of all the creditors” :In the one case the plaintiff must obtain a general authority to sue for them, or make them parties to his suit; while in the other case, this is not necessary and it will suffice if the plaintiff makes a declaration in his plaint or pleading to this effect.

“Subsequent transferee” :Clause (d) of Sec. 2 read with the preamble makes it clear that the Act does not apply to transfers by operation of law or by or in execution of a decree or order of a Court of competent jurisdiction. The transfers governed by this Act are transfers by “act of parties”. It is plain that a purchase at an auction sale is not a transfer as contemplated by the Transfer of Property Act, and, it therefore, not validated or invalidated by anything contained in the Act. According the expression “subsequent transferee” in sub-section (2) of Sec. 53 does not include a purchaser at a Court-sale.

“Defraud a subsequent transferee” : In the case of a creditor the intent must be to “defeat or delay” him; but as against a subsequent transferee the intention must be to *defraud* him. The change is merely verbal and adopted as more suitable to a transferee. But whether the intent was to defraud, or defeat or delay, a certain degree of fraud must be present in each case.

Application of the section. – Section 53 while safeguarding the rights of transferees in good faith and for consideration empowers the creditors to avoid any transfer of immovable property made by the debtor with intent to defeat or delay the creditors.

The basic requisites for the applicability of this Section thus may be stated to be : (i) there should be transfer of immovable property; (ii) the transfer ought to have been made with intent to defeat or delay the creditors and (iii) the suit must be brought by the creditor, acting on behalf of or for the benefit of the entire body of creditors for avoiding such transfer. The primary requirement for the applicability of this section therefore appears to be the existence of a valid transfer.

The terms of Sec. 53(1) are satisfied even if the transfer does not “defeat” but only “delays” the creditors. The fact, therefore, that the entirety of the debtor’s property was not sold cannot by itself negative the applicability of Sec. 53(1) unless there is cogent proof that there is other property left sufficient in value and of easy availability to render the alienation in question immaterial for the creditors.

Transfers contemplated by the section. – The transfers contemplated by the section are transfers apparently well made and binding upon the parties but voidable at the option of a creditor if the transfer was made with the intention specified in the section.

Effect of declaration under the section. – The effect of the declaration under Sec. 53 is that the transaction does not affect the creditor’s right to recover their claims from the property transferred. The declaration would still leave the deed operative between the parties thereto and would not amount to canceling or setting aside the deed.

When a transfer is declared void as against creditors under Sec. 53 the result is not to annul it altogether, but only to render it inoperative as against creditors and that too only to the extent necessary to satisfy their claims; and subject to their claims the transaction is valid and enforceable.

1.19 SECTION-53-A. PART PERFORMANCE

Where any person contracts to transfer for consideration any immovable property by writing signed by him or on his behalf from which the terms necessary to constitute the transfer can be ascertained with reasonable certainty,

and the transferee has, in part performance of the contract, taken possession of the property or any part thereof, or the transferee, being already in possession, continues in possession in part performance of the contract and has done some act in furtherance of the contract,

and the transferee has performed or is willing to perform his part of the contract,

then, notwithstanding that where there is an instrument of transfer, that the transfer has not been completed in the manner prescribed therefore by the law for the time being in force, the transferor or any person claiming under him shall be debarred from enforcing against the transferee and persons claiming under him any right in respect of the property of which the transferee has taken or continued in possession, other than a right expressly provided by the terms of the contract:

Provided that nothing in this section shall affect the rights of a transferee for consideration who has no notice of the contract or of the part performance thereof

Principle. – The doctrine of part-performance is an equitable doctrine designed to relieve the rigour of the law and provide a remedy when a transfer or an agreement for transfer falls short of the requirements laid down by the law.

Section 53-A of the Transfer of Property Act applies to a person who contracts to transfer immovable property in writing. If the proposed transferee in the agreement has taken possession of the property or he continues in possession thereof being already in possession, in part performance of the contract and has done some act in furtherance of the contract, and transferee has performed or is willing to perform his part of the contract, the transferor shall be debarred from enforcing any right in respect of the property. This is the kernel of the principle incorporated in Sec. 53-A of the Transfer of Property Act.

The doctrine of part-performance aims at protecting the possession of such transferee provided certain conditions contemplated by Sec. 53-A are fulfilled. The essential conditions which are required to be fulfilled if a transferee wants to defend or protect his possession under Sec. 53-A of the Act that have been culled out are –

- (1) there must be a contract to transfer for consideration of any immovable property;

- (2) the contract must be in writing, signed by the transferor, or by someone on his behalf;
- (3) the writing must be in such words from which the terms necessary to construe the transfer can be ascertained;
- (4) the transferee must in part-performance of the contract take possession of the property, or of any part thereof;
- (5) the transferee must have done some act in furtherance of the contract;
- and
- (6) the transferee must have performed or be willing to perform his part of the contract.

If these conditions are fulfilled then in a given case there is an equity in favour of the proposed transferee who can protect his possession against the proposed transferor even though a registered deed conveying the title is not executed by the proposed transferor. In such a situation equitable doctrine part-performance provided under Section 53-a comes into play.

The necessary conditions for application of Sec. 53-A of Transfer of Property Act are fulfilled then in spite of defect of registration or other defect in the deed, the transferor or any person claiming under him shall be debarred from enforcing against the transferee and person claiming under him any right in respect of the property of which the transferee has taken or continued in possession other than a right expressly provided by the term of the contract.

The benefit of Sec. 53-A of the Transfer of Property Act can be availed of only by those who were put into possession by virtue of a legal document.

Object of the section. – This section gives a right to the defendant to protect his possession as against the transferor. It is equally available against persons who claim under him, such as his heirs, assigns and legal representatives.

The safeguards which have been engrafted in Sec. 53-A to prevent fraud on the part of the defendant himself are : (1) that the defendant must have in part-performance, that is to say, in pursuance of the unregistered contract, taken possession of the property; (2) that he must continue in possession in such part-performance of the contract at the time of the dispute; and (3) if these conditions are satisfied, he can resist a suit for recovery of possession from him either by the transferor or by any person claiming under him, provided only that such latter person would not be

affected by the defence of part-performance if he was a person who had acquired the property for consideration without notice of the contract to the defendant or of the part-performance thereof.

All that Sec. 53-A of the Transfer of Property Act provides is that the transferee can defend his possession under the doctrine of part performance. It creates no real right and much less deprives the transferor of the ownership of the lands.

One necessary consequence of Sec. 53-A of the Transfer of Property Act is:

“the transferor or any person claiming under him shall be debarred from enforcing against the transferee and persons claiming under him any right in respect of the property of which the transferee has taken or continued in possession, other than a right expressly provided by the terms of the contract.” The total effect of Sec. 53-A is to effectuate a transfer as fully and as completely as if a conveyance had been effected although all that the parties had is a mere agreement in writing for the transfer of property followed by delivery possession and a willingness on that part of the parties to complete the transaction.

Section is ordinarily to be used as defense. – Section 53-A is ordinarily to be used as a defense and not as a weapon of attack.

The right conferred by Sec. 53-A is a right available only to the defendant to protect his possession. The section furnishes a statutory defence to a person who has no registered title-deed in his favour to maintain his possession if he can prove a written and signed contract in his favour and some action on his part in part-performance of that contract.

Meaning of words. – “*Done some act in furtherance of the contract*”, i.e. performed any of the terms of the contract, e.g., paid the consideration, prepared a draft deed or the like.

“*Act in furtherance of a contract.*” An act which can be regarded as having been done in furtherance of the contract must consist of something more than mere payment of the consideration.

“*Has performed*” or “*is willing to perform*”: the words occurring in Sec. 53-A, namely, “has performed” or “is willing to perform” can be read distributively. The first part

refers to a case of possession by a transferee pursuant to the contract. It is clear from the second part of the section that it confers no right on a party who is not willing to perform his part of the contract.

“Claiming under him”, i.e. under the transferor, include a judgment-creditor who has attached the property of the judgment-debtor in possession of the proposed purchaser under the contract to purchase it from the judgment-debtor. These words do not mean a person occupying the position of legal representative of the transferor. Under this section a person claims under another when he is either an assignee for that person or is his legal representative. As the step-daughter does not claim under the widow, the latter’s transferee is not entitled to protection under this section.

“Person claiming under the transferor” : The expression “any person claiming under him,” means only the person who had derived any interest from or through the transferor, namely, assignee or legal representative of the transferor.

Writing signed by him or on his behalf : The equitable doctrine of part-performance embodied in Sec. 53- is applicable only where a person having contracted to transfer property by writing signed by him or on his behalf and put the vendee in possession thereof, wants to recover the property taking advantage of want of formality in the evidence. It is based on rule of estoppel, and hence the disability attaches to a contracting party and not to any other person. This is available only to a defendant to protect his possession and it does not create any legal title in him.

Nothing in this section shall affect the right of a transferee who has no notice. Since possession is now declared to be notice, it follows that a subsequent transferee will be affected with notice of a transferee obtaining possession in pursuance of his contract. But if he was already in possession otherwise, it will be on him to show other facts constituting such notice.

Right conferred by the section is a right available only to the defendant to protect his possession. – It is well established that Sec. 53-A of the Transfer of Property Act provides for a passive equity and not for an active equity. Therefore, the plaintiff cannot seek his relief of injunction in a Court of law based on Sec. 53-A of the Transfer of Property Act though he can use Sec. 53-A to debar the transferor who has agreed to sell the property from claiming any right in respect of that property. It is well established that the right conferred by Sec. 53-A is a right available to the defendant

only to protect his possession and on the basis of that section the defendant cannot claim any title and it merely operates as a bar to the plaintiff to ascertain his title.

The principle underlying Sec. 53-A is that, notwithstanding that the contract, though required to be registered, has not been registered, or where there is an instrument of transfer, that the transfer has not been completed in the manner prescribed therefore by law for the time being in force, the *transferor or any person claiming under him shall* be debarred from enforcing against the transferee and persons claiming under him any right in respect of the property of which the transferee has taken or continued in possession, other than a right expressly provided by the terms of the contract. Therefore, Sec. 53-A applies as a bar against the transferor. It debar the transferor from enforcing against the transferee any right in respect of the property of which the transferee has continued in possession.

Essentials of part-performance. – The necessary conditions for applications of the section are – *firstly*, that there should be a contract to transfer for consideration any immovable property; *secondly*, that the contract should be in writing and its terms can be ascertained with reasonable certainty; *thirdly*, that the transferee in part-performance of the contract has taken possession of the property or any part thereof or if he is already in possession, he continues in possession in part-performance of the contract; *fourthly*, that the transferee has done some act in furtherance of the contract; and *fifthly*, that the transferee has performed or is willing to perform his part of the contract.

Proviso-Meaning of. – Section 53-A has an important proviso to the effect that nothing in the said section shall affect the rights of a transferee for consideration without notice of the contract or of the part-performance thereof. This proviso has been explained to mean that the right of the transferee to hold the transferor to the terms of the transfer is not a title or a right *in rem*.

So far as the transferee is concerned, the section confers a right on him to the extent that it imposes a bar on the transferor. But this is only a right to protect his possession against any challenge to it by the latter contrary to the tenor of the contract or the instrument of contract.

Proviso-Object of. – It is only when all the elements of Sec. 53-A are established and the claimant thus, *prima facie*, establishes his claim under the said Sec. 53-A that the said claim may be defeated by his adversary be showing that he was a transferee for

value without notice of the claimant's claim or agreement or the part-performance thereof and is, as such, entitled to the benefit of the proviso to the section. The purpose of the proviso merely is to defeat a claim which would otherwise have succeeded under the main part of the section. The question of the proviso does not arise until and unless the claimant has substantiated his claim under the main part of the section.

1.20 SALE OF IMMOVABLE PROPERTY (SS. 54 TO57)

1.0 "Sale" defined (S. 54)

"Sale" is a transfer of ownership in exchange for a price paid or promised, or part-paid and part-promised.

1.1 ESSENTIALS OF A VALID SALE

The following are the eight essentials of a valid sale:

1. The seller must be a person competent to transfer: see S. 7.
2. The buyer must be a person competent to be a transferee. He may be any person who is not disqualified to be a transferee under S. 6.
3. The subject-matter must be transferable immovable property: seeS.6.
4. There must be a transfer of ownership.
5. The transfer must be in exchange for a price.
6. The price must be. paid or promised, or partly paid and partypromised.
7. There must be a registered conveyance in the case of –
 - (i) tangible immovable property of the value of Rs. 100 and upwards; or
 - (ii) a reversion of an intangible thing of any value.
8. In the case of tangible immovable property of, a value less than Rs. 100, there must either be -
 - (i) a registered conveyance, or
 - (ii) delivery of property.

1.2 SALE HOW EFFECTED (S. 54)

1. In case of -
 - (i) tangible immovable property of the value of Rs. 100 and upwards, or
 - (ii) a reversion, or
 - (iii) any other intangible thing:

a sale can be made only by a registered instrument.

2. In case of tangible immovable property of a value less than of Rs. 100 a sale can be made
 - (i) by a registered Instrument,
 - or
 - (ii) delivery of the property.

Delivery of tangible immovable property takes place when the seller places the buyer, (or some other person as the buyer directs) in possession of the property.

Illustration

D orally transferred his lands of over Rs. 100 in value, in favour of the B, his first wife, in discharge of her claim for future maintenance. Subsequently he executed registered instrument of sale in respect of the same property in favour of the A. The B sued for a declaration that in view of the prior transfer in her own favour, the sale to the A was ineffective. The A resisted the suit contending that the transfer in favour of the B was a sale that failed for want of a registered instrument. Held:

1. The transfer in question is not a sale for, no "price" is paid or promised by the plaintiff.
2. 'Price' means money, but not necessarily money handed over in current coin at the time but includes money which might be already due or might be payable in the future.'
3. The transaction does not amount to a "gift" for it cannot be said that the transfer is without consideration. Nor is it an "exchange" for the plaintiff did not transfer the ownership of anything in return.
4. The transaction not being one required to be in writing by the T.P. Act, may be affected orally.
5. The plaintiff, therefore, acquired a valid title under the oral transfer and her suit has to be decreed.

2.0 "CONTRACT FOR SALE" DEFINED (S. 54)

A contract for the sale of immovable property is a contract that a sale of such property shall take place on terms settled between the parties. It does not, of itself, create any interest in, or charge on, such property.

In contract for sale, the intending purchaser acquires no interest in the property; he has only the right to get a conveyance in the terms of the contract; the vendor's ownership over the property remains unaffected.

A contract for the sale does not, of itself, create any interest in, or charge on, such property, and the title in the property passes only upon the delivery of possession or registration of the document. The result is that in case of accidental loss of the property, the buyer is not affected.

3.0 RIGHTS AND LIABILITIES' OF BUYER AND SELLER (S. 55)

The rights and liabilities of the parties to a sale can be discussed under the following heads:

- I. Buyer's rights:
 - (a) Before completion of sale.
 - (b) After completion of sale.

- II. Buyer's liabilities:
 - (a) Before completion of sale.
 - (b) After completion of sale.

- III. Seller's rights:
 - (a) Before completion of sale.
 - (b) After completion of sale.

- IV. Seller's liabilities:
 - (a) Before completion of sale.
 - (b) After completion of sale.

3.1 BUYER'S RIGHTS [S. 55(6)]

(a) Before completion of sale, i.e., where ownership has not passed to him [S 55(6)(b)]

The buyer (unless he has improperly declined to accept delivery of the property) is entitled to -

1. A charge on the property for the purchase-money properly paid by him in anticipation of the delivery.
2. Interest on such purchase-money.
3. The earnest and costs awarded to him in a suit to compel specific performance of the contract or to obtain a decree for its rescission-in case he properly declines to accept delivery.

The following points may be noted in connection with the buyer's rights under a contract for sale:

1. If he has already paid the purchase-money, he can acquire a charge on the property.
2. If he has obtained possession of the property agreed to be sold, his possession will, under S. 3, operate as 'notice' to all subsequent transferees of the property, who will be bound by it.
3. He may enforce execution of the agreement to sell.
4. In case of a breach of contract, he can bring a suit for specific performance against the seller.
5. If he succeeds in showing that by a re-sale of the property, he would have made a fair profit; he will be entitled to such profit.

(b) After completion of sale, i.e., where ownership has passed to him [S. 55(6)(a)]

The buyer is entitled to-

- (i) The benefits of any improvement in, or increase in value of, the property, and
- (ii) The rents and profits thereof.

3.2 BUYER'S LIABILITIES [S. 55(5)]

(a) Before completion of sale [So 55(5)(a) & (b)]

The buyer is bound-

1. To disclose to the seller any fact as to the nature or extent of the seller's interest in the property of which the buyer is aware, but of which he has reason to believe that the seller is not aware, and which materially increases the value of such interest. (An omission to make such disclosures amounts to fraud.)
2. To pay or tender the purchase-money to the seller or such person as he directs. Where the property is sold free from encumbrances, the buyer may retain, out of the purchase-money, the amount of any encumbrances on the property existing at the date of the sale and pay the amount so retained to the person entitled thereto.

(b) After completion [So 55(5)(c) & (d)]

The buyer is bound-

1. To bear any loss (not caused by seller) arising from destruction, injury, or decrease in the value of the property.
2. To pay public charges and rents which may become payable in respect of the property, the principal moneys due on any encumbrances subject to which the property is sold, and the interest thereon afterwards accruing due.

3.3 SELLER'S RIGHTS [S. 55(4)]

(a) Before completion of sale [S. 55(4)(a)]

The seller is entitled to rents and profits till ownership passes to buyer.

(b) After completion of sale [S 55(4)(b)]

The seller is entitled to a charge upon the property in the hands of (i) the buyer, or (ii) any transferee without consideration, or (iii) any transferee with notice of nonpayment, for the amount of the unpaid purchase-money.

The seller is entitled to -such charge, only when the whole or part of the purchase-money is unpaid, and the ownership of the property has passed to the buyer.

3.4 SELLER'S LIABILITIES [S. 55(1), (2) & (3)]

(a) Before completion of sale [S. 55(1)(a) to (g)]

The seller is bound-

1. To disclose to the buyer any material defect in (i) the property or (ii) the seller's title thereto, of which the seller is, and the buyer is not aware, and which the buyer could not, with ordinary care, discover. (An omission to make such disclosures amounts to fraud.)
2. To produce to the buyer, on his request, for examination, all documents of title relating to the property which are in the seller's possession or power.
3. To answer, to the best of his information, all relevant questions put to him by the buyer with respect to the (i) property or (ii) the title thereto.
4. On payment or tender of the price, to execute a proper conveyance of the property when the buyer tenders it to him for execution at a proper time and place.
5. Between the date of the contract of sale and the delivery of the property, to take as much care of the property and all documents of title relating thereto, as a man of ordinary prudence would take.
6. To pay all public charges and rent accrued due in respect of the property up to the date of the sale, the interest on all encumbrances on such property due on such date, and [except where the property is sold' subject to encumbrances] to discharge all encumbrances on the property

when existing.

(b) After completion [So 55(1)(1), S. 55(1), (2) & (3)]

1. The seller is bound to give to the buyer, or to such person as he directs, such possession of the property as its nature admits.
2. Where the whole of the purchase-money has been paid to the seller, he is also bound to deliver to the buyer, all documents of title relating to the property which are in the seller's possession or power.
 - (a) Where the seller retains any part of the property comprised in such documents, he is entitled to retain all the documents.
 - (b) Where the whole of such property is sold to different buyers, the buyer of the lot of the greatest value is entitled to such documents.

The seller, or such buyer of the lot of the greatest value, (as the case may be) is bound, upon the buyer's request, to produce the said documents, and furnish true copies thereof, and in the meantime, the seller or the buyer of the greatest value, as the case may be, must keep the said documents safe, uncanceled and undefaced, unless prevented from so doing by fire or other inevitable accident.

3. Covenant for title - The seller is deemed to contract with the buyer that the interest which the seller professes to transfer to the buyer subsists, and that he has power to transfer the same.

When the sale is made by a person in a fiduciary character, he is further deemed to contract with the buyer that the seller has done no act whereby the property is encumbered, or whereby he is hindered from transferring it.

The benefit of the contract mentioned in this rule is annexed to, and goes with, the interest of the transferee as such, and may be enforced by every person in whom that interest is vested.

COVENANT FOR TITLE - The above clause lays down an important rule of presumption for the benefit of all purchasers of immovable property. It says that in every conveyance, the seller is to be deemed to contract with the buyer that the interest which he professes to transfer to the buyer subsists, and that he has the power to transfer the same. The guarantee which is thus implied in law is absolute and unconditional, and the breach of this guarantee at any time after the conveyance would fix the seller with a liability in damages to the buyer and his transferees.

This implied covenant for title applies to any lawful eviction by a paramount title and imports an absolute warranty of the title professed to be transferred and of the seller's power to deal with it.

MARKETABLE TITLE BY SELLER -A seller is bound to give a marketable title; therefore, a sale conveys with it a warranty of title on the part of the seller, and if the warranty is broken, the buyer is entitled to compensation from the seller for the loss caused by the breach of this implied warranty.

It may also be noted that the covenant for title referred to above is a covenant which is annexed to, and which goes with, the interest of the transferee as such. It is a covenant running with the land. Therefore, every person in whom the interest is vested can benefit under this covenant.

Examples :

1. A sells an enclosed field to B. Before accepting the conveyance, B discovers that the public have a right of way across the field, at which there is no visible indication on the land. What are the rights of B?

Ans.- Here, there is a defect both in the property and in the seller's title. As A had not disclosed this defect, B can refuse to complete the sale and also claim damages. If A files a suit for specific performance, B can also successfully resist such a suit.

2. A sells property to B. After accepting the conveyance, B discovers that, under a decree for partition, a portion of the property had been allotted to C. What are the rights of B?

Ans.- As A had failed to disclose, the conveyance is fraudulent, and B can file a suit to set aside the conveyance.

1.21 MORTGAGES OF IMMOVABLE PROPERTY AND CHARGES (SS. 58-104)

1.1 MORTGAGES (Ss. 58-99 & 102-104)

Definition [5. 58(a)] :

A "mortgage" is the transfer of an interest in specific immovable property for the purpose of securing -

- (a) the payment of money advanced or to be advanced by way of loan,
- (b) an existing or future debt, or
- (c) the performance of an engagement which may give rise to a pecuniary liability.

The transferor is called a 'mortgagor', and the transferee a 'mortgagee'. The principal money and interest of which payment is secured for the time being are called the mortgage-money, and the instrument (if any) by which the transfer is effected is called a mortgage-deed. The words 'mortgagors' and 'mortgagees' also include persons deriving title from them respectively.

1.2 SIX KINDS OF MORTGAGES AND THEIR CHARACTERISTICS (Ss. 58, 62-65, 96 & 98)

The Transfer of Property Act, deals with the following six kinds of mortgages:

1. Simple mortgage: S. 58(b).
2. Mortgage by conditional sale: Ss. 58(c), 59 & 67.
3. Usufructuary mortgage: Ss. 55(d) & 62-68.
4. English mortgage: S. 58(e).
5. Mortgage by deposit of title-deeds (or equitable mortgage) : Ss.58(f) & 96.
6. Anomalous mortgage: Ss. 58(g), 67(b) & 98.

1.2.1 Simple mortgage [S. 58(b)]

When -

- (a) possession of the mortgaged property is not given (to the mortgagee), and
- (b) the mortgagor –

- (i) binds himself personally to pay the mortgage money; and
- (ii) agrees that, if he does not so pay, the mortgagee will have a right to cause the mortgaged property to be sold (by the Court), and the proceeds of such sale to be applied in payment of the mortgage-money, the transaction is called a simple mortgage.

The mortgagee, in such cases, is called a simple mortgagee.

INGREDIENTS OF A SIMPLE MORTGAGE. - In a simple mortgage, one finds the following elements:

- (a) a personal obligation on the part of the mortgagor to pay the debt;
- (b) an express or implied power given to mortgagee to cause the property to be sold through the intervention of the Court;
- (c) no transfer of ownership.

So, invariably in a simple mortgage, the mortgagee must have the power to sell the property. But the sale cannot be made out of Court. The words' "cause to be sold" plainly indicates that it must be through the intervention of the Court. Thus, in order to avail himself of his security, the mortgagee should first get a decree directing the sale of the mortgaged property.

In a simple mortgage, the mortgagee is not put into possession of the property mortgaged to him. The debtor merely parts with the right of sale and nothing more. It is a *right in rem* realizable by sale given to a creditor by way of accessory security.

REMEDIES OF A SIMPLE MORTGAGEE: - A mortgagee of this type of mortgage cannot foreclose (i. e. keep the property in lieu of the mortgage-money). He acquires only the right of sale, and that too, only through the Court. He can also sue on the personal covenant (under S. 58), inasmuch as the simple mortgagor binds himself to repay.

(The concepts of "foreclosure" and "sale" are explained at length later in this Chapter.)

1.2.2 Mortgage by conditional sale [55. 58(c), 59 & 67]

Where the mortgagor ostensibly sells the mortgaged property, on condition that—

- (i) on default of payment of the mortgage-money on a certain date,-the sale is to become absolute; or

- (ii) on such payment being made,-the sale is to become void; or
- (iii) on such payment being made,-the buyer is to transfer the property to the seller,

the transaction is called a 'mortgage by conditional sale'. However, in such cases, the condition should be embodied in the document which effects the sale: S. 58(c).

MORTGAGE BY CONDITIONAL SALE. - In this form of mortgage, there is no personal liability on the part of the mortgagor to pay the debt. The remedy of the mortgagee is by foreclosure only. The mortgagee remains content with the property mortgaged and cannot look to the other properties of the mortgagor, the latter not having any personal liability.

A mortgage by conditional sale is an ostensible sale which is to ripen into an absolute sale on breach of the condition as to payment; in other words, on the breach of the condition, the contract executes itself, and the transaction is closed, and becomes one of absolute sale to be enforced in a particular manner, called foreclosure. A mortgage is foreclosed by obtaining a declaration from the court to the effect that the mortgagor will be debarred of his right of redemption. Such a declaration ripens the ostensible ownership of the mortgage into absolute ownership.

A mortgage by conditional sale is non-possessory (i.e., no delivery of possession is given under it), and therefore, the mortgagee does not have the advantage to repay himself, as is the case in a usufructuary mortgage.

The right of a mortgagee (in this type of mortgage) is to close the transaction in case of default of repayment on the due date, and claim the property as an absolute owner. But this right can be enforced, not privately, but only by a suit for foreclosure. The mortgagee does not acquire any personal right against the mortgagor as in the case of a simple mortgage; nor is he entitled to the possession of the property. In fact, by virtue of this mortgage, he can only acquire ownership over the property which, however, will not vest in him in spite of a default of payment on the due date, until there is a decree for foreclosure.

Example -Separate documents of sale deed and deed of reconveyance are executed between the parties in the same transaction and in respect of the same property. The owner wishes to redeem the property and contends that the transaction is in the nature of a mortgage by conditional sale. Will he succeed?

In a mortgage by conditional sale, it is absolutely necessary that the condition effecting the sale as a mortgage should be embodied in the sale deed itself. As this was not done in the present case, the "mortgagor" cannot say that the transaction was in the nature of a mortgage by conditional sale.

How effected (5. 59)

Such a mortgage can be effected –

- (a) where the principal money secured is Rs. 100 or upwards,- by a registered instrument signed by the mortgagor and attested by at least two witnesses;
- (b) when the principal money secured is less than Rs. 100,-by a registered instrument signed and attested as aforesaid, or by delivery of the property.

Mortgagee's remedy (5. 67)

The remedy open to the mortgagee by conditional sale is by foreclosure only, and not by sale.

DIFFERENCE BETWEEN A MORTGAGE BY CONDITIONAL SALE AND A SALE WITH A CLAUSE FOR REPURCHASE:

TEST-Whether a particular transaction is a mortgage by conditional sale or an out-and-out sale with a right of repurchase is to be determined by the intention of the parties, as gathered from the terms of the deed itself. If the relation of debtor and creditor is intended to subsist, the conveyance will amount to a mere security, and therefore, a mortgage. In the case of a sale with a clause for repurchase, the whole transaction is a bona fide sale, there is no relation of debtor and creditor subsisting between the parties and the right of repurchase must be exercised within the fixed time, as time is regarded as the essence of the contract. If such a right is not exercised within the fixed time under the contract, there will be a discharge of the contract, and the seller will not be able to enforce the right of repurchase, whereas in the case of a mortgage by a conditional sale, the right of redemption continues to subsist even after the fixed period. Once a mortgage is always a mortgage. Therefore, the mortgagor can redeem the mortgage, so long as the law of limitation permits him, or before the mortgagee obtains a decree of foreclosure.

1.2.3 Usufructuary mortgage [So SS(d) & 62-93]

Where the mortgagor –

- (a) delivers possession, or expressly or by implication binds himself to deliver possession, of the mortgaged property to the mortgagee, and
- (b) authorises him -
 - (i) to retain such possession until payment of the mortgage money, and
 - (ii) to receive the rents and profits accruing from the property, and
 - (iii) to appropriate them in lieu of interest or, in payment of the mortgage money, (or partly in lieu of interest and partly in payment of the mortgage money),

the transaction is called- a usufructuary mortgage, and the mortgagee is called a usufructuary mortgagee

USUFRUCTUARY MORTGAGE-In this form of mortgage, the property is given as a security to the mortgagee, who is let into possession or is permitted to repay himself out of the rents and profits of such property. Two points must be carefully noted with respect to a usufructuary mortgage:

- (i) possession must be given to the mortgagee, or the mortgagor must expressly or impliedly bind himself to deliver possession: and
- (ii) the mortgagor will not be personally liable, unless there is a distinct agreement to the contrary.

A usufructuary mortgagee, having the opportunity of repaying himself, is not put to the necessity of going to Court. This position accounts for the prohibition in Sec. 67 denying him the right of foreclosure and sale.

Its characteristics- The following are the five main characteristics of a usufructuary mortgage:

- (i) There is delivery of possession to the mortgagee.
- (ii) The mortgagee is to retain possession until repayment of the money and is to receive rents and profits in lieu of interest, or in payment of the mortgage-

- money, or partly in lieu of interest and partly in payment of the mortgage-money.
- (iii) The mortgagor is entitled to redeem when the amount due is personally paid or the debt is discharged by rents and profits received by the mortgagee: S 62.
 - (iv) If the mortgage is for Rs. 100, or more, it must be registered; if below Rs. 100, it may be by a registered deed or by delivery of property S. 59.
 - (v) No time-limit is fixed for repayment.

REMEDIES OF A USUFRUCTUARY MORTGAGEE- A usufructuary mortgagee cannot sue, - either for sale or for foreclosure. His only remedy is to retain possession of the mortgaged property till the mortgage-money is paid up, and to appropriate the rents and /profits thereof till then, .as per the terms of the mortgage-deed. It may be noted, however, that if the mortgagee is not in possession, or if he loses such possession, he' may sue to obtain possession and also mesne profits (i.e., past profits); he may also sue for the mortgage-money under S. 68.

Neither the remedy of foreclosure nor that of a sale is open to usufructuary mortgagee, as he realizes his right by possession and enjoyment of the profits. When his possession is disturbed, the usufructuary mortgagee has a personal remedy under S. 68 to sue for the mortgage-money.

Rights of usufructuary mortgagor to recover possession (S. 62)

A usufructuary mortgagor has a right to recover possession of the property (together with the mortgage-deed and all documents relating to the mortgaged property which are in the possession or power of the mortgagee) in the following two cases, viz.,

- (i) where the mortgagee is authorised to pay himself the amount of the mortgage-money from the rents and profits of the property, -when the mortgage-money is paid;
- (ii) where the mortgagee is authorised to pay himself from such rents and profits, - when the terms (if any) prescribed for the payment of the mortgage-money has expired, and the mortgagor pays or tenders to the mortgagee the mortgage-money or the balance thereof or deposits it in Court.

Accession in the case of a usufructuary mortgage (S. 63)

Where, in a usufructuary mortgage, an accession has been acquired at the expense of

the mortgagee, the profits arising from the accession are, in the absence of a contract to the contrary, to be set off against interest, if any, payable on the money so spent.

1.2.4 English mortgage [5. 58(e)]

Where the mortgagor

- (a) binds himself to repay the mortgage-money on a certain date, and
- (b) transfers the mortgaged property absolutely to the mortgagee, - but subject to a proviso that he will retransfer it to the mortgagor upon payment of the mortgage-money as agreed,

the transaction is called an "English mortgage".

CHARACTERISTICS OF AN ENGLISH MORTGAGE- The following are the main characteristics of an English mortgage:

- (i) It is followed by delivery of possession.
- (ii) There is a personal covenant to pay the amount.
- (iii) It is affected by an absolute transfer of property, with a provision for re-transfer in case of repayment of the amount due.
- (iv) Power of sale out of Court is conferred on certain persons under certain circumstances stated in S. 69.

Remedy open to an English mortgagee.-His remedy is by sale, and not by foreclosure.

Though Section 58(e) states that the mortgagor transfers the property absolutely, yet it must be noted that an absolute transfer can never be a mortgage. The very definition of a mortgage is that there is the transfer of a limited interest for the purpose of securing the debt. Therefore, the word absolutely emphasizes that the characteristics of a sale are more pronounced in the case of an English mortgage, but it does not suggest that there is an absolute transfer in the nature of a sale.

Thus, the use of the word "absolutely" in the definition of an English mortgage, is only a matter of form, and not of substance. What really passes is only an interest in the property, and not the whole property. The sub-section (e) upon its true construction does not declare 'an English mortgage' to be an absolute transfer of property. It

declares only that such a mortgage would be absolute were it not for the proviso to retransfer.

1.2.5 Mortgage by deposit of title-deeds (Equitable mortgage) [Ss. 58(f) & 96]

Where a person -

- (a) in the towns of Calcutta, Madras and Bombay, and in any other town which the State Government concerned may, by notification in the Official Gazette specify in this behalf, (e.g., Ajmer, Allahabad, Delhi, Jaipur, Mysore etc.)
- (b) delivers to a creditor (or his agent), documents of title to Immovable property, deeds.
- (c) with intent to create a security thereon, -

the transaction is called a 'mortgage by deposit of title-deeds.

The provisions which apply to a simple mortgage apply, so far as may be, to a mortgage by deposit of title-deeds.

A mortgage by deposit of title-deeds may include lands outside the limits of the towns mentioned above. But it should be made in any one of those towns. When such a mortgage was created by deposit of title-deeds relating to immovable properties situate partly inside and partly outside the town of Calcutta as security.

Characteristics of a mortgage by deposit of title-deeds -

- (i) It can be created in the towns of Calcutta, Madras and Bombay (and other towns which may be notified in the Official Gazette). It can be created in such towns by deposit of title-deeds, even though the property is outside those towns.
- (ii) It is not necessary that all the deeds should be deposited. It is sufficient if material documents are deposited. It is effected by deposit of material title-deeds.
- (iii) No delivery of possession of property takes place.
- (iv) It is made to secure a debt or advances made, or to cover future advances.
- (v) No registration is necessary, even if there is a writing recording the deposit: S. 59.

- (vi) It prevails against a subsequent transferee who takes under a registered instrument.
- (vii) It prevails against all who are not bona fide purchasers for value without notice.

REMEDIES AVAILABLE. - S. 96 of the Act puts equitable mortgages on the same footing as simple mortgages. Therefore, the remedy of the mortgagee by deposit of title-deeds is by a suit for sale; he is not entitled to sue for foreclosure. He can also sue for the mortgage-money.

The mortgagor's remedy is a suit for redemption, and not an action to recover the title-deeds."

Example- A borrowed a sum of money from B in Bombay. As a security for the loan A deposited with B in Bombay, by way of equitable mortgage, the title-deeds of his property in Itarsi (which is not a notified town). B filed a suit in Bombay for sale of the mortgaged property. A argued that there was no valid or enforceable mortgage in B's favour, as the mortgaged property was situated outside the towns notified under S. 58. Will A's contention succeed?

No, A's contention will not succeed, because a mortgage of property situated in any place (whether notified or not) can be effected by a deposit of title-deeds in Bombay.

1.2.6 Anomalous mortgage [S. 58(g) & 98]

A mortgage which is not –

(i) a simple mortgage, (ii) a mortgage by conditional sale, (iii) a usufructuary mortgage, (iv) an English mortgage, (v) a mortgage by deposit of title-deeds, is called an 'anomalous mortgage.

The rights and liabilities of the parties to such a mortgage are to be determined–

- (i) by their contract, as evidenced in the mortgage-deed, and failing that,
- (ii) by local usage.

ANOMALOUS MORTGAGE - An anomalous mortgage is a transaction which is, in fact, a mortgage (as defined in the Act), but is not any of the types of mortgages considered above. In other words, it is a mortgage other than those categorically defined in the

section. Instances of such mortgages are the kanom, otti and peruartham mortgages of Madras and the san mortgage of Gujarat.

Characteristics of anomalous mortgage:

- (i) It would include a simple mortgage usufructuary and a mortgage usufructuary by conditional sale.
- (ii) Possession mayor may not be delivered.
- (iii) If for Rs. 100 or upwards, it must be registered; if below Rs. 100, it may be by a registered deed or by delivery of possession: S. 59.

REMEDY OF THE MORTGAGEE- The mortgagee's remedy is by sale and foreclosure, if the terms of the mortgage permit it : S. 67(a).

The remedy of a mortgagor, if he becomes a trustee or legal representative of the mortgagee, is by a suit for sale only: S. 67(b).

REMEDIES AVAILABLE TO DIFFERENT MORTGAGEES:

A simple mortgage, An English mortgagee and Equitable mortgagee	A mortgagee by conditional sale	A usufructuary mortgagee	An Anomalous mortgagee	Mortgagee of public work
Sale. No foreclosure S. 67 (a)	Foreclosure, No sale S. 67(a)	Neither sale nor foreclosure S. 67(a)	Ordinarily sale, Foreclosure allowed if so provided in mortgage deed. S.67 (a)	Appointment of receiver (Neither sale nor foreclosure) S. 67(a)

NATURE OF RIGHTS TRANSFERRED IN EACH KIND OF MORTGAGE

<u>Type of Mortgage</u>	<u>Nature of the right transferred</u>
(1) A simple mortgage	(1) The right of sale.
(2) A usufructuary mortgage	(2) The right of possession and; enjoyment of the usufruct.
(3) A mortgage by conditional sale	(3) The right of ownership subject to a condition.
(4) An English mortgage	(4) The right of ownership subject to a condition.
(5) A mortgage by deposit of title-deeds	(5) The right of sale.

SUB-MORTGAGE-A mortgage-debt being an immovable property, the mortgagee can assign his interest in the mortgaged property. A mortgage by the mortgagee of his interest under the original mortgage is called a sub-mortgage. A sub-mortgagee is entitled to a decree for sale of the mortgage-rights of his mortgagor.

A puisne mortgage arises where A mortgages his property to B by a legal mortgage and then mortgages it again to C either by an equitable mortgage or by creating a charge on the same property.

1.3 MORTGAGOR'S RIGHTS(55. 60-61, 63-66, 83-84, 91-92 & 102-108)

A mortgagor has the following six rights:

1. Right of redemption:
2. Right to transfer to a third party instead of retransference toMortgagor
3. Right to inspection and production of documents
4. Right to accession
5. Right to grant a lease
6. Right to reasonable waste

1.3.1 Redemption

Right of redemption

At any time after the principal money has become due, and on payment or tender of the mortgage-money, the mortgagor has the right to get back his property, and demand

- (a) the return of the mortgage instrument, together with all the title-deeds;

- (b) delivery of possession of the mortgaged property (when the mortgagee is in possession); and
- (c) a re-transfer of the property (at the mortgagor's cost) or an acknowledgement in writing of 'the extinction of the mortgagee's right. (8. 60)

However, the above right cannot be exercised if it has been extinguished by any act of the parties, or by a decree of the Court.

The right conferred by this section (S. 60) is called a 'right to redeem', and a suit to enforce it is called a 'suit for redemption'.

Moreover, S. 60 does not render invalid any provision to the effect that

- (i) if the time fixed for payment of the principal money has been of redemption of a allowed to pass, or
- (ii) if no such time has been fixed, the mortgagee is to be entitled to reasonable notice before payment or tender of such money.

RIGHT OF REDEMPTION - Redemption means paying off the mortgage-money, and getting back the mortgaged property. Redemption takes place when the mortgagor discharges his obligations under the mortgage, and thus becomes entitled to have his property re-vested in him, free of the charge. The mortgagor's right to have his property returned to him contemporaneously with the discharge of his obligation is called the right of redemption.

ONCE A MORTGAGE, ALWAYS A MORTGAGE- The right to redeem is a natural incident of a mortgage. Notwithstanding any stipulation to the contrary, a mortgagor, at any time after the principal money has become payable and before his equity of redemption has been actually foreclosed, has, on payment of his debt, the right to get back his property free of all conditions or liens. This right of redeeming the mortgagor's property is an indefeasible right and cannot be taken away from him by any law or contract. The right of redemption cannot be detached from the mortgage. This rule is well expressed by the maxim "Once a mortgage, always a mortgage."

The mortgage may be redeemed at any time after the principal money has become due. Therefore, unless the money becomes due, the mortgagor cannot insist on

redeeming his property, nor can the mortgagee attempt to foreclose. Again, the right of redemption subsists until the mortgage is actually foreclosed, that is, till a decree is passed in foreclosure suit. So, generally, these two rights accrue at the same time and subsist upto the same time, and this incident is often described by saying that the right of redemption and foreclosure are co-extensive. This maxim, of course, assumes the absence of any valid stipulation (express or implied) to the contrary.

Clog on Redemption

The right of redemption is statutory right, and it is so absolute that it cannot be defeated even by the parties themselves. Nor can this right be fettered by any condition. It may be noted that in section 60, there are no such words as "in the absence of a contract to the contrary." The legal position is that any condition contained in mortgage deed, which obstructs the right of redemption, will be considered as a clog on redemption, and will be null and void.

However, it may also be noted that the doctrine of clog on redemption relates only to dealings which take place between the parties to a mortgage at the time when the contract of mortgage is entered into. It does not apply where they subsequently vary the terms upon which the mortgage may be redeemed.

A mortgaged his land to B for five years, with a provision that rents and profits would be set off against interest. The deed further provided that if the mortgage was not redeemed within 20 years, the mortgagee should treat the land as sold to him absolutely. This was held to be a clog on redemption, and the mortgage was held redeemable even after 20 years.

X mortgaged his land to Y with possession and the mortgage provided that in default of redemption after 20 years, Y would become the owner of half the land. This provision was a clog on the equity of redemption. But, four years after the expiry of the 20 years period, while Y was still in possession, X executed a deed by which half the land was conveyed to Y, and Y released the other half from the mortgage. The Court held that this was an arrangement for the discharge of the mortgage, and it was valid.

The Supreme Court has held that a long term for redemption, by itself, is not a clog on the equity of redemption. But, a very long period for redemption (99 years in the present case), taken with other relevant factors (as for instance, inflation and rise in

prices) could create a presumption that it was a clog on the equity of redemption.

The right of a mortgagor to redeem a mortgage has been the subject of anxious protection in law. Any attempt made to obstruct such right is known as clog on the equity of redemption. The clog on the equity of redemption might be in anyone of the following forms:

1. The mortgagor may be totally prevented from redeeming the mortgage.
2. The terms of the mortgage might give a collateral benefit to the mortgagee or impose a collateral burden on the mortgagor, which is expected to last even after the discharge of the debt and the redemption of the mortgage.

1.4 LIABILITIES OF THE MORTGAGOR (S. 65), IMPLIED CONTRACTS BY THE MORTGAGOR (S. 65)

There are five implied contracts which the mortgagor is deemed to enter into with the mortgagee, in absence of a contract to the contrary:

1. Covenant for title [So 65(a)]

The mortgagor is deemed to contract that the interest which he professes to transfer to the mortgagee subsists, and that the mortgagor has power to transfer the same.

There is an implied warranty of title by the mortgagor in the property mortgaged by him. If the title turns out to be defective, there is a breach of this warranty, and the mortgagee can sue (i) for the principal money, as well as (ii) for damages, even before the stipulated period.

2. Covenant for defence of title [So 65(d)]

The mortgagor is also deemed to covenant that he will defend,- or if the mortgagee be in possession of the mortgaged property, enable him to defend,- the mortgagor's title to the property.

There is an implied covenant on the mortgagor's part to indemnify the mortgagee against all expenses incurred in protecting his title. The mortgagor is

bound to defend, or enable the mortgagee to defend his (i.e., the mortgagor's) title. This rule is based on the principle that the mortgagor is bound to keep the mortgage security intact by guarding it against all invasion or intrusion.

3. Covenant for payment of public charges [So 65(c)]

The mortgagor is also deemed to contract that he will, so long as the mortgagee is not in possession of the mortgaged property, pay all public charges accruing due in respect of the property.

There is an implied contract on the mortgagor's part during the time of his remaining in possession, to pay Government revenue and other public charges. If a sale results from the breach of this implied contract,' the mortgagee may, under section 68, sue for the mortgage-money; and if there are any surplus sale-proceeds after such revenue sale, the mortgagee will have a charge on them under section 73.

4. Covenant for payment of rent [So 65(d)]

Where the mortgaged property is a lease, the mortgagor is deemed to contract with the mortgagee that the rent payable under the lease, the conditions contained therein, and the contracts binding on the lessee, have been paid, performed and observed, down to the commencement of mortgage; and that the mortgagor will pay the rent reserved by the lease (or, if the lease be renewed, the renewed lease), and perform the conditions contained therein, and observe the contracts binding on the lessee, and indemnify the mortgagee against all claims, sustained by reason of the non-payment of the said rent or the non-performance or non-observance of the said conditions and contracts.

It may be noted that there is no covenant to renew the lease.

5. Covenant for payment of prior encumbrances [So 65(e)]

Where the mortgage is a second or subsequent encumbrance on the property, the mortgagor is deemed to contract that he will pay the interest accruing due on each prior encumbrance when it becomes due, and will, at the proper time, discharge the principal money due on such prior encumbrance.

The above covenants run with the land (S. 65)

The benefit of all the above contracts are annexed to and go with the interest of the mortgagee as such, and may be enforced by every person in whom that interest is, for the whole or any part thereof, from time to time, vested.

The benefit of these implied covenants passes or runs with the land; so, a mortgagee's assignee is also entitled to the same. But, the burden of these covenants is confined to the mortgagor alone, and does not pass to a purchaser of the equity of redemption. Thus, where the mortgagor's vendee allows Government revenue to fall in arrears and himself purchases the property at a revenue sale, he (i.e.; the purchaser) is not liable to the mortgagee whose security has been extinguished. His position in this respect is different from that of the mortgagor. The mortgagee, in such a case, can only look to the surplus sale proceeds, if any; therefore, he should be on the alert to prevent revenue sales.

The covenants implied by S. 65 are subject to any contract to the contrary. It has been held, for example, that such a contract may be presumed when the mortgagee was fully aware of the nature and extent of the mortgagor's title.

- 1.5 RIGHTS OF THE MORTGAGEE
- 1.5.1 Right of foreclosure or sale
- 1.5.2. Right to sue for mortgage-money
- 1.5.3 Right to sell without the intervention of Court
- 1.5.4 Right to appointment of a receiver
- 1.5.5 Right to accession
- 1.5.6 Right to renewal of mortgaged lease (S. 71)
- 1.5.7 Right to spend money (S. 72)
- 1.5.8 Rights to proceeds of revenue sale or compensation on acquisition (S. 73)
- 1.5.9 Right of mesne mortgagees (S. 94)
- 1.6 LIABILITIES OF THE MORTGAGEE (Ss. 67A & 76-77)
- 1.6.1 Mortgagee to bring one suit on several mortgages (S. 67 A)
- 1.6.2 Liabilities of the mortgagee in possession (Ss. 76-77)

1.7 CHARGE (S. 100-101)

Where immovable property of one person is-

- (a) by act of parties or operation of law,
- (b) made security for the payment of money to another,

and the transaction does not amount to a mortgage, -the latter person is said to have a 'charge' on the property.

All the provisions which apply to a simple mortgage, apply to a charge.

Exception.- S. 100 does not apply to the charge of a trustee on the trust-property, for expenses properly incurred in the execution of his trust.

Moreover, no charge can be enforced against any property in the hands of a person to whom such property is transferred for consideration and without notice of the charge.

WHAT IS A CHARGE-It may be that in a particular case, there may not be an actual mortgage of an immovable property, in the sense that any interest in the property is transferred to the transferee, and yet a person may have a right to recover a debt from that property. Where such a right exists, it is called a 'charge', and the person who is entitled to it is called a charge-holder, and the right is exercisable by a suit for sale of the property for realising the money charged on it.

No particular form of words is necessary to create a charge; all that is necessary is that there must be a clear intention to give property as security for payment of money in praesenti.

Exceptions

1. The section lays down an exception, not to the definition of 'charge', but to the rights of a chargee, namely, that a trustee who has incurred expenses in execution of a trust, though having a charge on the trust property in respect of such expenses, is not entitled to sue for a sale of the trust property in order to realise the same, for it would have the effect of destroying the trust estate. He can only sue for recovery of the money; or, he may reimburse himself out of the income of the trust property and prohibit any disposition of the property without previous payment of such expenses.
2. The section also lays down another exception as regards the extent of the enforceability of a charge, namely, that no charge can be enforced against any

property in the hands of a person to whom such property has been transferred for consideration and without notice of the charge. This exception marks an important distinction between a charge and mortgage. A mortgage, being a jus in rem, can be enforced against the mortgaged property in the hands of any transferee from the mortgage, irrespective of notice. But a charge is a jus ad rem, and can be enforced against a transferee for consideration, only if it is shown that he has taken the transfer with notice of the charge. In other words, a charge cannot be enforced against a bona fide purchaser for value who was not aware of the charge.

A charge may be created by an act of parties (e.g. when property is charged for the maintenance or education of another,) or by operation of law (e.g. a vendor of immovable property has a charge on the property sold for his unpaid purchase-money : S. 55(4) (b) or the charge of buyer for advances made by him : S. 55(6)(b); etc.)

PROBLEM- A sues B on a promissory note. In a compromise decree passed in the matter, it is directed that B shall *not* dispose of his share in a factory until satisfaction of the entire decretal amount. Has A any right to proceed against the property?

ANS- A charge may be created (1) by act of parties or (2) by operation of law. A charge created by a compromise decree is a charge created by the act of the parties to which S. 100 applies. In the present case, A has a charge on the property specified, and he has a right to proceed against the property.

Charges by act of parties -Instances- A charge by act of parties can be created by an instrument *inter vivos* OR BY WILL. Thus, a document stating “I have willingly fixed an annual allowance of Rs.100 in cash in perpetuity out of the profits of the said village for my eldest brother” creates a valid *charge*. Similarly, a will devising immovable properties, and directing the devisee to pay certain debts of the testator from these properties, creates a *charge* in them in respect of these debts.

Charges by operation of law - Charges by operation of law are based upon the consideration of duty or implied intention on the part of the owner of the property to make it answerable for a specific claim.

Instances of charges created by operation of law :

- (a) A Hindu widow's charge on the family property for her maintenance, if created by a decree.
- (b) A vendor's charge for unpaid purchases-money.
- (c) A party entitled to claim contribution under Sec. 82 also acquires a charge in respect thereof.

REQUISITES OF A CHARGE BY ACT OF PARTIES

1. A charge does not contemplate any transfer of an interest in the immovable property.
2. The property should be specified, and it should be made security for the payment of money.
3. In order to constitute a charge, the form of words is immaterial; it is not necessary to use any technical terms.
4. A charge must be created in favour of a particular person; such person must be specifically named.
5. A charge may be created orally, although if it is created by an instrument in writing, it must be registered, unless made by a will, or unless the amount secured is less than one hundred rupees.
6. A charge cannot be created on a future contingency.
7. A charge on future property is valid and operates on such property when it comes into existence.

How a charge can be enforced- A charge, even when created by a decree, can be enforced only by a suit.

How a charge is extinguished- Under S.100, all the rules which apply to a simple mortgage also apply to a charge. So, a charge can be extinguished by an act of parties, i.e., (i) by a release by the chargee of the debt or security; or (ii) by novation, or (iii) by

merger.

CASES -

1. A inherited an estate from his maternal grandmother and executed an agreement to pay his sister B, a fixed annual sum out of the rents of the estate. B has a charge on the estate.
2. A sued B on a promissory note. The compromise decree directed the payment of the money and further directed, that B shall not dispose of his share in a factory until satisfaction of the entire decretal amount. In the circumstances, it was held that A had a charge on the specified property.

1.22 LEASES OF IMMOVABLE PROPERTY (Ss. 105-117)

1.0 Definition (S. 105)

A lease of immovable property is a transfer of a right to enjoy such property for a certain time (express or implied), *or* in perpetuity, in consideration of (i) a price paid or promised, *or* (ii) money, (iii) a share of crops, (iv) service, *or* (v) any other thing of value, to be rendered periodically, *or* on specified occasions, to the transferor by the transferee, who accepts the transfer on such terms.

In the case of a lease, the price is, called the *premium*, and the money, share, service or other thing to be rendered is called. *therent*; the transferor is called the *lessor*, and the transferee is called the *lessee*.

THE FOLLOWING ARE THE ESSENTIAL ELEMENTS OF A LEASE:

1. The Lessor.- He must be competent to contract and he must have title or authority.
2. The Lessee.- He also must be competent to contract at the date of execution of the lease. A sale or a mortgage to a minor is valid. But a lease to a minor is void; as the lease is to be executed both by the lessor and the lessee: S. 107.
3. The subject-matter of the lease must be immovable property.

4. There must be a transfer of a right to enjoy such property.
5. Duration of the lease.-A lease must be made for a certain time, express or implied, or in perpetuity.
6. Consideration, which may be premium plus rent, as well as premium alone or rent alone. Premium is the price paid or promised in consideration of a transfer by way of lease. Any payment by the lessee that is part of the consideration of the lease is rent.
7. The lessee must accept the transfer.
8. It must be in the mode indicated by S. 107.

In an interesting decision delivered by a majority of the House of Lords in 1962, it was *held* that a *man could not grant a lease to himself*. It is submitted that if the question arose in India, the Indian courts would take an identical view.

LEASES IN PERPETUITY - Under *English Law*, a lease in perpetuity is unknown. *In India*, however, such leases (generally agricultural leases) are created by an express or a presumed grant.

The Calcutta High Court was faced with the question as to *whether a lease for 999 years is legal*, especially in view of the fact that substantial stamp duty can be saved by executing such a lease. The Court *held* that there was nothing illegal in executing a lease for 999 years, and just because stamp duty is saved thereby, the transaction does not become unlawful. The solution may be to amend the law relating to stamp duty or prohibit parties from entering into long leases. But until that is done, such leases remain valid and *lawful*.

AGREEMENT TO LEASE- It may be noted that a *contract to let* and a lease are different things; a contract to let, just like a contract to sell, gives rise to *right in rem*. It creates only a personal obligation, which may be enforced by suit for specific performance under the Specific Relief Act, *provided that* the agreement to lease is in writing and is accompanied by delivery of possession. In this respect, it materially differs from an agreement to sell. The latter agreement may be specifically enforced, even if oral and unaccompanied by delivery of possession; but not so with respect to an agreement to let or lease. A *lease* does, but an *agreement for lease* does *not*, establish the legal

relationship of landlord and tenant between the parties. This is so, because a lease is a *transfer*: a right to enjoy property, whereas an agreement to lease is not.

An agreement to lease, *not* creating a present *demise*, is *not* a lease, and does not require either writing or registration. The term 'demise' is not defined in the Transfer of Property Act. It is a term of English law, and it denotes a *transfer of lease*. When it is said that a particular agreement of lease creates *present demise*, what is meant is that though in form of an agreement, it actually effects a transfer by lease, *i.e.*, transfer of a right to enjoy a specific immovable property. The *real test* for determining whether an agreement to lease effects a *present demise*, is *not whether* the transfer is to operate immediately, *but whether* the right to enjoy the property is actually transferred or not. Once the right *is* transferred, the agreement creates a *present demise*, though the right is to operate sometime in the future. Such an agreement to lease creating a *present demise* requires writing and registration, and therefore, without such registration, it will *not* be admissible in evidence.

A grants B a "lease" for two years to tap toddy from the trees in his garden, but B is *not* to cut the leaves. This creates no interest in the immovable property, and is actually a licence.

In one *case*, the question before the Delhi High Court was whether an agreement amounted to a lease or a licence. It was provided that the licensee would be entitled to use the premises, but would have no right, title or interest to possess the premises. A licence fee per day was to be paid to the owner. In the circumstances, the Court *held* that it was a licence, and *not* a lease.

LEASES HOW MADE (S. 107)

A lease of immovable property from year to year, or for any term exceeding one year or reserving a yearly rent, can be made only by a registered instrument.

All other leases of immovable property may be made either by a registered instrument or by oral agreement accompanied by delivery of possession.

Where a lease of immovable property is made by a registered instrument, such instrument or, where there are more instruments than one, each such instrument shall be executed by both the lessor and the lessee:

PROVIDED that the State Government from time to time, by notification in the Official Gazette, direct that leases of immovable property, other than leases from year to year, or for any term exceeding one year, or reserving a yearly rent, or any class of such leases, may be made by unregistered instrument or by oral agreement without delivery of possession.

It is to be noted that in the case of a lease by a registered instrument, or by two or more instruments, the instrument, or each of the instruments, must be executed *by both the lessor and lessee*.

DURATION AND TERMINATION OF LEASES (S. 106)

In the absence of a contract or local law or usage to the contrary, a lease of immovable property for agricultural or manufacturing purposes shall be deemed to be a lease from year to year, terminable, on the part of either lessor or lessee, by six months' notice expiring with the end of a year of the tenancy; and a lease of immovable property for any other purpose shall be deemed to be a lease from month to month, terminable, on the part of either lessor or lessee, by fifteen days' notice expiring with the end of a month of the tenancy.

The above statutory presumptions as to duration arise *only when there is no agreement* between the parties *or local usage to the contrary*.

Requisites of notice (S. 106)

Every notice under S. 106 must be in writing, signed by or on behalf of the persons giving it, and must either be sent by post to the party who is intended to be bound by it *or be tendered*' or delivered personally to such party, or to one of his family or servants at his residence, *or* (if such tender or delivery is not practicable) affixed to a conspicuous part of the property.

Waiver of notice to quit (S. 113)

Notice to quit is deemed to have been waived, when, with the express or implied *consent* of the person to whom it is given, the person giving it does *an act showing an intention* to treat the lease as subsisting.

Examples.-

- (a) A, the lessor, gives B, the lessee, notice to quit the property leased. The notice expires. B tenders, and A accepts, rent which has become due in respect of the property since the expiration of the notice. The notice is waived.
- (b) A, the lessor, gives B, the lessee, notice to quit the property leased. The notice expires and B remains in possession. A gives to B as lessee a second notice to quit. The first notice is waived.

When a landlord, serving a notice to quit on default of payment of rent, serves a subsequent notice and demands a larger amount, it results in the *waiver* of first notice.

COMPUTATION OF LEASES (S. 110)

1. Where the time limited by a lease of immovable property is expressed as commencing from a particular day,-in computing that time, such day is to be excluded. Where no day of commencement is named, the time so limited begins from the making of the lease.
2. Where the time so limited is a year or a number of years, in the absence of an express agreement to a contrary, the lease is to last during the whole anniversary of the day from which such time commences.
3. Where the time so limited is expressed to be terminable before its expiration, and the lease omits to mention at whose option it is so terminable, the lessee, and not the lessor, is to have such an option.

RIGHTS AND LIABILITIES OF THE LESSOR [So 108(a) to (c)]

1. The lessor is bound to disclose to the lessee any material defect in the property, with reference to its intended use, of which the former is and the latter is not aware, and which the latter could not with ordinary care discover;
It has been held that a defect in the lessor's title cannot be said to be a material defect in the property within the meaning of this clause
2. The lessor is bound, on the lessee's request, to put him in possession of the property: S. 108(b).

If the lessor fails to give such possession, the lessee can sue both the lessor, as also a third person in possession.

3. The lessor is also deemed to contract with the lessee that, if the latter pays the rent reserved by the lease and performs the contract binding on the lessee, he may hold the property (during the time limited by the lease) without interruption: S. 108(c).

This covenant is called a *covenant for quiet enjoyment*, and is *absolute* and *unconditional*. It protects the lessee against the disturbance of his possession by the lessor or by persons claiming under the lessor, but *not* against any disturbance by a trespasser.

The benefit of the above contract is annexed to, and goes with the lessee's interest as such, and may be enforced by anyone in whom such interest is vested: S. 108(c).

RIGHTS OF THE LESSEE [So 108(d) to (D)]

1. If during the continuance of the lease, any accession is made to the property, such accession (subject to the law relating to alluvion for the time being in force) is deemed to be comprised in the lease: S. 108(d).
2. If by fire, tempest or flood, or violence of an army or of a mob or other irresistible force, any material part of the property is wholly destroyed, or rendered substantially and permanently unfit for the purpose for which it was let, at the option of the lessee, the lease becomes void. (However, if the injury is occasioned by the wrongful act or default of the lessee, he is not entitled to avail himself of this benefit): S. 108(e).
3. If the lessor neglects to make, within a reasonable time after notice, any repairs which he is bound to make to the property, the lessee may make the same himself, and deduct the expense of such repairs with interest from the rent, or otherwise recover it from the lessor: S. 108(f).
4. If the lessor neglects to make any payment which he is bound to make, and which, if not made by him, is recoverable from the lessee or against the

property, the lessee may make such payment himself, and deduct it with interest from the rent, or otherwise recover it from the lessor: S. 108(g).

5. The lessee may, even after the termination of the lease, remove, at any time whilst he is in possession of the property leased, but not afterwards, all things which he has attached to the earth, provided he leaves the property in the state in which he received it, S. 108(h).
6. When a lease of uncertain duration determines by any means except the fault of the lessee, he or his legal representative is entitled to all the crops planted or sown by the lessee and growing upon the property when the lease determines, and to free ingress and egress to gather and carry them: S. 108(i).
7. The lessee may transfer absolutely, or by way of mortgage or sub-lease, the whole or any part of his interest in the property, and any transferee of such interest or part may again transfer it. In such a case, the lessee does not, by reason only of such transfer, cease to be subject to any of the liabilities attaching to the lease: S. 108(j).

When a transfer of a lease is made, the question as to whether the transferee of the lessee becomes directly liable to the lessor or not deserves consideration. As S. 108 makes it clear, the lessee is *not* relieved from his liability *unless* the lessor consents to the transfer, or releases him from the liability. So far as the liability of the transferee is concerned, it should be noted that there is no privity of contract between the lessor and the transferee of the lessee. But it is a principle of English law that when there is a *privity of estate* between the lessor' and the transferee, the transferee will be liable to the lessor.

It was once doubted as to whether this principle of English law could be applied in India in view of the provisions of the Transfer of Property Act. However, it has now been *held* that such principle of privity of estate is applicable in India.

But it must be noted that such privity of estate is created between the lessor and the transferee only where there is 'a transfer of the *whole* of the lessee's interest. No privity of estate arises when a subsidiary interest is carved out of the lessee's interest. Only where the lease is absolutely assigned to the transferee, there will be a *privity of estate*, and' such transferee becomes *directly* liable to the lessor in respect of the covenants that are binding upon the lessee either under the terms of the lease or

under S. 108 of this Act.'

LIABILITIES OF THE LESSEE [S. 108(k) to (q)]

1. The lessee is bound to disclose to the lessor, any fact as to the nature or extent of the interest which the lessee is about to take, of which the lessee is, and the lessor is not, aware, and which materially increases the value of such interest: S. 108(k).
2. The lessee is bound to pay or tender, at the proper time and place, the premium or rent to the lessor or his agent in this behalf: S. 108(1).
3. The lessee is bound to keep, and on the termination of the lease, to restore, the property in as good condition as it was at the time when he was put in possession, subject only to the changes caused by reasonable wear and tear or irresistible force, and to allow the lessor' and his agents, at all reasonable times during the term, to enter upon the property and inspect the condition thereof, and give or leave notice of any defect in such condition; and when such defect has been caused by any act or default on the part of the lessee, his servants, or agents, he is bound to make it good within three months after such notice has been given or left: S. 108(m).
4. If the lessee becomes aware of any proceeding to recover the property or any part thereof, or of any encroachment made upon, or any interference with the lessor's rights concerning such property, he is bound to give, with reasonable diligence, notice thereof to the lessor: S. 108(n).
5. The lessee may use the property and its products (if any) as a person of ordinary prudence would use them if they were his own; but he must not use, or permit another to use, the property for a purpose other than that for which it was leased, or fell or sell timber, pull down or damage buildings belonging to the lessor, or work mines or quarries not open when the lease was granted, or commit any other act which is destructive or permanently injurious thereto : S. 108(o).
6. The lessee must not, without the lessor's consent, erect on the property any permanent structure, except for agricultural purposes: S.108 (p).

7. On the termination of the lease, the lessee is bound to put the lessor into possession of the property: S. 108(q).

RIGHTS AND LIABILITIES OF LESSOR'S TRANSFEREE (S.109)

If the lessor transfers the property leased or any part thereof, or any of his interest therein,-'

1. The transferee, in the absence of any contract to the contrary, possesses all the rights, and if the lessee so elects, is subject to all the liabilities of the lessor as to the property or part transferred, so long as he is the owner of it.

However, the lessor does not, by reason only of such transfer, cease to be subject to any of the liabilities imposed upon him by the lease, unless the lessee elects to treat the transferee as a person liable to him.

EXAMPLE- A leases a house and a stable to B, who agrees to keep premises in - good repair. During the term of the lease, A sells the stable to C. C can enforce the covenant to repair as regards the stable.

2. The transferee is not entitled to the arrears of rent due for the transfer. If the lessee, not having reason to believe it such transfer is made, pays rent to the lessor, the lessee not liable to pay such rent over again to the transferee.

The lessor, the transferee, and the lessee may determine what) portion of the premium or rent reserved by the lease is payable respect of the part so transferred, and, in case they disagree, such determination may be made by any Court having jurisdiction entertain a suit for the possession of the property leased.

PROBLEM- A lets a field to B at a rent of Rs. 100 and then transfers the field to C. B pays rent to A in good faith even after the transfer, having no notice of the transfer. C files a suit against B for recovery of rents due after the transfer. How will you defend B?

ANS - Under S. 109 of the Act, if the lessor transfers the leased property, and the lessee, not having reason to believe that such a transfer

made, pays rent to the lessor, the lessee is not liable to pay such rent ~r again to the transferee. Here, B has paid rent to A in good faith, having no notice of the transfer. Therefore, C will not be able to recover the rent from B.

Determination (i.e. termination) of a lease (ss. 111-113)

A lease of immovable property *determines (i.e. terminates)* in the following *eight cases*:

1. By efflux of the time limited thereby.

Thus, a lease created for a certain term (e.g., two years) determines on the last day of the term, without any formality, such as a notice on either side.

2. Where such time is limited conditionally on the happening of some event, - by the happening of such event.'

Thus, for instance, if a lease for 20 years is, at the same time, made conditional upon the life of the lessee, the lease determines on the death the lessee, even if this takes place within the stipulated period of 20 years; if the lessee does not die within this period, the lease determines the end of the period.

3. Where the interest of the lessor in the property terminates I, or his power to dispose of the same extends only to, the happening of any event, - by the happening of such event.

This clause operates in cases where the lessor has only a limited interest or a limited power to grant a lease. Thus, it has been held that a lease by a Hindu widow who is entitled only to a life-estate, determines on her death.

Similarly, a lease granted by a mortgage in possession and extending beyond the term of the mortgage, determines on redemption.

4. Merger, - i.e., when the interests of the lessee and the lessor in the whole of the property become vested at the same time in one person in same right.

The lease determines when the right of the lessee merges in that of the lessor. The same man cannot be a landlord and tenant of the same property at the same time in the same right.

Merger may take place either (i) by act of parties, e.g., when the lessor releases his interest in favour of the lessee, or (ii) by operation of law, e.g., when the lessee takes the lessor's interest by succession. When a superior owner acquires a subordinate's tenure, merger is the inevitable result, and if he intends to avoid merger, he must evince a clear intention to keep the inferior interest alive.

5. By express surrender, i.e., in case the lessee yields up his interest under the lease to the lessor by mutual agreement.

In the case of an express surrender, no formalities are required. The lessee must merely express his intention to surrender and the lessor must agree to it. This must be followed by delivery of possession.

6. By implied surrender.

Thus, if a lessee accepts from his lessor a new lease of the leased property, to take effect during the continuance of the existing lease, this is an implied surrender of the former lease, and such lease determines thereupon.

It has been held that mere execution of a usufructuary mortgage in favour of the lessee in respect of the same property does not automatically result in implied surrender. Whether or not there is an implied surrender in such a case would depend upon the terms and conditions of the two transactions.

7. *By forfeiture*- that is to say, (1) in case the lessee breaks an express condition which provides that, on breach thereof, the lessor may re-enter; or (2) in case the lessee renounces his character as such by setting up a title in a third person or by claiming title in himself; or (3) the lessee is adjudicated an insolvent and the lease provides that the lessor may re-enter on the happening of such event; and in any of these cases the lessor or his transferee gives notice in writing to the lessee of his intention to determine the lease,
8. On the *expiry of a notice to determine the lease or to quit* (or of intention to quit) the property leased, duly given by one party to the other: S. 111 (h). Such

notice may be waived with the express or implied consent of the person to whom it is given, by an act on the part of the person giving it, showing an intention to treat the lease as subsisting: S. 113.

Examples-

- (a) A, the lessor, gives B, the lessee, notice to quit the property leased. The notice expires, B tenders, and A accepts, rent which has become due in respect of the property since the expiration of the notice. The notice is *waived*.
- (b) If in the above example, B remains in possession even after the expiry of the notice and A gives a second notice to quit, the first notice is waived.

A *valid notice* must satisfy the following *three requisites, viz.*

- (a) It must expressly convey the intention to terminate the tenancy, although it is *not necessary* to state any ground for the notice to quit.
- (b) It must *specify the date* on which the tenancy is to expire.
- (c) It must be unconditional. Thus, a notice given by a tenant that he will quit when he gets another suitable accommodation is *not valid*.

Forfeiture of lease

Definition (s. 111(g))

A lease determines by forfeiture, if the lessee-

- (i) breaks an express condition, which provides that on breach thereof, the lessor may re-enter; or
- (ii) renounce his character, as such by-
 - (a) setting up title in third person, or
 - (b) by claiming title in himself;or
- (iii) is adjudicated insolvent, and the lease provides that the lessor may re-enter on

happening of such event,

provided that –

the lessor (or his transferee) gives notice in writing to the lessee of his intention to determine the lease.

FORFEITURE-

The lessee will forfeit the lease in any of the three cases mentioned above by S. 111 (g). However, there will be no forfeiture even in such cases, unless a power of *re-entry is distinctly reserved by the lessor*. Therefore, where there is no provision for re-entry in the lease, the lessor can sue only for damages or an injunction, but not for ejection.

As seen earlier, under S. 10, the lessor has the right to impose a condition on the lessee restraining him from alienating the property. On the lessee's attempt to break this condition, the lessor may restrain him injunction, or in case of an actual breach thereof, he may sue or damages. Under such circumstances, a case of forfeiture does *not* arise, *unless* there is a *distinct provision for re-entry* attached to the lease.

After forfeiture has been incurred, it is further necessary that the lessor should give a notice in writing to the lessee of his intention to determine (i.e. terminate) the lease. Thereafter, the landlord, i.e. the lessor, can maintain a suit for possession, *provided* he does not waive his right.

A condition restraining assignment by the lessee does *not* cover the case of a mortgage of the leasehold property, inasmuch as an *assignment* means only an absolute transfer. But, by virtue of Sec. 12, it is possible for a lessor to impose a condition on his lessee that on the latter becoming insolvent, the lease would stand terminated. Such a condition will operate as a determination (*i.e.* termination) of the lease, or have the effect of forfeiture, *only if* a right of re-entry upon the lessee's bankruptcy is distinctly reserved, and further if a *written notice* announcing the lessor's intention to terminate the lease is given. For the purpose of the - above rule, it is immaterial that the lease is a permanent one.

In other words, there can be no forfeiture of the tenancy on any of the grounds specified in S. 111, *unless* there is a *right of re-entry and unless* a *written notice* of the

intention to determine the lease is given to the lessee. The expression "right of re-entry" means a right to re-enter the land. It is a personal right and implies no interest in property. The mere institution of a suit for ejectment is *not* tantamount to giving notice as contemplated herein, because the forfeiture must be completed, and the lease determined before the commencement of the suit. Service of notice is a condition precedent to the determination of the tenancy, and therefore to the institution of the ejectment suit.

Forfeiture by denial of landlord's title arises as soon as the lessee disclaims his lessor's right by setting up a title in a third person or by claiming title in himself, and the lessor does some act showing his intention to determine the lease.

PROBLEM- A is a tenant of B, but C claims to be the landlord. B sues A for rent, and A in his written statement states "I have never paid rent to B. C now claims the rent. I am ready to pay whosoever is the rightful owner". B on the ground of disclaimer wants to eject A by suit. What are his chances?

ANS - He has no chances. This is not a disclaimer by virtue of which B can evict A.

Waiver of forfeiture (S. 112)

Forfeiture is *waived*-

- (i) by acceptance of rent which has become due since the forfeiture, or
- (ii) by distress for such rent, or
- (iii) by any other action on the part of the lessor showing intention to treat the lease as subsisting.

The above rule applies only if the lessor is aware that the forfeiture has been incurred.

Furthermore, if the rent is accepted after the institution of a suit to eject the lessee on the ground of forfeiture, such acceptance does *not* amount to a waiver.

RELIEF AGAINST FORFEITURE (Ss. 114-114A)

1. For non-payment of rent (S. 114)

Where a lease of immovable property has determined by forfeiture for non-payment of rent and the lessor sues to eject the lessee,-

- *if at the hearing of the suit, the lessee*
 - (a) *pays or tenders* to the lessor, the rent in arrear, together with interest and costs, *or*
 - (b) *furnishes security* for such payment within 15 days,

- the court *may*, instead of making a decree for ejectment, pass an order relieving the lessee against the forfeiture, -and thereupon, the lessee continues to hold the property as if the forfeiture has not occurred.

2. In certain other cases (S. 114A)

Where a lease of immovable property has been determined by forfeiture for a breach of an express condition which provides that on breach thereof the lessor may re-enter, no suit for ejectment shall lie unless and until the lessor has served on the lessee a notice in writing-

- (a) specifying the particular breach complained of; and
- (b) if the breach is capable of remedy, requiring the lessee to remedy the breach, and the lessee fails, within a reasonable time from the date of the service of the notice, to remedy the breach, if it is capable of remedy.

The above provisions do not, however, apply to an express condition against the assigning, under-letting, parting with the possession, or disposing, of the property leased, or to an express condition relating to forfeiture in case of non-payment of rent.

Effect of surrender and forfeiture on under-leases (S. 115)

The surrender, express or implied, of a lease of immovable property does not prejudice an under-lease of the property (or any part thereof) previously granted by the lessee, on tern and conditions substantially the same (except as regards the

amount of rent) as those of the original lease; but, unless the surrender is made for the purposes of obtaining a new lease the rent payable by, and the contracts binding on, the under lessee, are to be respectively payable to, and enforceable by the lessor.

The forfeiture of such a lease annuls all such under-lease *except* -

- (i) where such forfeiture has been procured by the lessor in fraud of the under-lessees; or
- (ii) relief against the forfeiture is granted under sec. 11

SURRENDER AND FORFEITURE DISTINGUISHED

1. *Surrender* of a lease, which means a yielding up of the lessee interest to the lessor, *moves from the lessee. Forfeiture* of a lease is the *instance of the lessor*.
2. *Surrender* of a lease implies *mutual consent* on the part of lessee and the lessor. *Forfeiture* of a lease does *not* imply any consent on the part of the lessee.
3. *Surrender* of a lease does *not* prejudice a sub-lease previously granted by the lessee on the terms and conditions substantially the same (except as regards the amount of the rent) as those of the original lease. In case of *forfeiture* of a lease, the sub-lease falls with the lease from which it is derived, except where (i) such forfeiture has been procured by the lessor in fraud of the under-lease, or (ii) relief against forfeiture is granted under S. 114.

HOLDING OVER (TENANCY-AT-WILL) (S. 116)

If a lessee or under-lessee of a property remains in possession thereof *after* the termination of the lease" grant to the lessee, and the lessor (or his legal representative) accepts the rent from the lessee or under-lessee, or otherwise assents to his continuing in possession, -the lease is, in the absence of an agreement to the contrary, renewed from year to year, or from month to month, according to the purpose for which the property is leased, as specified in section 106.

In other words, if the original lease is for agricultural or manufacturing purposes, it will be an *annual* tenancy and when for any other purposes, it will be a *monthly* tenancy.

Examples –

- (a) A lets a house to B for 5 years; A underlets the house to C at a monthly rent of Rs. 100. The 5 years expire, but C continues in possession of the house, and pays the rent to A. C's lease is renewed from month to month.
- (b) A lets a farm to B for the life of C. C dies, but a B continues in possession with A's assent. B's lease is renewed 1m year to year.
- (c) A lets out lands for manufacturing purposes to A for B for 10 years. After the expiry of the terms, A is allowed to remain in possession with the consent of A for two years more. If A then wants to eject B, to what notice would be the latter be entitled?

The lease being for a manufacturing purpose, the holding over gives rise to an annual tenancy terminable with 6 months' notice. But in this case, notice will be necessary as the holding is for *two* years only with consent; therefore, the lease will come to an end by efflux of time.

- (d) If, in Example (c) above, B is allowed to hold over indefinitely and not for a definite period of two years, 6 months' notice will be necessary.

TENANCY BY HOLDING OVER - When termination of the lease takes place, the lessee is bound to surrender possession of the property, and on default, he may be ejected without notice. But if he remains in possession of the property, and if the .lessor consents to the continuance of the lease by accepting rent, or otherwise assents to it, there will be a new tenancy by the tenant's so *holding over*. The new tenancy so created is called a *tenancy by holding over*, sometimes also referred to as *tenancy-at-will*.

But so long as the lessor does not assent to the continuation of the lease, there is no holding over, and by continued possession, the tenant becomes what is known as *tenant-at-sufferance*, *i.e.*, a tenant who comes in by right and holds over without the consent of the landlord, and therefore, without right.

Tenant-at-will:

A tenant-at-will is the result of a tenancy arising from the implication of law and

sometimes by agreement. It is a tenancy which is terminable at the will *either* of the landlord *or* of the tenant. It may arise in the following circumstances:

- (a) It may arise when a person is in possession of premises with the consent of the owner, there being no agreed period for which he should be so.
- (b) It may also arise by an agreement to let, for an indefinite term, for compensation accruing from day to day, so long as both parties agree.
- (c) A tenancy-at-will may also arise when a person enters into possession under a void lease.

Such a tenancy is terminable by either party giving notice. In such a tenancy, the tenant is liable to pay compensation for use and occupation. The tenant is not liable to pay rent as there is no demise to him. Therefore, obviously such a tenancy is not alienable, and it is terminated with the death of the tenant.

A lease is not extinguished by the death of the lessee holding over and devolves on his heirs like any other interest in immovable property. That is the essential difference between a tenant holding over and tenant-at-will. A tenant-at-will is determined by the death of either tenant or his landlord. But in case of a tenant holding over, his interest is heritable and alienable.

Legal implications of tenancy-at-will and tenancy-at sufferance:

Tenancy-at-sufferance is merely a fiction to prevent the *possession* from being a *trespass*. It can arise only by implication of law when a person has been in possession *under* a lawful title and continues in possession after that title has come to an end, without the consent of the person entitled. According to the Madras High Court, the concept has no place after the enactment of the Transfer of Property Act. But the Act is not exhaustive, and the term is useful to distinguish a possession rightful in its inception but wrongful in its continuation, from a trespass wrongful both in its inception and its continuance.

Exemption of lease *for agricultural purposes* (S. 117)

Ss. 105 to 117 do not apply to leases for *agricultural purposes*. But the State Government may, by notification (published 6 months before it takes effect), make *all* or *any* of the above provisions applicable to agricultural leases also.

1.23 EXCHANGES (Ss. 118-121)

Definition (S. 118)

When two persons mutually transfer-

- the ownership of one thing for the ownership of another,
- neither thing or both things being money only, the transaction is called an exchange.

EXCHANGE - It may be noted that an exchange also includes a *barter of goods or movable property*. The provisions will, therefore, apply to exchanges *both of movable and immovable property*.

The essential condition *of every transaction in the nature of an exchange* is that it must be a transfer *of a thing for another thing*, and both *or either of these things* may be movable *or immovable*. Thus, there may be an exchange *of Xs pen for YB book, or of Xs house for the house of Y* But, according to the definition, there *cannot* be an exchange *of a table for Rs. 100, or of a house for Rs. 5000*. These *are sales*, because one *of the items transferred is money*, and they will be governed by the principles applicable to sale. If the sale is *of immovable property*, the provisions *of Ss. 54 to 57* will apply. If, on the other hand, the sale is *of movable property*, the provisions *of the Sale of Goods Act, 1930*, will apply.

It must, however, be observed that the definition does *not* exclude the payment *of money altogether*. What it says is that no transfer *of a thing for money only* can amount to an exchange. It follows, therefore, that if one *of the two properties* which are to be exchanged exceeds the other in value, the transaction would nonetheless be an exchange, even if some money is paid by the owner *of the property* in addition, in order to equalize the value *of both properties*. For example, if A's house worth Rs. 2,000 is to be exchanged for B's field worth Rs. 1,200 and in pursuance *of this bargain*, B agrees to pay to A Rs. 800 in cash, the transaction is *not a sale but an exchange*.

Similarly, where the Government *of India*, as owners *of the G.I.P. Rly.* exchanged lands valued at 89 lacs *of rupees* for lands belonging to the Bomaby Port Trust valued at 86 lacs *of rupees* and rupees 3 lacs paid in cash by the Port Trust, it was *held* that the transaction was an *exchange and not a sale*, having regard to the relative value *of the*

lands and the money paid for equality of exchange.

Exchange how effected (S.118)

A transfer of property in completion of an exchange can be made only in the manner provided for the transfer of such property by *sale*.

EXCHANGE HOW EFFECTED- The mode of transfer by way of exchange is the same as in the case of sales. Thus, a registered instrument is necessary in an exchange of -

- (i) tangible immovable property of the value of Rs. 100 and upwards; and
- (ii) a reversion or other intangible thing.

Non-registration of the document can be cured by part-performance under S. 53-A.

In the case of *tangible* immovable property, of a value *less* than Rs. 100, exchange can be effected by a registered instrument *or by delivery* of the property.

In the case of *movable* property, the relevant portions of the Indian Sale of Goods Act will apply.

SALE AND EXCHANGE DISTINGUISHED - Sections' 18, 119 and 120 show that the Legislature has put an exchange on the same footing as a sale *in almost every respect*. For example, a transfer of property by way of an exchange can be made only in the manner provided for the, transfer of such property by sale. Moreover, each party has the rights, and is subject to the liabilities, of a *seller* as to that which he gives, and has the rights and is subject to the liabilities of a *buyer* as to that which he takes.

The *only distinguishing point* between sale and exchange is that while a sale is always for a *price*, which means money or the current coin of the realm; in exchange, there is no *price*, but one specific thing is transferred for another; money may, however, be *added* to the thing to equalize the consideration.

If *one* of the things transferred is money, the transaction is not an exchange, but a sale. If *both* things transferred are money, the transaction is not a sale, but an exchange. In an exchange of money, there is an implied warranty as to the genuineness of money. (S. 121)

Right of party deprived of thing received in exchange (S. 119)

If any party to an exchange (or any person claiming through or under such party) is - by reason of any defect in the title of the other party, - deprived of the thing (or any part of it) received by him in exchange – then, *unless a contrary intention appears* from the terms of the exchange,-such other party is liable to him (or to any person claiming through or under him)

- (i) for any loss caused thereby; or
- (ii) at the option of the person so deprived, for the return of the thing so transferred, if it is still in the possession of –
 - (a) such other party, or
 - (b) his legal representative, or .
 - (c) a transferee from him without consideration.

Rights and liabilities of parties to an exchange (S. 120)

As stated above, except as otherwise provided above, each party has the rights and is subjected to the liabilities of a *seller* as to that which he *gives and* has the rights and is subjected to the liabilities of a *buyer* as to that which he *takes*.

Exchange of money (S. 121)

On an exchange of *money*, each party thereby warrants the genuineness of the money given by him.

So, when money is paid for forged bills or forged currency notes, the money may be recovered.

SALE, MORTGAGE, EXCHANGE AND LEASE COMPARED - These are all different forms of transfer. A *sale* transfers the *entire ownership* in the property. A *mortgage* transfers only some interest in the property. A *lease* transfers only the right of enjoying the property.

A *sale* is a transfer of ownership for a *price*. An *exchange* also implies a transfer of ownership-but *not* for a *price*; in an *exchange*, the ownership of one *thing* is transferred for the ownership of another thing, neither *thing* being money only. In a *sale*, the *price* is always *money*. If we substitute a *thing* for *money*, a sale will become

an "exchange".

1.24 GIFTS (Ss. 122-129)

"Gift" defined (S. 122)

A *gift* is the transfer

- of certain existing movable or immovable property, made (i) voluntarily, and (ii) without consideration,
- by one person (called the donor) to another (called the donee),
- accepted by (or on behalf of) the donee.

Such *acceptance* must be made during the life-time of the donor, and while he is still capable of giving. If the donee dies before acceptance, the gift is *void*.

Gift how effected (S. 123)

A gift of -

(a) *immovable* property must be effected by a *registered instrument*

- (i) *signed* by (or on behalf of) the *donor*, and
- (ii) attested by at least *two witnesses*.

(b) *movable* property may be effected –

- (i) either by a registered instrument signed and attested as above, or
- (ii) by *delivery*. [Such delivery may be made in the same way as goods sold may be delivered.]

Requisites of a valid gift –

1. There should be a donor and a donee.
2. The subject of the gift must be certain and existing and capable of transfer.
3. The gift should be made voluntarily and without consideration.
4. There should be a transfer on the part of the donor.

5. There should be an acceptance, by or on behalf of the donee during his life-time.
6. The acceptance must be at a time when the donor is alive and capable of giving.
7. Therefore, it necessarily follows that the donor and the donee must both be living persons.
8. When the property is immovable, there must be a registered instrument properly attested.
9. In case of movable property, there must be either a registered instrument properly attested or delivery of possession.

S. 122 lays stress on the acceptance of the gift. Acceptance implies existence of the property; therefore, the definition uses the words "certain existing", and consequently, *there can be no gift of future property*.

Emphasis is also laid on the *voluntary* character of the transaction to make it sure that it is made not under undue influence, duress etc., and to repel an argument that a gift, by reason of 'absence of consideration, is *not* a contract like the other forms of transfer.

EXAMPLE - A executes a gift in favour of B. The given land is worth Rs. 90. The deed is not registered but B is put in possession. Is the gift *valid*?

ANS.- A gift of immovable property, of *whatever value*, can only be made by a registered instrument. A deed *cannot* be dispensed with even for a property of small value, as in the case of a sale. Even if the intended donee is put in possession, a gift of immovable property is *invalid without a registered instrument*.

GIFTS UNDER HINDU LAW AND MAHOMEDAN LAW- The Hindu law, which requires delivery of possession to complete a gift of immovable property, has been abrogated by S. 123 of this Act. So also, a gift of movable property may be made simply by a registered instrument without delivery of property.

Under Mahomedan law, the essentials of a gift are –

- (i) a declaration of gift by the donor,
- (ii) acceptance of the gift by the donee, and
- (iii) if possible, delivery of possession.

This rule of Mahomedan law is, by virtue of S. 139 (below) of the Act, unaffected by the provisions of S. 123, and consequently a registered instrument is *not necessary* to validate a gift by a Mahomedan of an immovable property. So, it follows that even a registered deed of gift is *not, effectual* under the Mahomedan law, if it is not accompanied by delivery of possession.

REGISTRATION –

Registration is compulsory in the case of a gift of *immovable property, what-ever be the value of the property*. But it is *not necessary* that the deed should be registered by the donor himself.

It may be noted that a gift becomes irrevocable once the deed of gift is delivered to the donee, even before its registration. Once the deed is executed, it will be registered according to the Indian Registration Act, even though the donor has changed his mind subsequently. Once the deed is executed and the gift is accepted during the life-time of the donor, the deed of gift may even be registered after the death of the donor. *But an unregistered deed of gift cannot be used under the doctrine of part-performance as the doctrine of part-performance is applicable to transfers for consideration only.*

The Delhi High Court has reiterated that in case of a gift of immovable property, if the document is not registered, mere of possession *cannot* pass a title to the donee.

EXAMPLE - A deed of gift is executed, attested and delivered to the donee. The donee accepts the gift. Before registration of the Deed, the donor seeks to revoke the gift, contending that the gift is not complete until registration. Advise the donee.

ANS.- A deed of gift becomes irrevocable once it is executed, attested' and delivered to the donee, and accepted by the latter. Thereafter, the deed may be registered later on, even if the donor has changed his mind, and even after the death of the donor. Thus, in the present case, the gift is complete, and the donee is entitled to it.

Kinds of gifts

1. Void gifts

The following gifts are *void, viz.*

1. Gift made for an unlawful purpose: S. 6.
2. Gift depending on a condition, the fulfillment of which is impossible, or forbidden by law: S. 6.
3. Where the donee dies before acceptance: S. 122.
4. Gift by a person incompetent to contract, e.g., a minor, lunatic etc.: S.7.
5. A gift comprising existing and future property is void as to the latter: S. 124.

EXAMPLE - X gives to his daughter a gift of his bungalow, Prabhu Prasad, built in 1999, and also of a Maruti Car which X was to buy in future. Is the gift valid?

ANS.- S. 124 of the Act provides that a gift comprising existing and future property is void as to the latter. In this case, therefore, the gift of the bungalow is valid, (as it is existing property), but the gift of the car to be bought in future is void (as it is future property).

6. A gift of a thing to two or more donees, of whom one does not accept it, is void as to the interest which he would have taken, had he accepted: S. 125.

When, a gift, is made to two or more persons jointly, *it does not fail in its entirety*, if one of the donees does not accept. The gift is void only as to the interest of the donee who does not accept.

7. A gift which, under an agreement between the parties, is revocable, wholly or in part, at the mere will of the donor, is, *void* wholly or in part, as the case may be: S. 126.

MISTAKE-A gift is *not* liable to be set aside merely on the ground of mistake, *provided* it is not vitiated by fraud, undue influence etc.

GIFT FOR PAST ILLICIT COHABITATION-A gift requires no consideration, and past illicit cohabitation can be a *motive* for a gift, but not its *object* or *consideration*, and a gift in consideration of past cohabitation is *immoral* and *invalid*.

Under S. 2(d) of the Indian Contract Act, past illicit cohabitation *cannot* be the consideration *for* an agreement or a transfer of property, and such an agreement or transfer is void. If such a void agreement precedes a gift and the gift is made in discharge of that agreement, then the gift also is *void*

2. Onerous gifts (S. 127)

A gift may not always be of a purely beneficial character, but may, attimes, be burdened with an obligation, e.g., when shares in a company subject to heavy calls *form* the subject-matter of a gift. Such a gift is called an 'onerous gift'. The law as to *onerous gifts* is laid down in S.127 of the Act.

1. Where a gift is in the form of a single transfer to the same person of several things, of which one is, and the others are not, burdened by an obligation - the donee can take nothing by the gift unless he accepts it fully.

ILUSTRATION- A has shares in X, a prosperous joint-stock company, and also shares in Y, a joint-stock company in difficulties. Heavy calls are expected in respect of the shares in Y. A gives B all his shares in joint-stock companies. B refuses to accept the shares in Y. He cannot take the shares in X.

2. Where a gift is in the form of two or more *separate and independent* transfers to the same person of several things, - the donee is at liberty to accept one of them and refuse the others, although the former may be *beneficial* and the latter *onerous*.

EXAMPLE - A having a lease for a term of years of a house at a rent which he and his representatives are bound to pay during the term, and which is more than the house can be let Jr, gives to B the lease, and a1so, as a separate and dependent transaction, a sum of money. B refuses to accept the lease. He does not, by his refusal, forfeit the money.

S. 127 is based on the simple principle that he who wants the roses lust not fear the *thorns*.-*Qui sensitcommodum, debt et sentire onus*. 1e rule is *analogous to the doctrine of election*, as

the donee has to elect to accept the *whole* gift or not to accept anything at all. What he cannot do is to retain the benefit of the transaction, and reject its burden.

Onerous gift to disqualified person

If a donee, who is not competent to contract, accepts property burdened by any obligation, he is *not* bound by his acceptance. But, if after becoming competent to contract, and being aware of the obligation, he retains the property given, he becomes so bound.

A disqualified person (*e.g.*, a minor) may be a donee, but he cannot create obligations against himself. So, when an onerous gift is made to him and he accepts it, he is *not* bound by the obligations with which the gift is burdened. The *result* is that when the disqualification is removed, he may avoid the obligation by returning the property to the donor within a reasonable time. But where a minor is the donee of an onerous gift 1 after attaining majority, retains the property given, he will be bound the obligation with which the gift is burdened.

Universal donee (s. 128)

A universal donee is one to whom the donor's *whole property* is given, I who consequently becomes liable for all the debts due by, and liabilities of, the donor at the time of the gift to the extent of the property comprised in the gift.

Subject to the provisions of S. 127 (--seen above --) where a gift consists of the donor's *whole* property, the donee is personally liable for all the debts due by the donor at the time of the gift, to the extent of the property comprised therein.

The. essential condition for the application of S. 128 is that all the properties of the debtor should have been transferred to the donee. However, it has been *held* that even if a life-interest in a part of the property is retained by the donor, the donee is nevertheless a universal donee.

However, if only all the immovable properties are transferred, and the donor continues to own movables, *the donee cannot be called a universal donee.*

But, if only a small, insignificant part of the property is retained by *the donee will be*

treated as a universal donee.

Where, in a gift-deed, the donor had *not* included the equity of redemption in respect of property mortgaged by him, he *cannot* be said to have transferred the whole of his property, and *the donee cannot be regarded as a universal donee.*

There is no rule under *Mahomeddan Law* which conflicts with the provisions of S. 128 of the Transfer of Property Act.

HOW S. 128 DIFFERS FROM S. 53.: s. 53 of the Act deals with *fraudulent transfers* of immovable property, whereas S. 128 deals with both movable and immovable property.

Secondly, a gift under S. 128 is *not necessarily fraudulent*. If the gift is fraudulent and it covers immovable property, S. 128

Lastly, under s. 53 the fraudulent gift need not comprise of the entire property of the donor, whereas S. 128 will come into play only if there is a gift of the *whole* property of the donor.

Revocation or suspension of gifts (s. 126)

A gift once made is irrevocable, except in the following *two* cases:

1. A gift is revocable if the donor and the donee have agreed that on the *happening of a specified event* (not depending upon the will of the donor), the gift should be suspended or revoked.

EXAMPLE -

- (a) A gives a field to B reserving to himself with A's assent, the right to take back the field in case A and his descendants die before A dies without descendants in A's life-time. A may take back the field. A gift, which the parties agree is revocable wholly or in part, at the mere will of the donor, is void wholly or in part, as the case may be.

(b) A gives a lakh of rupees to a, reserving to himself, with B's assent, the right to take back at pleasure Rs 10,000 out of the lakh. The gift holds good as to Rs. 90,000 but is void as to Rs. 10,000, which continue to belong to A.

2. A gift may also be revoked in any of the cases (save want or failure of consideration) in which if it were a contract, it might be rescinded (*e.g.*, when the gift is made under coercion, undue influence, fraud, misrepresentation etc.)

The above rules do *not*, however, affect the rights of transferee for consideration without notice.

When the gift is revoked owing to the causes mentioned in S. 126 the donee ceases to have any interest in the property. But, if before revocation, *the donee has transferred the property to a third party*, who takes it for consideration and without notice, the donor *cannot* exercise his power of revocation given to him by S. 126 to the prejudice of such third person.

Undue influence is a common ground for revocation, *e.g.*, a gift by a child to a parent, by a *cestui que trust* to a trustee, by a patient to his doctor or by a client to his solicitor. *Hardy, L. J.* once said that "the only competent independent advice that should be given to a man who proposes to make a gift to his solicitor is to tell him not to do so:"

INCOMPLETE GIFT -The rule that a gift cannot be revoked except according to the provisions of Sec. 126 does not apply to an incomplete gift. Such a gift can be revoked at any time.

A *donatio mortis causa* of movable property is by virtue of S. 129 of the ' Act, revocable at the will of the donor.

Saving of donatio mortis causa and Muhammadan law (S. 129)

S. 129 of the Act provides that nothing in the chapter (relating to gifts)

- (i) relates to gifts of movable property made in contemplation of death (i.e. *donatio mortis causa*); or
- (ii) shall be deemed to affect any rule of Mohamadan law.

S. 129 exempts gifts of *movable* property made in contemplation of death from the operation of all the foregoing provisions relating to gifts. Such gifts are governed by S. 191 of the Indian Succession Act, 1925, as they are treated as being in the nature of gifts by will. But, a similar gift of *immovable* property must be made according to the provisions of this Act.

GIFTS BY MUHAMMADAN -S. 129 also exempts gifts made by Muhammadan from the operation of these provisions in so far as they are consistent with the principles of Mahomedan law. Under Muhammadan Law, a gift of an immovable property may be made orally by simple delivery of possession. Similarly, the rules regarding revocation of a gift are entirely different from those enacted in S. 126. In these cases, therefore, none of the relevant provisions of the Act will apply.

But in so far as the rules under this Act are founded upon equity and reason, and do not *conflict* with any rule of that law, they will be applied. Accordingly, S. 128 about onerous gifts, being an embodiment of a rule of equity, has been *held* to apply to Mahomedan gifts.

GIFTS BY HINDUS-Formerly, no portion of the Transfer of Property Act, relating to gifts, except S. 123, affected the Hindu law of gifts. But by the Amending Act of 1929, the *whole* of the Transfer of Property Act was made applicable to Hindus. Therefore, today, gifts by Hindus *will be* governed by the provisions of this Chapter.

UNIT – VII

Laws relating to Inheritance and Succession

Mohmedan – Personal Law,

Hindu Succession Act, 1956, the Hindu Succession (Amendment) Act, 2005. (39 of 2005),

Indian Succession Act, 1925, Law of succession for persons other than Hindu and Mohmedan

Will & testament; succession certificate

INTRODUCTION

There are various modes of acquiring rights and interests in the immovable property. One of the modes is succession. Study of law of succession will be helpful to the valuers for determining share of a person in property devolves on him or her by testamentary or non-testamentary succession. In India, law of succession is different for Hindus, Mohammedan, Parsis and Christians. Succession in case of Hindus is governed by Hindu Succession Act, that of Christian by Indian Succession Act. Mohammedans and Parsis are governed by the personal law. Testamentary succession is governed by the Indian Succession Act.

STRUCTURE OF THE UNIT

- 1.1** Objectives
- 1.2** Hindu Succession Act, 1956
 - 1.2.1** Application of Act (s.2)
 - 1.2.2** Definitions and interpretations (s.3)
 - 1.2.3** Overriding effect of Act (s.4)
 - 1.2.4** Intestate Succession
 - 1.2.5** Testamentary succession (s.30)
- 1.3** Mohammedan Law
 - 1.3.1** Sunni Sub-schools
 - 1.3.2** Inheritance (Non-testamentary succession)
 - 1.3.3** Exclusion from Inheritance
 - 1.3.4** Physical or mental defects and unchastity no bar to inheritance.
 - 1.3.5** Hanafi Law of Inheritance
 - 1.3.6** Miscellaneous Topics

1.1 OBJECTIVES

By the end of this chapter student will learn about –

- Hindu Law of succession
- Mohammedan law of succession

1.2 HINDU SUCCESSION ACT, 1956

It extends to the whole of India except the State of Jammu and Kashmir.

1.2.1 Application of Act (s.2)

1. This Act applies -

- (a) to any person, who is a Hindu by religion in any of its forms or developments, including a Virashaiva, a Lingayat or a follower of the Brahmo, Prarthana or Arya Samaj;
- (b) to any person who is a Buddhist, Jaina or Sikh by religion; and
- (c) to any other person who is not a Muslim, Christian, Parsi or Jew by religion unless it is proved that any such person would not have been governed by the Hindu law or by any custom or usage as part of that law in respect of any of the matters dealt with herein if this Act has not been passed.

Explanation - The following persons are Hindus, Buddhists, Jainas or Sikhs by religion, as the case may be:

- (a) any child, legitimate or illegitimate, both of whose parents are Hindus, Buddhists, Jainas or Sikhs by religion;
- (b) any child, legitimate or illegitimate, one of whose parents is a Hindu, Buddhist, Jaina or Sikh by religion and who is brought up as a member of the tribe, community, group or family to which such parent belongs or belonged;

- (c) any person who is a convert or reconvert to the Hindu, Buddhist, Jaina or Sikh religion.
- 2. Notwithstanding anything contained in sub-section (1), nothing contained in this Act shall apply to the members of any Scheduled Tribe within the meaning of Cl. (25) of Art. 366 of the Constitution unless the Central Government, by notification in the Official Gazette, otherwise directs.
- 3. The expression "Hindu" in any portion of this Act shall be construed as if it included a person who, though not a Hindu by religion is, nevertheless, a person to whom this Act applies by virtue of the provisions contained in this section.

1.2.2 Definitions and interpretations (s.3)

- 1. In this Act, unless the context otherwise requires-
 - (a) **"agnate"**-- one person is said to be an "agnate" of another if the two are related by blood or adoption wholly through males;
 - (b) **"aliyasantana law"** means the system of law applicable to persons who, if this Act had not been passed, would have been governed by the Madras Aliyasantana Act, 1949 (Madras Act 9 of 1949) or by the customary Aliyasantana law with respect to the matters for which provision is made in this Act;
 - (c) **"cognate"**-- one person is said to be a "cognate" of another if the two are related by blood or adoption but not wholly through males;
 - (d) **the expressions "custom" and "usage"** signify any rule which having been continuously and uniformly observed for a long time, has obtained the force of law among Hindus in any local area, tribe, community, group or family:

Provided that the rule is certain and not unreasonable or opposed to public policy; and

Provided further that in the case of a rule applicable only to a family it has not been discontinued by the family;

(e) **"full blood", "half blood" and "uterine blood"-**

- (i) two persons are said to be related to each other by full blood when they are descended from a common ancestor, by the same wife, and by half blood when they are descended from a common ancestor but by different wives;
- (ii) two persons are said to be related to each other by uterine blood when they are descended from a common ancestress but by different husbands.

Explanation-In this clause "ancestor" includes the father and "ancestress" the mother;

(f) **"heir"** means any person, male or female, who is entitled to succeed to the property of an intestate under this Act;

(g) **"intestate"**- a person is deemed to die intestate in respect of property of which he or she has not made a testamentary disposition capable of taken effect;

(h) **"marumakkattayam law"** means the system of law applicable to persons --

- (a) who, if this Act had not been passed, would have been governed by the Madras Marumakkattayam Act, 1932 (Madras Act XXII of 1933), the Travancore Nayar Act (II of 1100); the Travancore Ezhava Act (III of 1100); the Travancore NanjinadVellala Act (VI of 1101); the Travancore Kshatriya Act (VII of 1108); the Travancore Krishnanvaka Marumakkathayee Act (VII of 1115); the Cochin Marumakkathayam Act (XXXIII of 1113); or the Cochin Nayar Act (XXIX of 1113), with respect to the matters for which provision is made in this Act; or
- (b) who belong to any community, the members of which are, largely domiciled in the State of Travancore-Cochin or Madras as it existed immediately before the 1st November, 1956 and who, if this Act had not been passed, would have been governed with respect to the matters for which provision is made in this Act by any system of inheritance in which descent is traced through the female line; but does not include the aliyasantana law;

(c) "nambudri law" means the system of law applicable to persons who, if this Act had not been passed, would have been governed by the Madras Nambudri Act 1932 (XXI of 1933), the Cochin Nambudri Act (XVII of 1113); or the Travancore Malayala Brahmin Act (III of 1106), with respect to the matters for which provision is made in this Act;

(d) "related" means related by legitimate kinship :

Provided that illegitimate children shall be deemed to be related to their mother and to one another, and their legitimate descendants shall be deemed to be related to them and to one another; and any word expressing relationship or denoting a relative shall be construed accordingly.

2. In this Act, unless the context otherwise requires, words importing the masculine gender shall not be taken to include females.

1.2.3 Overriding effect of Act (s.4)

1. Save as otherwise expressly provided in this Act -

(a) any text, rule or interpretation of Hindu law or any custom or usage as part of that law in force immediately before the commencement of this Act shall cease to have effect with respect to any matter for which provision is made in this Act;

(b) any other law in force immediately before the commencement of this Act shall cease to apply to Hindus in so far as it is inconsistent with any of the provisions contained in this Act.

2. For the removal of doubts, it is hereby declared that nothing contained in this Act shall be deemed to affect the provisions of any law for the time being in force providing for the prevention of fragmentation of agricultural holdings or for the fixation of ceilings or for the devolution of tenancy rights in respect of such holdings.

1.2.4 Intestate Succession

Act not to apply to certain properties (s.5)

This Act shall not apply to -

- (i) any property succession to which is regulated by the Indian Succession Act, 1925 (39 of 1925), by reason of the provisions contained in Sec.21 of the Special Marriage Act, 1954 (43 of 1954);
- (ii) any estate which descends to a single heir by the terms of any covenant or agreement entered into by the Ruler of any Indian State with the Government of India or by the terms of any enactment passed before the commencement of this Act;
- (iii) The ValiammaThampuranKovilagam Estate and the Palace Fund administered by the Palace Administration Board by reason of the power conferred by Proclamation (IX of 1124), dated 29th June 1949 promulgated by the Maharaja of Cochin.

Devolution of interest in coparcenary property (s.6)

When a male Hindu dies after the commencement of this Act, having at the time of his death an interest in a Mitakshara coparcenary property, his interest in the property shall devolve by survivorship upon the surviving members of the coparcenary and not in accordance with this Act.

Provided that, if the deceased had left him surviving a female relative specified in Class I of the Schedule or a male relative specified in that class who claims through such female relative, the interest of the deceased in the Mitakshara coparcenary property shall devolve by testamentary or intestate succession, as the case may be, under this Act and not by survivorship.

Explanation 1

For the purposes of this section, the interest of a Hindu Mitakshara coparcener shall be deemed to be the share in the property that would have been allotted to him if a partition of the property had taken place immediately before his death, irrespective of

whether he was entitled to claim partition or not.

Explanation 2

Nothing contained in the proviso to this section shall be construed as enabling a person who has separated himself from the coparcenary before the death of the deceased or any of his heirs to claim on intestacy a share in the interest referred to therein.

Devolution of interest in the property of a tarwad, tavazhi, kutumba, kavaru or illom (s.7)

1. When a Hindu to whom the marumakkattayam or nambudri law would have applied if this Act had not been passed dies after the commencement of this Act, having at the time of his or her death an interest in the property of a tarwad, tavazhi or illom, as the case may be, his or her interest in the property shall devolve by testamentary or intestate succession, as the case may be, under this Act and not according to the marumakkattayam or nambudri law.

Explanation - For the purposes of this sub-section, the interest of a Hindu in the property of a tarwad, tavazhi or illom shall be deemed to be the share in the property of the tarwad, tavazhi or illom, as the case may be, that would have fallen to him or her if a partition of that property per capita had been made immediately before his or her death among all the members of the tarwad, tavazhi or illom, as the case may be, then living, whether he or she was entitled to claim such partition or not under the marumakkattayam or nambudri law applicable to him or her, and such share shall be deemed to have been allotted to him or her absolutely.

2. When a Hindu to whom the aliyasantana law would have applied if this Act had not been passed dies after the commencement of this Act, having at the time of his or her death an undivided interest in the property of a kutumba or kavaru, as the case may be, his or her interest in the property shall devolve by testamentary or intestate succession, as the case may be, under this Act and not according to the aliyasantana law.

Explanation - For the purposes of this sub-section, the interest of a Hindu in the property of a kutumba or kavaru, shall be deemed to be the share in the

property of the kutumba or kavaru, as the case may be, that would have fallen to him or her if a partition of that property per capita had been made immediately before his or her death among all the members of the kutumba or kavaru, as the case may be, then living, whether he or she was entitled to claim such portion or not under the aliyasantana law, and such share shall be deemed to have been allotted to him or her absolutely.

3. Notwithstanding anything contained in sub-section (1) when a sthanamdar dies after the commencement of this act, the sthanam property held by him shall devolve upon the members of the family to which the sthanamdar belonged and the heirs of the sthanamdar as if the sthanam property had been divided per capita immediately before the death of the sthanamdar among himself and all the members of his family then living, and the shares falling to the members of his family and the heirs of the sthanamdar shall be held by them as their separate property.

Explanation - For the purposes of this sub-section, the family of a sthanamdar shall include every branch of that family, whether divided or undivided, the male members of which would have been entitled by any custom or usage to succeed to the position of sthanamdar if this Act had not been passed.

General rules of succession in the case of males (s.8)

The property of a male Hindu dying intestate shall devolve according to the provisions of this Chapter-

- (a) firstly, upon the heirs, being the relatives specified in Class I of the Schedule;
- (b) secondly, if there is no heir of class I, then upon the heirs, being the relatives specified in Class II of the Schedule ;
- (c) thirdly, if there is no heir of any of the two classes, then upon the agnates of the deceased; and
- (d) lastly, if there is no agnate, then upon the cognates of the deceased.

THE SCHEDULE (See.Sec.8): Heirs in Class I and Class II

Class I

Son; daughter; widow; mother; son of a pre-deceased son; daughter of a pre-deceased

son; son of a pre-deceased daughter; daughter of a pre-deceased daughter; widow of a pre-deceased son; son of a pre-deceased son of a predeceased son; daughter of a pre-deceased son of a predeceased son; widow of a pre-deceased son of a predeceased son.

Class II

I Father

II (1) Son's daughter's son,
(2) son's daughter's daughter,
(3) brother,
(4) sister.

III (1) Daughter's son's son,
(2) daughter's son's daughter,
(3) daughter's daughter's son,
(4) daughter's daughter's daughter.

IV (1) Brother's son,
(2) sister's son,
(3) brother's daughter,
(4) sister's daughter.

V Father's father; father's mother.

VI Father's widow; brother's widow.

VII Father's brother; father's sister.

VIII Mother's father; mother's mother

IX Mother's brother; mother's sister.

Explanation- In this Schedule references to a brother or sister do not include reference to a brother or sister by uterine blood.

Order of succession among heirs in the Schedule (s.9)

Among the heirs specified in the Schedule, those in Class I shall take simultaneously and to the exclusion of all other heirs; those in the first entry in Class II shall be preferred to those in the second entry; those in the second entry shall be preferred to those in the third entry; and so on in succession.

Distribution of property among heirs in Class I of the Schedule (s.10)

The property of an intestate shall be divided among the heirs in Class I of the Schedule in accordance with the following rules:

- Rule 1.** The intestate's widow, or if there are more widows than one, all the widows together, shall take one share.
- Rule 2.** The surviving sons and daughters and the mother of the intestate shall each take one share.
- Rule 3.** The heirs in the branch of each pre-deceased son or each pre-deceased daughter of the intestate shall take between them one share.
- Rule 4.** The distribution of the share referred to in rule 3--(i) among the heirs in the branch of the pre-deceased son shall be so made that his widow (or widows together) and the surviving sons and daughters get equal portions; and the branch of his pre-deceased sons get same portion;

Distribution of property among heirs in Class II of the Schedule (s.11)

The property of an intestate shall be divided between the heirs specified in any one entry in Class II of the Schedule so that they share equally.

Order of succession among agnates and cognates (s.12)

The order of succession among agnates or cognates, as the case may be, shall be determined in accordance with the rules of preference laid down hereunder:

- Rule 1.** Of two heirs, the one who has fewer or no degrees of ascent is preferred.
- Rule 2.** Where the number of degrees of ascent is the same or none, that heir is preferred who has fewer or no degrees of descent.

Rule 3. Where neither heir is entitled to be preferred to the other under rule 1 or rule 2 they take simultaneously.

Computation of degrees (s.13)

1. For the purposes of determining the order of succession among agnates or cognates, relationship shall be reckoned from the intestate to the heir in terms of degrees of ascent or degrees of descent or both, as the case may be.
2. Degrees of ascent and degrees of descent shall be computed inclusive of the intestate.
3. Every generation constitutes a degree either ascending or descending.

Property of a female Hindu to be her absolute property (s.14)

1. Any property possessed by a female Hindu, whether acquired before or after the commencement of this Act, shall be held by her as full owner thereof and not as a limited owner.

Explanation- In this sub-section, "property" includes both moveable and immoveable property acquired by a female Hindu by inheritance or devise, or at a partition, or in lieu of maintenance or arrears of maintenance or by gift from any person, whether a relative or not, before, at or after her marriage, or by her own skill or exertion, or by purchase or by prescription, or in any other manner whatsoever, and also any such property held by her as stridhana immediately before the commencement of this Act.

- (2) Nothing contained in sub-section (1) shall apply to any property acquired by way of gift or under a will or any other instrument or under a decree or order of a Civil Court or under an award where the terms of the gift, will or other instrument or the decree, order or award prescribe a restricted estate in such property.

General rules of succession in the case of female Hindus (s.15)

- (1) The property of a female Hindu dying intestate shall devolve according to the rules set out in Sec. 16-

- (a) firstly, upon the sons and daughters (including the children of any pre-deceased son or daughter) and the husband;
 - (b) secondly, upon the heirs of the husband;
 - (c) thirdly, upon the mother and father;
 - (d) fourthly, upon the heirs of the father; and
 - (e) lastly, upon the heirs of the mother,
- (2) Notwithstanding anything contained in sub-section (1)-
- (a) any property inherited by a female Hindu from her father or mother shall devolve, in the absence of any son or daughter of the deceased (including the children of any pre-deceased son or daughter) not upon the other heirs referred to in sub-section (1) in the order specified therein, but upon the heirs of the father; and
 - (b) any property inherited by a female Hindu from her husband or from her father-in-law shall devolve, in the absence of any son or daughter of the deceased (including the children or any pre-deceased son or daughter) not upon the other heirs referred to in sub-section (1) in the order specified therein, but upon the heirs of the husband.

Order of succession and manner of distribution among heirs of a female Hindu (s.16)

The order of succession among the heirs referred to in Sec.15, shall be and the distribution of the intestate's property among those heirs shall take place according to the following rules, namely:

- Rule 1.** Among the heirs specified in sub-section (1) of Sec.15, those in one entry shall be preferred to those in any succeeding entry and those including in the same entry shall take simultaneously.
- Rule 2.** If any son or daughter of the intestate had pre-deceased the intestate leaving his or her own children alive at the time of the intestate's death, the children of such son or daughter shall take between them the share which such son or daughter would have taken if living at the intestate's death.
- Rule 3.** The devolution of the property of the intestate on the heirs referred to in Cls. (b), (d) and (e) of sub-section (1) and sub-section (2) of Sec.15 shall be in the same order and according to the same rules as

would have applied if the property had been the father's or the mother's or the husband's, as the case may be, and such person had died intestate in respect thereof immediately after the intestate's death.

Special provisions respecting persons governed by "marumakkattayam and aliya santana" laws. (s.17)

The provisions of Secs.8, 10, 15 and 23 shall have effect in relation to persons who would have been governed by marumakkattayam law or aliya santana law if this Act had not been passed as if -

- (i) for sub-clauses (c) and (d) of Sec.8, the following had been substituted, namely:
"(c) thirdly, if there is no heir of any of the two classes, then upon his relatives whether agnates or cognates."
- (ii) for Cls. (a) to (e) of sub-section (1) of Sec.15, the following had been substituted, namely:
 - (a) "firstly, upon the sons and daughters (including the children of any pre-deceased son or daughter) and the mother;
 - (b) secondly, upon the father and the husband;
 - (c) thirdly, upon the heirs of the mother;
 - (d) fourthly, upon the heirs of the father; and
 - (e) lastly, upon the heirs of the husband".
- (iii) Cl. (a) of sub-section (2) of Sec. 15 had been omitted;
- (iv) Section 23 had been omitted.

Full blood preferred to half blood (s.18)

Heirs related to an intestate by full blood shall be preferred to heirs related by half blood, if the nature of the relationship is the same in every other respect.

Mode of succession of two or more heirs (s.19)

If two or more heirs succeed together to the property of an intestate, they shall take the property -

- (a) save as otherwise expressly provided in this Act, per capita and not per stripes; and
- (b) as tenants-in-common and not as joint tenants.

Right of child in womb (s.20)

A child who was in the womb at the time of the death of an intestate and who is subsequently born alive shall have the same right to inherit to the intestate as if he or she had been born, before the death of the intestate, and the inheritance shall be deemed to vest in such a case with effect from the date of the death of the intestate.

Presumption in cases of simultaneous deaths (s.21)

Where two persons have died in circumstances rendering it uncertain whether either of them, and if so which, survived the other, then, for all purposes affecting succession to property it shall be presumed, until the contrary is proved, that the younger survived the elder.

Preferential right to acquire property in certain cases (s.22)

1. Where after the commencement of this Act, an interest in any immoveable property of an intestate, or in any business carried on by him or her, whether solely or in conjunction with others, devolves upon two or more heirs specified in class I of the Schedule, and any one of such heirs proposes to transfer his or her interest in the property or business, the other heirs shall have a preferential right to acquire the interest proposed to be transferred.
2. The consideration for which any interest in the property of the deceased may be transferred under this section shall, in the absence of any agreement between the parties, be determined by the Court on application being made to it in this behalf, and if any person proposing to acquire the interest is not willing to acquire it for the consideration so determined, such person shall be liable to pay all costs of or incident to the application.
3. If there are two or more heirs specified in class I of the Schedule proposing to acquire any interest under this section, that heir who offers the highest consideration for the transfer shall be preferred.

Explanation- In this section "Court" means the Court within the limits of whose jurisdiction the immoveable property is situate or the business is carried on, and includes any other Court which the State Government may, by notification in the Official Gazette, specify in this behalf.

Special provision respecting dwelling-houses (s.23)

Where a Hindu intestate has left surviving him or her both male and female heirs specified in class I of the Schedule and his or her property includes a dwelling-house wholly occupied by members of his or her family, then, notwithstanding anything contained in this Act, the right of any such female heir to claim partition of the dwelling-house shall not arise until the male heirs choose to divide their respective shares therein; but the female heir shall be entitled to a right of residence therein:

Provided that where such female heir is a daughter, she shall be entitled to a right of residence in the dwelling-house only if she is unmarried or has been deserted by or has separated from her husband or is a widow.

Certain widows re-marrying may not inherit as widows (s.24)

Any heir who is related to an intestate as the widow of a pre-deceased son, the widow of a pre-deceased son of a pre-deceased son or the widow of a brother shall not be entitled to succeed to the property of the intestate as such widow, if on the date the succession opens, she has re-married.

Murderer disqualified (s.25)

A person who commits murder or abets the commission of murder shall be disqualified from inheriting the property of the person murdered, or any other property in furtherance of the succession to which he or she committed or abetted the commission of the murder.

Convert's descendants disqualified (s.26)

Where, before or after the commencement of this Act, a Hindu has ceased or ceases to be a Hindu by conversion to another religion, children born to him or her after such

conversion and their descendants shall be disqualified from inheriting the property of any of their Hindu relatives, unless such children or descendants are Hindus at the time when the succession opens.

Succession when heir disqualified (s.27)

If any person is disqualified from inheriting any property under this Act, it shall devolve as if such person had died before the intestate.

Disease, defect, etc. not to disqualify (s.28)

No person shall be disqualified from succeeding to any property on the ground of any disease, defect or deformity, or save as provided in this Act, on any other ground whatsoever.

Escheat - Failure of heirs (s.29)

If an intestate has left no heir qualified to succeed to his or her property in accordance with the provisions of this act, such property shall devolve on the Government; and the Government shall take the property subject to all the obligations and liabilities to which an heir would have been subject.

1.2.5 Testamentary succession (s.30)

Any Hindu may dispose of by will or other testamentary disposition any property, which is capable of being so disposed of by him, in accordance with the provisions of the Indian Succession Act, 1925 (39 of 1925), or any other law for the time being in force and applicable to Hindus.

Explanation -The interest of a male Hindu in a Mitakshara coparcenary property or the interest of a member of a tarvad, tavazhi, illom, kutumba or kavaru in the property of the tarvad, tavazhi, illom, kutumba or kavaru shall, notwithstanding anything contained in this Act or in any other law for the time being in force, be deemed to be property capable of being disposed of by him or by her within the meaning of this section.

1.3 MOHAMMEDAN LAW

1.3.1 Sunni Sub-schools

There are *Four* sub-schools in *Sunni Laws*, as follows :

1. **The Hanafi School**, named after its founder, Imam Abu Hanifa (A.H. 80 – 150). – The majority of *Sunnis* in India are followers of this school. This school placed great reliance on the principles of “*qiyas*” (or analogical deductions). Imam Abu Hanifa leaned heavily on *qiyas* because the doctrine of *hadith* had not fully developed in his time. The two celebrated authoritative texts of this school are the *Fatava Alamgiri* and the *Hidaya*.
2. **The Maliki School**, whose founder was Imam Malik Ibn Anas (A.H. 95 - 175). – This school does not differ materially from the Hanafi School. Imam Malik, however, placed greater reliance on systematic reasoning.
3. **The Shaafi School**, founded by Imam Shaafi (A.H. 150 – 204), who perfected the doctrine of “*ijma*” (or consensus of the learned).
4. **The Hanbali School**, whose founder was Imam Hanbal (A.H. 164 – 241), who advocated the principle of adhering to the *hadith* literally. (It is believed that the followers of Imam Hanbal are almost extinct today).

Though these schools differ in detail, their doctrines are essentially the same as regards the fundamentals.

Presumption:

Unless the contrary is shown, it is to be presumed that parties to a suit or proceeding are Sunnis of the *Hanafi School*.

The Calcutta High Court has observed that in India “there is a presumption that the parties are Sunnis, to which a great majority of the (Mahommedans of this country belong)”. (*Bafatun v BilaitiKhanun*, (1903) 30 Cal. 683).

***Istihsanor* juristic equity**

It may happen that the law which is analogically deduced (*qiyas*), might fail to recommend itself to the jurists owing to its inadaptability to meet the new habits and the usages of the people, or on account of its being likely to cause hardship and inconvenience. Abu Hanifa, a great jurist, therefore, adopted as a corrective "*istihsan*", which literally means "approbation" and has been translated as "liberal construction" or "juristic preference". This term was used by *Tyabjee*, the great jurist, to express the liberty which he assumed of laying down such a rule of law as would meet with the exigencies of a particular case, rather than the rule that as analogy might indicate.

Shia Sub-schools:

Among the Shias, different schools arose as the result of dynastic troubles, and of disputes as to the rightful Imam.

The Shias are divided into the following *three* sub-schools:

1. The **Ithna – Asharis**. – They follow the "Ithna-Ashari" law. The great majority of the Shias in India follow this system of law. Their important text is 'Shara'yal-ul-Islam'.
2. The **Ismaili** -The Khojas and Bohras of Bombay belong to this school.
3. **Zaidys** (They do not exist in India, and are to be found mostly in South Arabia.)

The difference between Shia sub-school is not so much in the interpretation of law as in doctrinal points

Presumptions :

As most Shias are Ithna-Asharis, the presumption is that a Shia is governed by the Ithna-Ashari exposition of the law. (*Akbarally v. Mohomedally (1932) 34 Bom. L.R. 655*).

Choice of Schools :

Every adult Muhammadan may choose any school he or she likes, and may renounce

one school in favour of another. (*Hayat-un-Nissa v. Muhammad*, 17 I.A. 73). Moreover, a Sunni woman contracting a marriage with a Shia does not thereby become subject to Shia Law. (*Nasart vHamidan*, I.L.R. (1882) 4 All. 20).

Applicability of law of different schools :

The position regarding applicability of the law of the different schools of Muhammadan law may be summed up as follows :

- (a) When the parties to a suit are Muslims of the same school, the law of that school will apply.
- (b) If they do not belong to the same school, the law of the defendant will apply.
- (c) If a Muslim, in good faith, changes his school of law in Islam, his personal law ordinarily *changes with immediate effect*.
- (d) When a person who has changed his school of law in Islam dies, the law of succession applicable to his estate will be the law of school which he professed *at the time of his death*.

It is interesting to note that in *Abul Fata vRussamoy*, (1894) 22 I.A. 76, the Privy Council, in holding that family *wakfs* were void, had apparently misunderstood an important point of the Muhammadan law of *wakf*, and applied a rule of English law to institution of *wakf*, overruling a long list of Muslim jurists in the process. However, as the learned author, *Fyzee*, rightly remarks, poetic justice was done when the Privy Council itself was overruled by an Act of Indian legislature (viz., the MussalmanWakf (Validating) Act, 1913).

1.3.2 Inheritance (Non-testamentary succession)

General Principles

1. Which law prevails?

The property of a deceased Muslim is to be distributed according to the law of the school to which *he* belonged at the time of his *death*. The law of the school to which the *heirs* belongs is *immaterial*.

2. What property is heritable?

The estate that remains after the payment of the charge, viz., funeral expenses, debts and legacies, out of the property of the deceased is heritable property; it includes both moveable and immovable property.

As Muhammadan law *does not* recognise the joint family system, no distinction is made between ancestral and self-acquired property. *All* property that remain after deduction of the above charges is heritable property. There is only one mode of devolution, namely, by way of inheritance.

3. Joint family system *not* recognised.

The law does not recognise a Muslim joint family as a legal entity. When the members of a Muslim family live in commensality, they do *not* form a joint family in the sense in which the term is used in Hindu Law. Again, if these members carry on business jointly and make acquisitions, they do *not* constitute a joint family firm, in the sense in which that term is used in Hindu Law, so as to attract the legal incidents of such a firm. The rights of such members and those of their heirs are to be determined with reference to express or implied agreement, if any, e.g., relationship of principal and agent, partnership, constructive trust, and the like.

Under the Muhammadan law, the sons do *not*, by birth, acquire, during the life-time of the father, any interest in the property belonging to the father. Hence, where it is not proved that a Muslim father and sons entered into a contract of partnership, the sons do *not*, by their birth, become partners with father, the partnership property remains exclusively of the father, and the sons *cannot* be sued with regard to transactions for which the father alone is responsible : *Tarachand v. Mohideen*, (1935) 37 Bom. L.R. 654.

4. No rule of primogeniture.

Sunni law – There is no rule of primogeniture, that is a man leaves several sons, the eldest son gets and advantage over the rest.

Shia law – Under the Shia law, *Habua*, i.e., the deceased father's wearing apparel, the Quran, ring and sword become the property of the eldest son.

5. Right of heir presumptive, a mere *spessuccessionis*

Under Muslim law, a son or any other heir does *not* acquire any interest in the property of a person by mere birth. The right of an heir presumptive comes into existence for the first time only on the death of the *propositus*. During the life time of *propositus*, his heirs presumptive have no transferable interest in his property. All that the heirs have is a mere chance of inheriting to the estate in case they survive the *propositus*, that is a mere *spessuccessionis*. Such as expectancy, therefore, *cannot* be the subject of a valid transfer.

Cases

1. *Hasan Ali v. Nazo*, (1889) I.L.R. 11 All. 456. – A, who has a son, B makes a gift of his property to C. B, alleging that the gift was procured by undue influence, sues C in A's life-time on the strength of his right to succeed to A's property on A's death.

The court *held*, dismissing B's suit, on the ground that the nature of right claimed by B was only *spessuccessionis*, and that he had no cause of action till A died.

2. *Sumsuddin v. Abdul Hussein*, (1906) I.L.R. 31 Bom. 165. – A, a hanafi male, marries B, a Shia female. Some time after the marriage, A gives one of his immovable properties to B in lieu of her dower, and agrees not to claim any shares of it as her heir on her death. B dies leaving A and her father C. C sues A to recover possession of the said property, alleging that A had agreed not to claim any share thereof on B's death.

The relinquishment of a contingent right of inheritance by a Muslim heir is generally void in Muhammadan Law. *Abdul Kafoor v. AbdulRazak*, (1958) II

M.L.J. 492. It was, therefore, *held*, dismissing *C's* suit, that the relinquishment by an heir apparent of his right of inheritance being merely a *spessuccessionis*.

3. A has a son B and a daughter C. A pays Rs.1,000/- to C and obtains from her a writing whereby in consideration of Rs.1,000/- received by her from A, she renounces her right to inherit A's property. A then dies, and C sues B for her share (one-third) of the property left by A. B sets up in defence the release passed by C to her father. Discuss whether C is entitled to her share in her father's estate.

Here, the release is no defence to the suit, and C is entitled to her share of the inheritance, as the transfer by her was merely a transfer of a *spessuccessionis*, and hence inoperative. But C is bound to bring into account the amount the amount received by her father :*Samsuddin v. Abdul Hussein*, (1906) I.L.R. 31 Bom. 165.

6. **Vested inheritance.**

The inheritance of a Muslim vests at his death by a specific title in each individual heir, although it may not be possible to determine exactly what property shall fall to each heir, until all the prior charges, viz., funeral expenses, debts and legacies, have been paid; succession is never allowed to be in abeyance. A "vested inheritance," therefore, is the share which vests in an heir at the moment of the death of the deceased whose property is claimed. If any of the heirs dies before distribution, the share of the inheritance which has already vested in him will pass to his or her heirs.

7. **No 'principle of representation' in Sunni law**

The *principle of representation* has no place in the Sunni law of inheritance. In other words, the expectant right of an heir presumptive does not pass to his heirs. On the death of the heir presumptive in the life time of the *propositus*, the heirs of such an heir presumptive have no right to claim his share in the property of the *propositus*, as representing the heir.

Thus, A, a Muslim has two sons, B and C. B dies in the life-time of A, leaving a son, X. Then, A dies, leaving C, his son, and X, his grand-son. Following the above rule, the whole property of A passes to C to the total exclusion of X. In

other words, it is not open to *X* to argue that he is entitled to *B*'s share as representing *B*. Thus, the son of a predeceased son is not an heir under Muhammadan law, when deceased leaves other sons behind him (*Moola Cassim v. Moola Abdul*, (1905) 33 Cal. 173).

In *Moola Cassim's case* (above), the Privy Council observed as follows:

“It is well known principle of Mahomedan law that if any of the children of a man die before the opening of the succession to his estate, leaving children behind, these grand-children are entirely excluded from inheritance by their uncles and aunts.”

Thus, the rule which is followed is the Islamic law of inheritance is that the nearer heir excludes the more remote and there is no “representation”. In the above case, *X* is entirely excluded by *C*, and *C* thus becomes the sole heir.

It has been pointed out by various authors that the refusal of Muhammadan law to recognise the doctrine of representation creates a *lot of hardship*. As observed by *Macnaghten* “It certainly seems to be a harsh rule, and is at variance with the English, Roman and Hindu laws.” Whatever purpose the rule may have served in the past, it is no longer considered to be just and equitable by most Muslim thinkers. It is, therefore, heartending to see that *the rule has been abolished in Pakistan*, and the doctrine of representation is now accepted in that country.

Shia Law

Subject to the application of the general rule that the nearer in degree excludes the more remote, in each class of heirs, the cardinal principle underlying the Shia law of inheritance is the principle of representation. Thus, if there are no sons or daughters, grand-children step in according to the principle of representation in the following manner:

- (i) the children of a deceased daughter take among them the share that their mother would have taken;
- (ii) the daughter of a deceased son shares with other children of that deceased son, the share which would have been assigned to the latter; and

- (iii) where there are sons, or sons and daughters of different sons, the distribution is according to the stocks and not according to individuals. The children of each son have the exclusive right to what their father would have taken.

The principle of representation is recognised in the Shia law of inheritance only in the sense that the succession is always *per stirpes*, and not *per capita*. Hence, the descendants of a deceased son represent the son and take the share which he would have taken, if he were living at the time when the inheritance opens. Similarly, the descendants of a deceased daughter represent the daughter, and take the share which she would have taken, if she were living at the time when the inheritance opens.

Since the principle of representation has no place in Sunni law, succession among grand-children will be *per capita*, and *not per stirpes*, as under Hindu law. Thus, if a Sunni Muslim dies leaving two grandsons through one predeceased son, and three grandsons from another predeceased son, all the five grandsons will receive a fifth of the estate. If the principle of representation was to be applied, the two grandsons from one son, would have divided between themselves the share of their father, that is, half of the estate, and the other half of the estate, would have been distributed equally among the three sons of the other son.

8. Suit by creditor against heir.

If there is no executor or administrator, the creditor can proceed against the heirs of the deceased. Where the estate of the deceased has not been distributed between the heirs, he is entitled to execute the decree against the property as a whole, without regards to the extent of the liability of the heirs *inter se*.

PROBLEM - A Muslim dies leaving a widow and a daughter. After his death, a creditor of the deceased sues the widow for the recovery of a debt due to him, and a decree is passed in his favour, to be recovered out of the estate of the deceased. In execution of the decree, the right, title and interest of the deceased in a house is sold and is purchased by P. The daughter, who was not a party to the suit, subsequently sues P to recover by partition her share in the house. Will she succeed?

ANS - In these circumstances, the daughter not being a party to the creditor's suit, is not bound by the decree passed in the suit, and she is entitled to recover her share in the house: *Bhagirthibaiv. Roshanbi*, (1919) I.L.R. 43 Bom. 412, 51 I.C. 18.

9. Life-estate and vested remainder.

An interesting question arises as to whether life-estates and vested remainders are recognised by Islamic law. In *Humeedav. Budlun* (1872 17 W.R. 525), the Privy Council observed that "the creation of a life-estate does not seem to be consistent with Mahomedan usage, and there ought to be very clear proof of so unusual a transaction".

A difficulty on this point arises, out of the Muhammadan laws of gifts. As seen, if a gift is made subject to a condition which derogates from the grant, the condition is void. However, a condition which does not effect the *corpus* of the thing which is gifted is *not* within the rule, as for instance, when there is a reservation of the income for the donor of the gift for life operates as an absolute gift.

The assumption underlying this doctrine is that what is given is the corporeal thing itself; as the refusal to permit gifts of life-interest give rise to serious inconvenience, this assumption has often been challenged. Thus, it has been argued that can it not be said that what is given is, for instance, *not the land, but the interest in the land*, and that is given absolutely and unconditionally, there being no intention to make a gift of the corpus itself.

In *Nawazish Ali Khan v. Ali Raza Khan* (1948 75 I.A. 62), the Privy Council observed that *there was no difference between the several schools of Muslim law in their fundamental conception of property and ownership*. A limited interest takes effect out of the usufruct under any of the schools. The Privy Council remarked that it would be the duty of the court to construe the gift in each case, and observed : "If it is a gift of the corpus, then, any condition which derogates from absolute dominion over the subject of the gift will be rejected as repugnant; but if upon construction, the gift is held to be one of a limited interest, the gift can take effect out the usufruct, leaving the ownership of the corpus unaffected, except to the extent to which its enjoyment is postponed for the duration of the limited interest."

The same question was raised before the Privy Council in *Amjad Khan v. Ashraf Khan*

(1929 56 I.A. 213). In this case, there was a document which described the transaction as a “a gift without consideration”. The document recited that the donee and the heirs of the donor had given their consent, to the transaction. Under the deed, the donor gave to his wife his entire property, and as to the rest it was stated that “she shall not possess any power of alienation, but she shall remain in possession thereof for her life-time. After the death of the donee, the entire property gifted away by this document shall revert to the donor’s collaterals”. The question to be decided in this case was whether the interest given in one-third of the property was an absolute interest, or whether it was only a life-interest coupled with power to alienate.

On the facts of the case, the Privy Council *held* that it was a life-interest with a power to alienate. Construing the deed, the Court observed that the subject matter of gift was only a life-interest, together with the power of alienation as regards one-third of the property. On this basis, the Court dismissed the appeal of the heir of the donee, stating that the gift of a life-estate was not given the effect of an absolute estate.

The High Courts of Bombay, Calcutta and Nagpur have *held* that the gift of a life-estate is valid. In *Nawazish Ali Khan v. Ali Raza Khan* (referred above), the Privy Council has observed that a life-estate, as known to English law, cannot be created by *hiba*, whether *inter vivos* or by will. In each case, the question is always a question of construction. If there is a gift to A for life, and thereafter to B, the Court will presumably construe the gifts as a gift of the corpus to B absolutely, and of the usufruct to A for life. If however, the gift is *only* to A for life, it would be construed as a gift of life-interest to A, and the corpus would vest in the heirs of B.

In *Abdul Wahid Khan v. Mt. Nuran Bibi* (1885 12 I.A. 91), the Privy Council has *held* that Mahomedan law does *not* seem to recognise an interest which may be called *vested remainder*. This case is now accepted as an authority for the proposition that the remainderman will *not* get anything, unless he survives the person who is given the life-interest.

All the above cases have now to be read subject to the judgment of the Privy Council in *Nawazish Ali Khan’s* case referred to above. The Privy Council, in the course of the judgment in this case, made the following observations which are pertinent.

“In their Lordships’ opinion, this view of the matter introduces into Muslim law, legal terms and conceptions of ownership, familiar enough in English law, but wholly alien to Muslim law. In general, Muslim law draws no distinction between real and personal property, and their Lordships know of no authoritative work on Muslim law....which

affirms that Muslim Law recognises the splitting up of ownership of land into estates, distinguished in point of quality, like legal and equitable estates, or in point of duration, like estate in fee simple, in tail, for life, or in remainder. What Muslim law does recognise and insist upon, is the distinction between the corpus of the property itself (*ayn*) and the usufruct in the property (*manafi*). Over the corpus of property, the law recognizes only absolute dominion – heritable, and unrestricted in point of time; and where a gift of the corpus seeks to impose a condition inconsistent with such absolute dominion, the condition is rejected as repugnant; but interests limited in point of time can be created in the usufruct of the property, and the dominion over the corpus takes effect subject to any such limited interests.”

1.3.3 Exclusion from Inheritance

The following are the disabilities affecting a Muslim in inheriting property :

(1) Slavery, (2) Infidelity or conversion to another religion, (3) Homicide, and (4) Illegitimacy.

1. Slavery

Under the strict Muhammadan law (both Sunni and Shia) even a slave wife could not succeed. But since slavery has been abolished by Act V of 1843, slavery as a ground of disability is only of academic interest.

2. Conversion to another religion.

Infidelity or change of religion (*Kufr*) was a ground of disability affecting a Muslim in inheriting property. Those who were born in a different faith, as well as those who has abjured Islam, were excluded from inheritance. But since the passing of the Freedom of Religion Act (Act XXX of 1850), infidelity has ceased to be impediment. Now, a Muslim does not *lose* his right of inheritance by relinquishing his religion.

3. Homicide

According to Sunni law, a person who causes the death of another either *intentionally, or accidentally* cannot succeed to the latter. *According to Shia law*,

however, homicide, to be an impediment to inheritance, must be *intentional*, and not *accidental*.

PROBLEMS :

1. A, a Shia, dies leaving a son B, a grandson C by B and a brother D. A's death occurred in a motorcar smash while the car was driven by B in a rash and negligent manner. On A's death, D files a suit against B and C claiming the estate of A and contending that B and his branch are excluded from inheritance as B has killed A.

ANS - Here, D must fail. According to Shia law, homicide, to be impediment to succession, must be *intentional*. In the present case, B has caused A's death *accidentally*. B is therefore not excluded from inheritance.

2. A, a Sunni woman, is found guilty of having killed her husband through mistake. Can A succeed to the property of her husband? Will she succeed if she were a Shia?

ANS - Here, A cannot succeed to the property of her *husband*, as according to Sunni law, a person who causes the death of another cannot succeed to the property of that person, although the death have been caused accidentally. However, she would succeed if she were a Shia as the death was not caused intentionally.

4. Illegitimacy

An illegitimate child –

- (i) is *not* entitled to inherit at all, *according to the Shia law*;
- (ii) can inherit from the *mother* and *her* relations in the absence of legitimate issue, but, can, in no case, inherit from the *father* or *his* relations, *according to the Sunni law*.

An illegitimate child –

- (i) is *matrisfilius*, according to the *Sunni law*, and as such, in the absence of a legitimate issue, it inherits from its mother and her relations, and they inherit from the child; it cannot inherit to its putative father or relations on the father's side;
- (ii) is *nullius filius*, according to *Shia law*, and therefore it does *not* inherit even from its mother and her relations; they also cannot inherit from it.

Under Shia law, unlike *Sunni law*, illegitimacy is a bar to succession, both to the father and mother. An illegitimate child is regarded as *nullius filius*, as owing no relationship to either of its parents and, therefore, incapable of inheriting from either.

PROBLEM- A Hanafi Muslim repudiated his wife by three pronouncements in the same breath in these terms, "I divorce you...I divorce you...I divorce you...". The parties afterwards live together, and 5 children are born to them, whom the father acknowledges as legitimate and then dies. What are the rights of such children in the father's estate?

ANS - Here, the children are illegitimate as the repudiation is irrevocable and Islam does not recognise acknowledgement of legitimacy. The children cannot inherit.

1.3.4 Physical or mental defects and unchastity no bar to inheritance.

Physical defects or disease, insanity and unchastity *do not* constitute any impediment to succession in Muslim law. Thus, want of chastity in a daughter, before or after the death of her father, or whether before or after marriage, is no bar to succession. Nor does a widow lose her right to a share in her husband's estate by reason of unchastity in her husband's life-time. She would lose her right only if she is divorced by the husband.

1.3.5 Hanafi Law of Inheritance

DEFINITIONS

Before dealing with the Hanafi law of inheritance, a few terms may be defined as under:

“True grandfather”

A *true grandfather* means a male ancestor between whom and the deceased, no female intervenes. Thus, the father’s father, the father’s father’s father and his father, how highsoever (h.h.s.) are all *true grandfathers*.

“False grandfather”

A *false grandfather* means a male ancestor between whom and the deceased, a female intervenes. Thus, the mother’s father, mother’s mother’s father, mother’s father’s father are all *false grandfathers*.

“True grandmother”

A *true grandmother* means a female ancestor between whom and the deceased, no false grandfather intervenes. Thus, the father’s mother, mother’s mother, father’s mother’s mother, father’s father’s mother, mother’s mother’s mother are all *true grandmothers*.

“False grandmother”

A *false grandmother* means a female ancestor between whom and the deceased, a false grandfather intervenes. Thus, the mother’s father’s mother is a *false grandmother*. [False grandfather and false grandmother belong to the *distant kindred*.]

“Son’s son how lowsoever”

This expression included the son’s son, the son’s son’s son and the son of a son, how lowsoever.

“Son’s daughter how lowsoever”

This expression includes a son’s daughter, the son’s son’s daughter, and the daughter of a son, how lowsoever.

THREE CLASSES OF HEIRS

Under the Hanafi Law, there are three classes of heirs, as follows:

- (i) Sharers (also known as *Quaranic heirs*)
- (ii) Residuries (also known as *Agnatic heirs*)
- (iii) Distant kindred (also known as *Uterine heirs*).

The *sharers* are those who are entitled to a prescribed share of the inheritance; the *residuries* are those who take no prescribed share but succeed to the residue after the claims of the sharers are satisfied; the *distant kindred* are those relations by blood who are neither sharers nor residuries.

Property of the deceased, how to be distributed

The first step in the distribution of the estate of deceased Muslim, after payment of his funeral, debts, and legacies (not exceeding a third of the estate after deducting the former), is to allot their respective shares to such of the relations as belong to the class of the sharers as are entitled to a share. If there are no sharers, the residuries will succeed to the *whole* of the inheritance. If there are neither sharers nor residuries, the inheritance will be divided among such of the distant kindred as are entitled to succeed, as long as there is any heir belonging to the class of sharers or residuries. But *there is one case in which the distant kindred will inherit with a sharer*, and that is where the sharer is the husband or wife of the deceased. Thus, if a husband dies leaving only a wife and distant kindred, the wife as a sharer, will take her share, which is $1/4^{\text{th}}$, and the remaining three-fourths will go to the distant kindred.

General rule of succession

Amongst relations belonging to the same class, the rule of succession is that the nearer relation excludes the more remote. Thus, if the surviving relations be the father, and the father’s father, the father alone will succeed to the *whole* estate, to the entire exclusion of the grandfather, though both of them belong to the same class of sharers.

Similarly, if the surviving relations be a son and a son's son (or the son of a deceased son), the son alone will succeed to the *whole* estate, and the son's son (and also deceased son's son) will *not* be entitled of the inheritance, though both belong to the class of residuaries.

The above *three classes* of heirs and a *fourth class*, viz., *successors unrelated in blood*, to whom the property goes in the absence of all the other three classes of heirs, are discussed below in greater detail.

I. Sharers (Quranic Heirs)

The following is a complete list of sharers:

Husband;Wife;

Ascendents:Father; father's father;

(h.h.s.)Mother>true grandmother;

Descendants:Daughter;son's daughter;(h.l.s.)

Collaterals:Full sister;consanguine sister;

Uterine brother and uterine sister

The shares of each of these heirs are dealt with below:

Husband / Wife -

The share of the *husband* is $1/4^{\text{th}}$ when there is a son or child of a son, h.l.s.; when there is no child or child of a son h.l.s., the husband is entitled to $1/2$ of the estate of the wife.

The share of the *wife* is $1/8^{\text{th}}$ when there is children. (If there are two or more wives, all of them together are entitled only to a $1/8^{\text{th}}$ share of the estate.) When there are no children or a child of a son h.l.s., her share is increased to $1/4^{\text{th}}$.

Ascendants:

Father -

The father inherits as a sharer when there is a child or child of a son, and his share is $1/6$. *But when there is no child or child of a son h.l.s., the father inherits as a residuary.*

When the only relations entitled to inherit are the father and the daughter, the father will inherit *both* as a sharer as a residuary.

True grandfather -

The true grandfather inherits only in the absence of a father, and to the same extent.

Mother -

The mother inherits $1/6^{\text{th}}$ of the estate when (i) there is a child or child of a son h.l.s.; or (ii) when there are two or more brothers or sisters, or even one brother and one sister, whether full, consanguine or uterine. She gets $1/3$, when there is no child or child of a son h.l.s., but if there is also the wife or the husband *and* the father, then she is entitled to only $1/3$ of what remains after deducting the husband's or the wife's estate.

True grandmother -

The true grandmother (and if there is more than one, all of them together) gets $1/6$ of the estate. The material grandmother inherits when there is no mother, and no nearer true grandmother, whether paternal or maternal. The paternal grandmother succeeds only when there is no mother, no father, no nearer true grandmother either paternal or maternal.

Descendants:

Daughter –

The share of the daughter is $1/2$ when there is no son; with the son, she becomes a residuary. Two or more daughters (in the absence of a son or sons) share $2/3$ of the estate.

Son's daughter -

The son's daughter succeeds only when there is no (i) son; (ii) daughter; (iii) Higher son's son; (iv) higher son's daughter or equal son's son; (with the equal son's son, she becomes a residuary).

In the absence of the above relations, the son's daughter's share is $1/2$ if there is only one, and $2/3$, if there are more than one.

But if there is only one daughter and no other sharers, the daughter will inherit $1/2$ and the son's daughter (h.l.s.), whether one or more, will get $1/6$.

Collaterals:

Full sister -

Her share is $\frac{1}{2}$ when only one, and $\frac{2}{3}$ to be divided equally, when more than one; she inherits only when there is no (a) child; (b) child of a son h.l.s.; (c) father; (d) true grandfather; or (e) full brother; with the full brother and, in certain cases, with the daughter, she becomes a residuary. The full sister is *not* a primary heir.

PROBLEM - A Sunni Muslim dies leaving a daughter, a full sister and a brother's son. Who will inherit the estate and how?

ANS - The daughter will get a share as a sharer. The full sister will also get a $\frac{1}{2}$ share as a residuary.

Consanguine sister –

The consanguine sister inherits, in the absence of the full sister, and also in the absence of all relatives mentioned above and the consanguine brother; with the consanguine brother, she becomes a residuary.

Uterine brother and sister –

A uterine brother or sister gets $\frac{1}{6}$ if one, and $\frac{1}{3}$ if more than one. They inherit only in the absence of (a) a child; (b) child of a son h.l.s.; (c) father, or true grandfather.

PROBLEM - A, a Sunni Muslim dies; leaving as his heirs his mother, a full sister, a full brother, and his father. How will A's estate evolve?

ANS- The mother will get $\frac{1}{6}$ (because there is a brother and also a sister); the brother and the sister will be excluded from inheritance by the father, and the father will take $\frac{5}{6}$ as a residuary.

The following *illustrative examples* of heirs left behind by a deceased Mahomedan and the shares they are entitled to (with a brief explanation) may prove useful:

(i)	Father	...	$\frac{1}{6}$ (as <i>sharer</i> , as the deceased has left daughters surviving him)
	Father's father	...	NIL (as he is excluded by the father)
	Mother	...	$\frac{1}{6}$ (because there are daughters also)

	Mother's mother	...	NIL (as she is excluded by the mother)
	Two daughters	...	2/3 (as sharers)
	Son's daughter	...	NIL (as she is excluded by the daughters)
(ii)	Mother	...	1/3 (as sharer)
	Father	...	2/3 (as residuary)
(iii)	Husband	...	1/2 (as sharer)
	Father	...	1/2 (as residuary)
(iv)	Mother	...	1/6 (because there are two sisters)
	Two sisters	...	NIL (as they are excluded by father)
	Father	...	5/6 (as residuary)
(v)	Four widows	...	1/4 (i.e. each will get 1/16)
	Father	...	3/4 (as residuary)
(vi)	Mother	...	1/3 (as sharer)
	Sister	...	NIL (as she is excluded by the father)
	Brother	...	NIL (as he is excluded by the father)
	Father	...	2/3 (as residuary)
(vii)	Husband	...	1/2 (as sharer)
	Mother	...	1/6 (i.e. 1/3 of 1/2)
	Father	...	1/3 (as residuary)
(viii)	Husband	...	1/2 (as sharer)
	Mother	...	1/3 (as sharer)
	Father's father	...	1/6 (as residuary)
(ix)	Widow	...	1/4 (as sharer)
	Mother	...	1/4 (i.e. 1/3 of 3/4)
	Father	...	1.2 (as residuary)
(x)	Widow	...	1/4 (as sharer)
	Mother	...	1/3 (as sharer)

Father's father ... 5/12 (as residuary)

II. Residuaries (Agnatic Heirs)

If there are no shares, or of there are sharer, but there is a residue left after satisfying the claims of the sharers, the whole of the inheritance, *or* the residue, as the case may be devolves upon residuaries in *the following order* :

A: Descendants –

1. *Son and daughter.* – The daughter takes as a residuary with the son, the son taking a double portion. Thus, the shares of a son and a daughter, *as residuaries*, would be as follows : son : 2/3; daughter : 1/3.
2. *Son's son h.l.s.* – The nearer in degree excludes the more remote. Son's daughter h.l.s. takes as residuary with ad equal son's son.

PROBLEM - A Sunni Muslim dies leaving a widow, a son and a daughter. How will the estate devolve?

ANS– Widow 1/8, son 12/24, daughter 7/24.

(Note - It is to be noted that a daughter *cannot* inherit as a *sharer* when there is a *son*. But of the only heirs are a daughter, and a son's son, the daughter will inherit 1/2 as a sharer, and the son's son will get 1/2 as a residuary.)

B: Ascendants –

1. Father
2. True grandfather h.h.s., the nearer in degree excluding the more remote.

C: Descendant of the father –

1. Full brother: the full sister takes as residuary with brother, the brother taking a double portion.

PROBLEM -A Sunni Muslim male dies leaving him surviving two daughters, D1

and D2, a full brother B and a full sister S. What will be the respective shares of D1, D2, B and S in the property of the deceased?

ANS - D1 – 1/3, D2 – 1/3, full brother – 2/9, and full sister 1/9.

2. Full sister: in default of a full brother and the other residuaries above-named, the full sister takes the residue, if any.
3. Consanguine brother.
4. Consanguine sister.
5. Full brother's son.

D: Descendants of true grandfather –

Full paternal uncle; consanguine paternal uncle; full paternal uncle's son (followed by the remote descendants of the remote ancestor).

Principles of Succession among Sharers and Residuaries

Rule I

Whoever is related to the deceased *through any person* does not inherit while that person is living. Thus, the father excludes the brothers and sister, there being only *one exception to this rule*, that is, the *mother does not exclude the uterine brothers or sisters*.

Rule II

The nearest in blood inherits, that is, the nearer degree must exclude the remoter. Thus, the father excludes the father's father, and so on.

Rule III

One who is excluded himself may exclude others, wholly or partially. There are certain cases in which heirs are excluded or have their shares reduced, by reason of the existence of other heirs who themselves take no share in the inheritance.

Doctrine of “Increase” (Aul)

According to Muhammadan law, the share of various sharers are fixed. Where there are several sharers co-existing, it sometimes happens that the total of their respective shares exceeds unity (one). Thus, suppose that the deceased leaves behind a husband and two full sisters. Ordinarily, the husband will take $1/2$, as there is no child or child of a son how low-soever, and the two sisters together will take $2/3$, as there is no son. $1/2 + 2/3 = 7/6$ which exceeds unity, and the property falls short in distribution. How then is the deceased’s property to be divided?

This difficulty is solved by increasing the common denominator to the sum of the numerators, and thus reducing the fractions without disturbing the proportion between them. Thus, in the illustration taken above, on reducing the fractions to the common denominator one gets $1/2 = 3/6$ and $2/3 = 4/6$. Thus, with the common denominator the shares are – husband = $3/6$ and two sisters = $4/6$. [The sum of the numerators is 7.] Now, the common denominator is increased to the sum of the numerators. On doing this, the shares would be as follows: husband = $3/7$ + two $4/7 =$ unity.

It may be noted that this doctrine is called “increase”, not because the shares are increased, which is quite the opposite, the very object of the doctrine being to *diminish* the shares, but because the unity is reached by *increasing the denominator* of the fractional shares.

In other words, if it is found on assigning their respective shares to the shares, that the sum total of the shares exceeds unity, the share of each share is proportionately *diminished* by reducing the fractional shares to a common denominator and *increasing the denominator*, so as to make it equal to the sum of the numerator. It should be noted that this doctrine, although it is called “increase”, does not increase the share, but on the contrary, because it; it is so called, because the *unity is reached by increasing the denominator* of the fractional shares.

Difference between Shia and Sunni law of ‘Increase’ –

According to the Sunni law, the doctrine implies proportionate reduction of *all* the shares. According to the *Shia law*, on the other hand, it implies the reduction of the shares of the daughters; or full or consanguine sister or sisters alone. *Other heirs do not suffer.*

Illustrative examples. – The following are a few illustrative examples of the application of the *Doctrine of Increase*:

(a)	Husband...	$1/2=3/6$	...	reduced to $3/8$
	2 Full sisters...	$2/3=4/6$	...	reduced to $4/8$
	Mother	...	$1/6=1/6$	... reduced to $1/8$
TOTAL		<u>$8/6$</u>		<u>$8/8$</u> (i.e.1)
(b)	Husband...	$1/4=3/12$	...	reduced to $3/13$
	Mother...	$1/6=2/12$	...	reduced to $2/13$
	2 Daughters...	$2/3=8/12$	...	reduced to $8/13$
TOTAL		<u>$13/12$</u>		<u>$13/13$</u> (i.e.1)
(c)	Widow...	$1/4=3/12$	...	reduced to $3/13$
	Mother...	$1/3=4/12$	...	reduced to $4/13$
	Full sister...	$1/2=6/12$	...	reduced to $6/13$
TOTAL		<u>$13/12$</u>		<u>$13/13$</u> (i.e.1)
(d)	Husband...	$1/4=3/12$	...	reduced to $3/15$
	Father ...	$1/6=2/12$	...	reduced to $2/15$
	Mother...	$1/6=2/12$	...	reduced to $2/15$
	3 Daughters...	$2/3=8/12$	...	reduced to $8/15$
TOTAL		<u>$15/12$</u>		<u>$15/15$</u> (i.e.1)

Doctrine of 'Return' (Radd) –

If, on assigning their shares to the sharers, it is found that the total of the shares does not exhaust the whole, the residue will go to the residuaries. But if there be no residuaries the residue will not go to distant kindred, but would be distributed among the shares in proportion to their shares. This right of reverter is called *radd* (return).

Sunni law - The residuaries take the surplus between them, after the shares are satisfied. But there are no residuaries to take it. Thus, suppose A dies leaving behind, his (a) mother and (b) a son's daughter (both shares), and no residuaries. Their shares

respectively are $\frac{1}{6}$ and $\frac{1}{2}$, this together makes $\frac{2}{3}$ of A's property, leaving $\frac{1}{3}$ of his property as surplus, with no residuary to take it. In such a case, the surplus reverts to the shares in proportion to their shares. This is done by reducing the fractional shares to a common denominator, and by decreasing the denominator of the shares, so as to make it equal to the sum of numerators.

Thus, in the above illustration, the shares of the mother and the son's daughter are $\frac{1}{6}$ and $\frac{1}{2}$ respectively. Reducing them to the common denominator, gives $\frac{1}{6}$ and $\frac{3}{6}$. The sum of numerators is $(1 + 3) = 4$. By decreasing the denominator of the shares to make it equal to the sum of the numerators, one arrives at $\frac{1}{4}$ and $\frac{3}{4}$. These will be the shares of the two shares. Thus, the Return (*Radd*) is the apportionment of surplus among the sharers, when the shares do not exhaust the property *and* there are no residuaries.

There is *one exception* to the right of reverter of the sharers. The *husband* or *wife* of the deceased is *not* entitled to share in the return, so long as there is any other heir. If there are any other sharers, they will share the return among themselves, without giving his or her share of the return to the husband or wife. Even when there is no other sharer, the residue will go to distant kindred, if any. It is only when there is no other heirs, sharers, residuaries or distant kindred, and the husband or wife is the only heir, that he or she will take the residue by return, i.e. the whole of the estate : *Mir Isab v. Isab*, (1920) 20 Bom. L.R. 942.

PROBLEMS –

1. A Sunni Muslim dies leaving as his heirs, a widow, daughter and his mother. What would be the shares of the parties in the state of the deceased?

ANS –The widow's share would be $\frac{1}{8} = \frac{4}{32}$. Mother's share $\frac{1}{6}$ would be increased to $\frac{1}{4}$ of $\frac{7}{8} = \frac{7}{32}$. Daughter's share $\frac{1}{2}$ would be increased to $\frac{3}{4}$ of $\frac{7}{8} = \frac{21}{32}$.

2. A Sunni woman dies, leaving a *husband* and a *mother*. How will the estate devolve?

ANS –The husband is entitled to $\frac{1}{2}$ as sharer, and the *mother* to $\frac{1}{2}$ ($\frac{1}{3}$ as sharer and $\frac{1}{6}$ by *Return*).

3. A Sunni woman dies, leaving a *husband* and a daughter. How will the estate devolve?

ANS –The husband will get $\frac{1}{4}$ as sharer, and the daughter $\frac{3}{4}$ ($\frac{1}{2}$ as sharer as $\frac{1}{4}$ by *Return*).

As seen above, the husband and the wife are excluded from the benefit of '*Return*' only *so long as* there is any other heir, sharer or distant kindred. Thus, if A dies, leaving a widow ($\frac{1}{4}$ share) and two sisters ($\frac{2}{3}$ share), there is a surplus of $\frac{1}{2}$ which will be divided between the two sisters, each taking $\frac{1}{24}$. The widow will have no share in it. But, if A dies, leaving his widow as his only heir, she will take $\frac{1}{4}$ as a sharer, and the remaining $\frac{3}{4}$ by "return".

Shia law -

Under the Shia law, if there is a surplus after satisfying the shares, it is *not necessary* that there should be no residuaries in order to take a case for a *return*. If there is a surplus left after the allotment of shares of the sharers, but there are no residuaries *in the class to which the shares belong*, the surplus reverts to the sharers in the proportion of their respective shares.

Difference between 'Increase' and 'Return' –

The doctrine of "return" is the *converse* of the doctrine of "increase". In "increase", the shares exceed unity and suffer a proportionate reduction. In "return", the shares fall short of unity and are proportionately increased. In return, the husband and wife do not benefit if there is any other sharer or distant kindred, but they are not saved from the operation of the doctrine of increase.

1. In 'Increase', the total of shares adds up to more than unity; whereas in 'return' the total falls short of unity.
2. In 'Increase', the shares undergo rateable reduction. In 'Return', the shares undergo a rateable increase.
3. In 'Increase', the share of the husband or wife suffers a proportionate reduction along with other shares. In 'Return' the husband or wife is not entitled to the 'Return' so long as there is any other heir, whether sharer or distant kindred.

III Distant Kindred

The distant kindred are entitled to inherit only (i) in the absence of the shares of residuaries; or (ii) if the only sharer is a husband or wife, and there is no relation belonging to the class of residuaries, the husband or wife will take his or her full share, and the remaining of the estate will be divided among the distant kindred.

Four classes of distant kindred –

Distant kindred can be divided into *four classes*. These are (i) descendants of the deceased *other than* sharers and residuaries; (ii) ascendants of the deceased *other than* sharers and residuaries; (iii) descendants of parents *other than* residuaries and (iv) descendants of grandparents.

The kindred belonging to class (i) succeed in priority to the second, the kindred belonging to class (ii) succeed in priority to (iii) and so on.

General rules of succession among distant kindred –

1. The first class excludes the second, and so on.
2. The nearer in degree excludes the remoter one.

Illustration -Daughter's children exclude son's daughter's children.

3. As amongst the members of the same class and of the same degree, the children of sharers and residuaries are preferred to those of distant kindred.

Illustration -Son's daughters children are preferred to daughter grandchildren.

4. Subject to the above rules, heirs of whole blood are preferred to consanguine heirs, and a male takes double the share of a female.

The above rules of distribution are in accordance with the opinion of Imam Muhammad which, though complicated when compared to those of Abu Yusuf, is followed in India because it is followed by the authors of *Al Sirajiyah and the Sarjfiyya*. Abu Yusuf and Imam Muhammad do not differ in their sexes or blood. But

where the intermediate ancestors are (a) of different sexes or (b) of different blood, according to Abu Yusuf, regard is to be had to the sex and blood of the *actual* claimants. According to Imam Muhammad, the sexes and blood of the intermediate ancestors are the most important.

IV. Successors Unrelated In Blood

Failing the shares, residuaries and distant kindred, the property of deceased Muslim goes to the following successors unrelated in blood to the deceased:

1. Successor by contract (Maula) -

A “successor by contract” is a person who derives his right of succession under a contract with the deceased in consideration of an undertaking given by him to pay any fine or ransom to which the deceased may become liable. Such an agreement is called an agreement of *mawalat*, and the successor is called *maula*. Such a contract being illegal and void is *recognised in India*.

2. Acknowledge kinsan-

Z, a person having no relations of *his own*, may be acknowledged by another person X as X’s relation through *another*, and not through Z himself. Thus, X may acknowledge Z, as his brother; it is relationship through the father. But X may not acknowledge Z to be his *son* because that is relationship *through himself*.

3. Universal legatee -

A universal legatee is a person to whom the deceased, *who has left no known heirs*, has left the whole of his property by will.

4. The Government (Escheat)

On the failure of all the heirs and the successors mentioned above, the property of the deceased *escheats* to the state.

Under pure Muslim law, the property does *not* in such a case, escheat to the State, but falls into the public treasury (*bait-ul-mal*) for the benefit of all Muslims.

1.3.6 MISCELLANEOUS TOPICS

Step-children

Step-children do *not* inherit from step-parents; nor do step-parents inherit from their step-children.

Illegitimate children

An illegitimate child is considered to be a child of its mother only, and as such, it is entitled to inherit from its mother and her relations. Conversely, such persons also inherit from the child. However, it has been held that an illegitimate son *cannot* inherit from the legitimate son of the same mother.

The above rule thus implies that an illegitimate child does not inherit from its putative father or his relations; nor do they inherit from such a child.

Missing Persons

When the question is whether a Muslim is alive or dead, and it is proved that he has not been heard of for seven years by those who would naturally have heard of him if he had been alive, the *burden of proving* that he is alive is on the person who affirms it.

Under strict Mohammedan law, a missing person is to be regarded as alive till the lapse of *ninety years from the date of his birth*. It has however been held that this is a rule of evidence, and not one of succession. It must therefore be taken as superseded by the provisions of the Indian Evidence Act.

UNIT – VIII

Will and Testament

INTRODUCTION

Testamentary succession is governed by the Indian Succession Act.

The object of the Indian Succession Act is to consolidate all the Indian Laws relating to succession. The separate existence on the Statute book of a number of large and important enactments renders the present law difficult of ascertainment and there is, therefore, every justification for an attempt to consolidate it. The Bill has been prepared by the Statute Law Revision Committee as a purely consolidating measure. No intentional change of the law has, therefore, been made.

STRUCTURE OF THE UNIT

- 1.1** Objectives
- 1.2** Definitions
- 1.3** Will
- 1.4** Testamentary Succession
 - 1.4.1** Application of certain provisions of part to a class of wills made by Hindus, etc.
 - 1.4.2** Person capable of making Wills (s.59)
 - 1.4.3** Testamentary guardian (s.60)
 - 1.4.4** Will Obtained by fraud, coercion or importunity (s.61)
 - 1.4.5** Will may be revoked or altered (s.62)
- 1.5** The Execution of Unprivileged Wills (s.63)
- 1.6** Privileged Wills (s.65)
 - 1.6.1** Mode of making and rule for executing, privileged Wills. (s.66)

1.1 OBJECTIVES

By the end of this chapter student will learn about –

- Testamentary Succession

1.2 DEFINITIONS -

- (a) “administrator” means a person appointed by competent authority to administer the estate of a deceased person when there is no executor;
- (b) “codicil” means an instrument made in relation to a Will, and explaining, altering or adding to its dispositions, and shall be deemed to form part of the Will;
- (c) “District Judge” means the Judge of a Principla Civil Court of original Jurisdiction;
- (d) “executor” means a person to whom the execution of the last Will of a deceased person it, by the testator’s appointment, confided;
- (e) “India” means the territory of India excluding the State of Jammu and Kashmir;]
- (f) “Indian Christian” means a native of India who is, or in good faith claims to be, of unmixed Asiatic descent and who professes any form of the Christian religion;
- (g) “minor” means any person subject to the Indian Majority Act, 1875 (9 of 1975), who has not attained his majority within the meaning of that Act, and any other person who has not completed the age of eighteen years; and “minority” means the status of any such person;
- (h) “probate” means the copy of a Will certified under the seal of a Court of competent jurisdiction with a grant of administration to the estate of the testator;
- (l) “Will” means the legal declaration of the intention of a testator with respect to his property which he desires to be carried into effect after his death.

1.3 WILL

A will is an important document whereby any living person can bequeath (leave behind) his property to other persons after his death. A will is enforceable only after the death of the person who has made the will. The person who makes the will is known as the testator. In India, the Indian Succession Act, 1925 is applicable to Hindus, Sikhs, Jains or Buddhists. However, most of it doesn’t apply to Muslims as Muslims are largely covered by Muslim Personal Law.

Under the Indian Succession Act, 1925, a will has been defined as follows:

"A Will is the legal declaration of the intention of the testator, with respect to his property which he desires to be carried into effect after his death."

It is a document whereby a person makes a disposition of property, which is to take effect after his death. In other words, it is a testamentary disposition of property. A testamentary disposition of property means that the property gets disposed only after the death of the person making the disposition. When a person intends to dispose of his property by making a document, other than a Will, then the disposition of the property takes place, either immediately or, on a specifically mentioned date, if any.

A person who propounds the Will or produces the Will before the Court and wants the Court to rely upon the same has to prove that:

- (i) the Will in question is the legal declaration of the intention of the deceased;
- (ii) the testator, when executed the Will, was in a sound and disposing state of mind; and
- (iii) the testator had executed the Will of his own free will, meaning thereby, he was a free agent when he executed the Will.

Moreover, the onus of a proof on plaintiff (or on the persons who propounded the Will in such cases) is of two types –

1. to discharge the burden as regards the legal and valid execution of the Will;
2. to remove the suspicious circumstances surrounding the execution of the Will so as to satisfy the conscience of the Court.

A document is a Will if it contains all the specific words of bequeathed to be given effect to after the death of the testator. In order to constitute a Will, there must be a desire of the testator that the declaration should be affected after his death. The desire of the testator to give up the ownership of the property after his death is also an essential constituent of the Will. Under the Indian Succession Act, the "Will" means the legal declaration of the intention of the testator with respect to his property which he desires to be carried into effect after his death. Whenever the Will is claimed, it must be shown that there is no room for suspicion that it does not express the mind of the trustee.

The difference between a transfer and a Will are will-recognised. A transfer is a conveyance of an existing property by one living person to another (that is transfer inter vivos). On the other hand, a Will does not involve any transfer, nor effect any transfer inter vivos, but is a legal expression of the wishes and intention of a person in regard to his properties which he desires to be carried into effect after his death. In other words, a Will regulates succession and provides for succession as declared by it (testamentary succession) instead of succession as per personal law (non-testamentary succession). The concept of transfer by a living person is wholly alien to a Will. When a person makes a Will, he provides for testamentary succession and does not transfer any property. While a transfer is irrevocable and comes into effect either immediately or on the happening of a specified contingency, a Will as a transfer of an existing property in future, is contrary to all known principles relating to transfer of property and testamentary succession. Thus, the Single Judge proceeded on wrong premises when he observed that the execution of a Will.

1.4 TESTAMENTARY SUCCESSION

1.4.1 Application of certain provisions of part to a class of wills made by Hindus, etc. –

The provisions of this part which are set out in Schedule III shall, subject to the restrictions and modifications specified therein, apply –

- a. to all Wills and codicils made by any Hindu, Buddhist, Sikh or Jaina, on or after the first day of September, 1970, within the territories which at the said date were subject to the Lieutenant- Governor of Bengal or within the local limits of the ordinary original civil jurisdiction of the High Courts of Judicature at Madras and Bombay; and
- b. to all such Wills and codicils made outside those territories and limits so far as relates to immovable property situate within those territories or limits; and
- c. to all Wills and codicils made by any Hindu, Buddhist, Sikh or Jaina on or after the first day of January, 1927, to which those provisions are not applied by clauses (a) and (b)

Provided that marriage shall not revoke any such Will or codicil.

1.4.2 Person capable of making Wills (s.59)

Every person of sound mind not being a minor may dispose of his property by Will.

Explanation 1 – A married woman may dispose by Will of any property which she could alienate by her own act during her life.

Explanation 2– Persons who are deaf or dumb or blind are not thereby incapacitated for making a Will if they are able to know what they do by it.

Explanation 3– A person who is ordinarily insane may make a Will during interval in which he is of sound mind.

Explanation 4– No person can make a Will while he is in such a state of mind, whether arising from intoxication or from illness or from any other cause, that he does not know what he is doing.

Illustrations

- (i) A can perceive what is going on his immediate neighbourhood, and can answer familiar questions, but has not a competent understanding as to the nature of his property, or the persons who are of kindred to him, or in whose favour it would be proper that he should make his will. A cannot make a valid Will.
- (ii) A executes an instrument purporting to be his Will, but he does not understand the nature of the instrument, nor the effect of its provisions. This instrument is not a valid Will.
- (iii) A, being very feeble and debilitated, but capable of exercising a judgment as to the proper mode of disposing of his property, makes a Will. This is a valid Will.

There are three things to be kept in mind:

- (i) The propounder of a Will has to prove its due and valid execution.
- (ii) If there are any suspicious circumstances surrounding the execution of a Will, the propounder must remove the suspicions by cogent and satisfactory evidence.

- (iii) The application of the above principles depends on the facts and circumstances of each case. Whether a Will is genuine or not has to be decided on the facts of each case. There is no mathematical equation to determine whether a Will is genuine or not. The authenticity of a Will depends on the circumstances surrounding its execution and the quality of the evidence that is led in respect of its genuineness.

The following guidelines have to be borne in mind, while appreciating the evidence relating to Will :

1. the propounder of the Will has to show by satisfactory evidence that the Will was signed by the testator, that the testator at the relevant time was in a sound and disposing state of mind and that he understood the nature and effect of the dispositions and put his signature to the document of his own free Will.
2. When the evidence adduced in support of the Will is disinterested, satisfactory and sufficient to prove the sound disposing state of the testator's mind and his signature as required by law, the Court would be justified in making a finding in favour of the propounder.
3. if it is shown that the propounder has taken a prominent part in the execution of the Will and has received substantial benefit under it, that itself can be treated as a suspicious circumstances attending the execution of the Will and the propounder is required to remove the said suspicion by clear and satisfactory evidence.
4. the onus of proving the Will is on the propounder.

In the absence of suspicious circumstances surrounding the execution of the Will, proof of testamentary capacity and the signature of the testator as required by law is sufficient to discharge the onus. Where, however, there are suspicious circumstances, the onus is on the propounder to explain them to the satisfaction of the Court before the Court accepts the Will as genuine. Even where circumstances give rise to doubts, it is for the propounder to satisfy the conscience of the Court.

5. The suspicious circumstances may be as to the genuineness of the signatures of the testator, the conditions of the testator's mind, the dispositions made in the

Will being unnatural, improbable or unfair in the light of the relevant circumstances, or there might be other indications in the Will to show that the testator's mind was not free.

6. Any and every circumstances is not normal or is not normally expected in a normal situation or is not expected of a normal person.
7. What are the suspicious circumstances must be judged in the facts and circumstances of each particular case. It is obvious that for deciding the material questions of fact regarding the genuineness of the Will, no hard and fast or inflexible rules can be laid down for the appreciation of the evidence. The broad principles would always depend upon the facts and circumstances of each case and on the nature and quality of the evidence adduced by the parties.
8. If a Will has been registered, that is a circumstance which may, having regard to the circumstances, prove its genuineness. But the mere fact that a Will is registered Will not by itself be sufficient to dispel all suspicion regarding it where suspicion exists, without submitting the evidence of registration to a close examination. The bald fact of registration is insufficient, when there are other circumstances creating suspicion on the execution of the document.
9. There are two rules of law set out. The first is that the onus for proving the execution of the document lies in every case upon the party propounding a Will and he must satisfy the conscience of the Court that the instrument so propounded is the last will of a free and capable testator. The second is that, if a party writes or prepares a Will under which he takes a benefit, that is a circumstances that ought generally to excite the suspicion of the Court and call upon it to be vigilant and zealous in examining the witness in support of the instrument in favour of which it ought not to pronounce unless the suspicion is removed, and it is judicially satisfied that the paper propounded does express the true Will of the deceased.

Neither the Hindu Succession Act not the Indian Succession Act put any embargo on the power and authority of the executant that a Will cannot be executed in favour of a person who is professing another religion.

Regarding the mode of proving of a Will, the Supreme Court held that as in the case of proof of other documents so in the case of proof of Wills it would be idle to expect

proof with mathematical certainty. The test to be applied would be the usual test of the satisfaction of the prudent mind in such matters.

The Supreme Court further held that other factors like surrounding circumstances including that existence of suspicious circumstances, if any, should be clearly explained and dispelled by the propounder.

The law with regard to proof of Will is now well –settled. In terms of the Evidence Act, it is necessary to have the testimony of one of the attesting witnesses to the Will who could depose about the execution and attestation of the Will.

1.4.3 Testamentary guardian (s.60) –

A father, whatever his age may be, may by Will appoint a guardian or guardians for his child during minority.

1.4.4 Will Obtained by fraud, coercion or importunity (s.61)–

A Will or any part of a Will, the making of which has been caused by fraud or coercion, or by such importunity as takes away the free agency of the testator, is void.

A Will is one of the most solemn documents known to law. The executant of the Will cannot be called to deny the execution or to explain the circumstances in which it was executed. It is, therefore essential that trustworthy and unimpeachable evidence should be produced before the Court to establish genuineness and authenticity of the Will. It must be stated that the factum of execution and validity of the Will cannot be determined merely by considering the evidence produced by the propounder. In order to judge the credibility of witnesses and disengage the truth from falsehood, the Court is not confined only to their testimony and demeanour. It would be open to the Court to consider circumstances brought out in the evidence or which appear from the nature and contents of the documents itself. It would be also open to the Court to look into surrounding circumstances as well as inherent improbabilities of the case to reach a proper conclusion on the nature of the evidence adduced by the party.

1.4.5 Will may be revoked or altered (s.62)–

A Will is liable to be revoked or altered by the maker of it at any time when he is competent to dispose of his property by Will.

1.5 THE EXECUTION OF UNPRIVILEGED WILLS (S.63)

Every testator, not being a soldier employed in an expedition or engaged in actual warfare [or an airman so employed or engaged,] or a mariner at sea, shall execute his Will according to the following rules:

- (a) The testator shall sign or shall affix his mark to the Will, or it shall be signed by some other person in his presence and by his direction.
- (b) The signature or mark of the testator, or the signature of the person signing for him, shall be so placed that it shall appear that it was intended thereby to give effect to the writing as a Will.
- (c) The Will shall be attested by two or more witnesses, each of whom has seen the testator sign or affix his mark to the Will or has been some other person sign the Will, in the presence and by the direction of the testator, or has received from the testator a personal acknowledgment of his signature or mark, or of the signature of such other person; and each of the witnesses shall sign the Will in the presence of the testator, but it shall not be necessary that more than one witness be present at the same time, and no particular form of attestation shall be necessary.

Incorporation of papers by reference (s.64)– If a testator, in a Will or codicil duly attested, refers to any other documents then actually written as expressing any part of his intentions, such documents shall be deemed to form a part of the Will or codicil in which it is referred to.

1.6 PRIVILEGED WILLS (s.65)

Any soldier being employed in an expedition or engaged in actual warfare, 28 [or an airman so employed or engaged,] or any mariner being at sea, may, if he has completed the age of eighteen years, dispose of his property by a Will made in the manner provided in section 66. Such Wills are called privileged Wills.

1.6.1 Mode of making and rule for executing, privileged Wills. (s.66)

1. Privileged Wills may be in writing or may be made by word of mouth.
2. The execution of privileged Wills shall be governed by the following rules:

- (a) The Will may be written wholly by the testator, with his own hand. In such case it need not be signed or attested.
- (b) It may be written wholly or in part by another person and signed by the testator. In such case it need not be attested.
- (c) If the instrument purporting to be a Will is written wholly or in part by another person and is not signed by the testator, it shall be deemed to be his Will, if it is shown that it was written by the testator's directions or that he recognized it as his Will.
- (d) If it appears on the face of the instrument that the execution of it in the manner intended by the testator was not completed, the instrument shall not, by reason of that circumstance, be invalid, provided that his non-execution of it can be reasonably ascribed to some cause other than the abandonment of the testamentary intentions expressed in the instruments.
- (e) If the soldier, 29[airman] or mariner has written instructions for the preparation of his Will, but has died before it could be prepared and executed, such instruction shall be considered to constitute his Will.
- (f) If the soldier, 29[airman] or mariner has, in the presence of two witnesses, given verbal instructions for the preparation of his Will, and they have reduced into writing in his lifetime, but he has died before the instrument could be prepared and executed, such instruction shall be considered to constitute his Will, although they may not have been reduced into writing in his presence, not read over to him.
- (g) The soldier, 29[airman] or mariner may make a Will by word of mouth by declaring his intentions before two witnesses present at the same time.
- (h) A Will made by word of mouth shall be null at the expiration of one month after the testator, being still alive, has ceased to be entitled to make privileged Will.

VALUATION OF REAL ESTATE

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1.0 TERMS AND PHRESES USED IN VALUATION OF REAL ESTATE

- 1. Actual age:**
The number of years that have elapsed since construction of property – it is also known as historical or chronological age.
- 2. Agents in production:**
Land, labour, capital and entrepreneurship which create wealth, goods, services and income.
- 3. Amortization:**
A process by which a capital invested is recovered by a systematic schedule of repayment.
- 4. Amortization rate:**
The ratio of periodic payment to the total capital.
- 5. Annuity:**
An annual income; a program or contract of regular payments of agreed amount.
- 6. Annual Letting Value (Annual Ratable Value):**
It is a rental value of the property assessed by the local authority for levy of property tax. Municipal/local authority adopting rental base, assesses rental value of all buildings within municipal limits for the purposes of levy of property tax. Rental value of the old buildings which have been assessed earlier are revised and reassessed periodically as per the provisions of the Act. The Annual Ratable Value of every property existing in different wards of the local authority are recorded in the register maintained by each local authority.
- 7. Appraisal:**
It is a process of estimating value. It is an opinion of the nature, quality, monetary value or utility of specified interest in or with regard to aspects of identified asset.
- 8. Appreciation:**
An increment in value.
- 9. Approaches to value:**
A process to estimate value of assets, e.g., cost approach, income approach or market approach.
- 10. Arm's length transaction:**
A transaction by parties unknown to each other who are under no duress to undertake the transaction.

11. Before tax cash flow:

Income remaining from operating income after the payment of debt service but before payment of income tax.

12. Benefit/Cost ratio:

The ratio indicating present value of future benefits of an investment to the expenditure incurred for creating the asset in its existing state.

13. Book cost:

The cost of acquisition of an asset indicated in the company's ledger inclusive of all taxes, erection, installation, foundation, pre-operative expenses and other related costs. Sometimes referred to as "gross book" / "gross block" i.e., original cost before deduction for depreciation.

14. Book depreciation:

Depreciation provided in the books of account as per policy of the company. It is the amount written off on capital accounts regularly during ownership of an asset.

15. Book value:

It is the original cost of an asset after providing the depreciation for the period of use (as per the policy adopted by the company – by straight line method or diminishing balance method or any other method) as shown in books of account of the owner of the asset. It is accountant's method of indicating value of the asset after deducting depreciation in the books of account.

In case of assets which is in use even after claiming 100% depreciation they are shown generally with book value of ` 1/-

16. Break-even point:

The level of operation of an enterprise at which gross income equals the sum of expenses incurred to keep the concern going.

17. Break-up Value:

When any running unit or an enterprise is closed down and sale of each individual asset is envisaged or planned separately, it is termed as break-up value of the property. Value of each asset is estimated separately in isolation of the other asset. Buildings may be sold separately and to different parties.

18. Bundle of rights in an asset:

The concept of comparing asset ownership to a bundle of sticks with each stick indicating a distinct right of the asset owner, e.g., right to use, to sell, to give it on leave and licence, to lease out, to mortgage, or to choose to exercise none of these rights or to execute all the rights. The loss of any one of these rights could alter the value.

- 19. Business cycle:**
It is a trend of economic activity which passes through changing phases like prosperity, recession, depression, recovery, etc.
- 20. Buyer's market:**
This is indicative of a condition of the market where the supply of goods and service is more than the demand and results in low prices by which buyers are benefited.
- 21. Capital:**
Money available for investment or accumulated wealth having potential of generating income.
- 22. Capital assets:**
Assets of permanent nature capable of generating income e.g., land, building, machinery, equipment, cash, receivables, inventories, current assets.
- 23. Capital expenditure:**
Investment of cash to acquire fixed assets like land, building, machinery, additions to building and machinery.
- 24. Capital expense:**
Capital charge or the amount necessary for interest on and amortization of an investment.
- 25. Capital gain:**
The difference between net sale proceeds and book value of a fixed asset.
- 26. Capitalization:**
Method used to convert future benefits to present value by discounting such future benefit at an appropriate rate of return.
- 27. Capitalisation in perpetuity:**
Capitalising the net future benefits assumed to last permanently or indefinitely.
- 28. Capitalisation rate:**
A designated rate of return which converts net future benefits to capital value.
- 29. Capital market:**
The interaction of sellers and purchasers trading through financial instruments.
- 30. Cash flow analysis:**
An analysis of anticipated movement of cash in or out of a business.

31. Cost:

The term “Cost” admits of a wide variety of application and assumes different senses in different uses or contexts as hereinafter explained. It represents the actual expenditure to create/manufacture.

In case of real estate, the cost of land, material, labour, entrepreneur etc. enter into cost of the product. In absolute terms it is a measurement of the expenditure necessitated to produce the product. This cost may not be the same that the prospective purchaser would be willing to pay. Thus “Cost” is a term used in relation to production and not exchange.

32. Cost of sales:

All the costs of a product sold including manufacturing cost and staff costs.

33. Costs decreed:

Expenses involved in court case as decreed by the court.

34. To cost a product:

To calculate how much money will be needed to make a product, and to work out a selling price.

35. Cost plus:

System of calculating price from actual cost of production including a per cent of that cost to cover overhead and profit.

36. Direct cost:

It means expenditure for the labour and materials necessary to construct a new improvement. Direct costs are also called the hard costs. A contractor’s overhead and profit are generally considered hard costs.

37. Indirect cost:

It means expenditure for items other than labour and material. Indirect costs include administrative costs; expenses incurred by the owner for professional fees, financing, taxes, interest and insurance during construction. Indirect costs are also called soft costs.

38. Cost approach:

It is one of the three valuation approaches. In this approach, the replacement cost is at first estimated and there from total depreciation for the age of the asset is deducted by giving due regard to physical deterioration, technological, functional & economic obsolescence. The difference of the replacement cost and cumulative depreciation and obsolescence gives a value.

39. Cost index:

A multiplier applied to historical cost which converts historical cost to estimated

reproduction cost. In other words, by cost index one estimates trended cost. Trended cost reproduces the item and therefore the result is known as reproduction cost with all its bad and good qualities.

40. Current assets:

Assets not intended for use on a continuing basis in the activities of an enterprise. Examples include stocks, debentures, short-term investments, and cash in bank and in hand.

41. Current yield:

Current known periodic return on investment of capital.

42. Depreciation

Types of depreciation:

- Depreciation due to wear and tear (physical depreciation).
- Depreciation due to technological obsolescence.
- Depreciation due to functional obsolescence.
- Depreciation due to economic obsolescence.

Physical depreciation: This is very common. This is due to normal wear and tear and usage of the asset. All similar objects do not observe similar depreciation. Quantum of this depreciation depends on several factors as given below:

- (i) **Manner of usage:** If the property is properly used, it will observe normal depreciation but if property is used ignoring basic principles for its usage, it results in higher depreciation. We find that well maintained building has longer life span than the building which is subjected to negligence in repairs and maintenance for years.
- (ii) **Environmental aspect:** A building on seashore deteriorates faster than the building away from sea shore. Similarly a factory building in chemical zone would wear out faster than the factory in engineering zone.
- (iii) **Natural force aspects:** Natural calamities like earthquakes, cyclone, tsunami or monsoon flooding, lead to sudden damage to property. Even otherwise these forces contribute to higher depreciation and higher wear and tear to the buildings.
- (iv) **Accidental aspects:** Serious damage is caused to the buildings due to fire, defects in structural design, bad quality of construction, these even lead to collapse of the structure. Even due to war or riot or bombing on the structures, serious damage to buildings is caused.

43. Discounted cash flow analysis:

It is an analytical device or a programme in which the quantity, variability, timing, and duration of periodic income as well as the quantity and timing of reversions are specified and discounted to a present value at a specified rate.

44. Discounting:

The process which converts periodic income and reversions into present value, on the assumption that benefits available in the future are worth less than benefits received now.

45. Discount rate:

A rate of return to convert future receipts into present value.

46. Distress sale:

Seller selling the asset under compulsion for whatever reason.

47. Due-on-sale clause:

It is a clause generally found on mortgage contracts indicating as if there is an outstanding loan balance on a sale, it precludes loan assumption by a new buyer.

48. Earning power:

Capacity to raise income.

49. Economic base:

The quality of economic activity of a particular area/zone capable of attracting income from within its borders.

50. Economic feasibility:

Ability to produce sufficient income from investment to pay all expenses, charges and to provide a reasonable return on capital to enable the recapture of the sum invested.

51. Economic life:

The period of steady return after which it is uneconomical to use a particular asset.

52. Eminent domain:

The superior right that resides with the government enabling it to take over private property for public purpose on the payment of amount as per legal provisions.

53. Encumbrance:

Mortgage, tax, dues, charges, restriction, easement, reservation or similar covenant whether arising out of legal or contractual obligations or judicial pronouncements but not lien as such.

- 54. Effective age:**
Age indicative of the condition of utility of an asset. This is usually limited to physical life or can be a reference to age within an economic life.
- 55. Equity-debt ratio:**
It is the ratio of capital invested to debt incurred in acquiring an asset.
- 56. Evaluation:**
A study of nature, quality, or utility of an asset in which value estimate is not necessarily required.
- 57. Fee simple estate:**
Freehold estate.
- 58. Fixed assets:**
Assets of permanent nature like land, building, machinery, equipment, furniture which are not generally converted into cash or used up in production process once they are pressed into service. Some refers to this as capital assets.
- 59. Forced price:**
The price realized in forced sale or purchase when sufficient time was not available to find a purchaser on reasonable terms. It assumes a result of a compelled seller.
- 60. Forced sale:**
A sale under compulsion of circumstances or exigency of necessity including sale at a public auction under orders of the court of law.
- 61. Forecasting:**
Predicting a future market condition on the basis of past or present trends.
- 62. Force majeure:**
An unavoidable cause leading to the failure to fulfill obligation under the agreement within stipulated time.
- 63. Foreclosure:**
Mortgagee exercising his right by due process of law and forcing sale of the mortgaged asset to recover loan which mortgagor has defaulted.
- 64. Fully amortizing mortgage loan:**
A mortgage loan with repayment schedule in periodic or monthly installments of equal nature which provides for return on investment/interest as well as return of the investment, or recovery of the principal over the period of the loan.

65. Functional utility:

It is the capacity of an asset to be useful and to execute activity for which it is built as per prevailing market tastes and standards.

66. Goodwill:

It is an intangible asset arising out of reputation, credibility and earning potential of a business or manufacturing concern.

67. Graduated payment mortgage:

A system of mortgage in which repayment increases with income; the periodic payment begins with low and increases gradually.

68. Gross National Product (GNP):

The total value of all final goods and services due to an economic activity in a country in any given time period, without taking into consideration, and allowances for the consumption of durable goods.

69. Gross Rent Multiplier (GRM):

It is the relationship between the value of the property and gross rental income. GRM is equal to value of the property divided by gross rent received from the property.

70. Gross rental basis:

This indicates all outgoings in respect of leased property are borne by the lessor.

71. Guaranteed mortgage:

It is a mortgage in which, in the event of default by the borrower, payment is guaranteed by a third party.

72. Highest and best use:

The utilization of a property to its best and most profitable use. Highest and best use must satisfy four criteria viz., physical possibility, legal permissibility, financial affordability, and maximum profitability which result in highest property value.

Inherent factors in determination of highest and best use of real estate are:

- Time
- Location
- Market demand
- Legal right to develop
- Topography/resource quality of site
- Technological feasibility
- Financial or economic feasibility
- Public utilities

Time:

The time factor is probably the most significant, especially in this era of governmental controls and regulations, and is related to many of the other factors. It is the foundation factor in the study of the highest and best use of real estate.

The relative importance of the time factor can be illustrated by the following example: In case of property development, the time when finance is available to buyers is the most appropriate time to develop the land.

Location:

The importance of the location factor is, generally, self-evident. If an industrial site is to be developed to its highest and best use, it must be located near a place of active labour supply where utilities must be available, and transportation facilities- both for man power and goods- must be easily accessible. In many cases, truckage facilities are most important and necessary.

Market demand:

Analysis of market demand is necessary to determine whether the proposed use is “reasonably probable” given the supply and demand.

In order to come to the conclusion of demand potential, the following study is necessary:

- Market research for demand of product
- An inventory of the project under construction
- Population (workforce)
- Tax savings
- Industrial assistance
- Legal right to develop
- Public and private legal restrictions regulate the use of assets. This may be explained by the following categorization:

Public regulations

- Zoning regulation
- Environmental law
- Building code
- Sub-division regulation
- Compulsory acquisition for public purpose
- Reservation for lower income group at subsidized rate
- Rent control

Private regulations

- Deed restrictions
- Easements

Legal right to develop:

There must be legal right to develop in the property.

Topography/resource quality of site:

The following factors are also relevant to be considered in the real mof highest and best use of assets:

Technological feasibility:

If the project takes too long a time to complete, its cost will over run and it may not be with in minimum quality requirement nor considered to be technologically feasible. There are following basic constraints that define why the project will not be feasible. These are:

- physical,
- legal,
- safety,
- material sand supplies,
- financial,
- crew and
- management.

Note: These constraints, even if curable, may not be economically viable.

Financial or economic feasibility:

It is based on whether the proposed project will attain a cashflow of sufficient quantity, quality and duration to allow investors to recover the capital invested and expected rate of return.

Public utilities:

All properties must have water, sewage disposal facilities and abundant supply of power.

73. Historical cost:

The purchase price paid at the initial time of acquiring the asset plus additions made subsequent to purchase. Historical cost is without considering depreciation. Let us consider a case of a building constructed by a company for Rs.15,000/- in 1985 and additions made for Rs.5,000/-, Rs.10,000/- in 1989 and 1991 respectively, and if the same is sold in 1993 for Rs.50,000/- its historical cost remains Rs.30,000/-. It is sometimes referred to as first cost new.

74. Income capitalization approach:

It is an approach to value an income producing asset by converting future benefits, cash flows and reversions into asset value.

75. Index lease:

A lease in which change in rent is linked with change to a particular index e.g., cost of living index.

- 76. Inflation:**
Rise in price causing erosion of purchasing power of currency.
- 77. Insurable value:**
The value of assets at which they are considered to be insured. The value may be subject to provision in the policy.
- 78. Insurance:**
It is a contract by which an insurer indemnifies the insured for damages or losses that may occur due to perils or events specified in the contract (insurance policy).
- 79. Insurance policy:**
Insurance policy means contract of indemnity by which the insurer undertakes, in the event of loss, to replace insured article by payment or otherwise in the same position as it was before the loss, neither better nor worse, but subject to any limits or restrictions of the policy terms and conditions.
- 80. Indemnity value for insurance purpose:**
Indemnity value for insurance purpose means value decided on the basis of depreciated replacement cost to take account of prior usage unless the second hand equivalent asset is available in the market.
- 81. Interest:**
Return on capital and is not return of capital.
- 82. Internal rate of return:**
It measures performance of an investment. It is the rate of return on capital that is generated or capable of being generated within an investment over a period of ownership. This is similar to yield rate.
- 83. Intrinsic value:**
The inherent worth of an asset.
- 84. Investment analysis:**
It is a study showing relation of price paid for purchase of assets with expected future benefits.
- 85. Investment property:**
It constitutes business enterprise comprising all tangible and intangible assets acquired for earning profit by way of regular annual income and/or capital gain.
- 86. Investment value:**
The value of property to a particular investor, or a class of investors, for identified

investment objectives. This is a subjective concept that relates specific property to a specific investor or group of investors with identifiable investment objectives and/or criteria.

87. Investment yield:

It is a gain from investment made in any asset which is expressed as an annual percentage which includes all of the income and the capital gain or loss from sale. In other words, it is Internal Rate of Return.

88. Law of decreasing return:

The logic which indicates that any additional expenditure beyond a certain limit will not produce a return commensurate with the additional investment.

89. Law of increasing return:

The logic which indicates that larger amounts of factors of production produce more income to a certain point.

90. Lease:

A written document between owner of the property and lessee, (person who takes the property on lease) by which property is transferred for a specific period of time at certain rent and/or premium under agreed terms and conditions.

91. Lease back:

An arrangement under which seller of the asset takes the assets on lease from buyer under specific terms and conditions.

92. Lessee:

One who has right to occupy and/or use the property as per the terms and conditions of lease.

93. Lessor:

One who is owner of the property and conveys the right to use and/or occupy the property under a lease agreement.

94. Lessee's interest:

The right to use and/or occupy the property for certain period under certain terms and conditions as per the lease.

95. Letter of credit:

A letter issued by a financial institution certifying that the party named is entitled to draw on the institution and that institution will honour party's credit to a certain amount.

96. Leverage:

A technique used by investors to enhance the return on their equity. They buy the property by investing small portion of their own money and the balance is borrowed. They mortgage the property to secure the capital. In other words, it is the effect of borrowed capital upon the rate of return on equity investment.

97. Lien:

A claim or charge on an asset in which the property is the security for payment of debt.

98. Life:

In determining total life of the building valuer should consider following aspects viz.

- Materials used in construction
- Workmanship
- Usage of building
- Soil strata/foundation depth
- Weather conditions etc.

Materials used in building may increase or decrease total life of the building. Building made out of stones lasts longer than building with steel or timber. Steel corrodes and reduces life. Wood is damaged by white ants. However, in earthquake prone zones, earthquake resistant R.C.C. framed structure has longer life than stone built structure.

Good workmanship enhances life of the structure. Poor workmanship and out of plumb structure reduce life of the building.

Proper maintenance and upkeep of the building and timely structural repairs of the building enhances life of building.

Excessive usage of building increases wear and tear. Excessive wear and tear reduce the life of the building.

Heavy vibrations within factory building reduces its life. Vibrations close to structure on account of heavy railway traffic or truck traffic also reduces life of the building.

Design and foundation criteria of building also would increase or decrease life. Building foundations at shallow depth and in poor soil strata may cause settlement of structure and reduce life of the building. High rise R.C.C. framed buildings which are not designed with earthquake resistant features like shear walls and special footings, may have reduced life in earthquake prone areas.

Weather conditions also affect life of the building. Building along seashore has high corrosion effect due to salty air and high humidity. Region having high rain fall also have reduced life of the building.

Poor soil like muddy or creek land or black cotton soil calls for specially designed foundation. If such foundations are not provided, building develops structural cracks due to uneven settlement and life of building is reduced.

There are following types of life of the building:

- (i) Economic
- (ii) Physical
- (iii) Life due to legal constrains

Economic life is the actual service life of the building. Well maintained building has more or less same years of economic life. Nevertheless, bad or neglected maintenance and excessive wear and tear reduces economic life of the property. Economic life of an R.C.C. framed building is normally considered to be 60 years. Economic life of a building indicates life of a building which is economic to use; where cost of repairs is not prohibitive.

Physical life of the building is the actual survival life of the building before it collapses. It may be either more or in some cases even less than the planned life of the building.

In case of old buildings which are in good structural condition and which have already outlived their planned life (Say 60 years), yet, total physical life is adopted for the purpose of depreciation. If the building is 80 years old, its total physical life is adopted at 100 years, estimating 20 years as future life of such good building.

Bad workmanship, use of inferior materials, careless alterations and over loading of structures reduce physical life. In some cases accidents like fire, explosion, earthquake, flood damage causes total collapse of the structure much before its planned life. On the other hand it is not uncommon to see palaces having 200 years and temples made of stone having 400 years or even more physical life.

Life due to legal constrains - Life of building in some case depends on legal constrains. The building with 60 years life may be erected on a leasehold land which has only 30 years lease period. As per terms of lease on expiry of lease period the building is to be demolished and open land is to be handed over to the lessor. Income from building would cease after 30 years. Valuer in such a case has to adopt total life of building as 30 years only even though its economic and physical life may be 60 years.

99. Life interest/Life estate:

An interest in a property like occupancy or control limited to the life-time of a person other than owner and is terminated on the death of the designated person. It is also

known as life tenancy.

100. Limited marketability:

The asset that has relatively few potential purchasers.

101. Liquid assets:

Assets that can be converted into cash very easily and are easily available for payment of debts.

102. Liquidated damages:

An amount liable to be paid as per the terms of contract in the event of breach of contract.

103. Liquidation:

Forced or voluntary cash realization by way of sale of fixed assets, bonds etc. to take profit in anticipation of decrease in prices.

Termination of business by converting assets into cash, the proceeds being paid to creditors and remainder, if any, paid to owners as per their holdings.

104. Liquidity:

Cash position of an entity which is based on easy convertibility of assets into cash.

105. Loan to value ratio:

Ratio of mortgage loan amount to value of security offered e.g., 80% loan to 100% value.

106. Marginal cost:

In economic terms, it indicates price that barely, if at all, covers cost of production.

In real estate terms, it indicates income derived from the property that just barely, if at all, covers operating cost.

107. Marginal revenue:

The required gross revenue by selling one additional unit to break even.

108. Marginal utility:

Utility gained by an additional dose of intake of any consumable commodity.

109. Margin of security:

The difference between market value and loan amount.

110. Market analysis:

The identification and study of a pertinent market.

111. Marketability:

Salability of a particular commodity at a specific time and price.

112. Marketability study:

Micro-economic study to discover how a particular product can be marketed.

113. Market value:

Market value means the estimated amount for which an asset ought to exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted with full knowledge, prudently, and without compulsion.

114. Market value for the existing use:

The market value of an asset based on continuation of its existing use, assuming that the asset could be sold in the open market for its existing use, and other- wise, in keeping with the market value definition regardless of whether or not, the existing use represents the highest and best use of the asset.

115. Non-market value:

Non-market value is worked out in the field of valuation refers to estimating liquidation values, salvage and scrap values, insurance values. The valuer shall ensure that such value is duly estimated and reported though it may not reasonably be construed to represent the market value.

116. Market approach:

It is one of the three approaches to value. Value of the property in question is derived by the comparison of sales of similar property sold recently in the locality. The relative merits and demerits of sale instances are compared with the property in question. Sometimes it is referred to as "sales comparison approach".

117. Mass appraisal:

The method of appraising an entire area or district at the same time by standard methodology using common data and allowing for statistical testing.

118. Merger:

The combining/absorption of two or more companies into one without dissolving the individual companies.

119. Money market:

The interaction of purchasers and sellers who trade short-term money instruments.

120. Net cash proceeds of sale:

Price realized after deducting all expenses related to complete the sale, like

commission, outstanding debt, and tax claims on ownership interest.

121. Nuisance value:

Price paid to relieve an objectionable condition.

122. Obsolescence:

Decline in value due to new inventions, changes in design or demand, improved methods of production, change in legislation and taste and preference of consumers. It may be technological, functional or economic.

Chawl with common toilet are best example of obsolescence. In modern time people like self-contained tenements and not premises with common toilet. Individual small shops design may become obsolete in Metropolitan towns having shopping malls. Residential buildings in Industrial Zone and factory building in Residential Zone become obsolete due to user restrictions though its economic life as well as physical life may be more.

123. Obsolescence - Economic:

A residential building existing on a plot in commercial zone is an excellent example of economic obsolescence. Highest and Best use of land and building is not made. As the building is put to inferior usage of residence instead of commercial user it results in an economic loss. Higher depreciation in such case is absolutely necessary.

Due to legislative enactment and policies, property may remain underutilized. The policy of government to protect slums and not to permit removal of unauthorized structures in a plot without providing free alternate accommodation to dwellers is a classic example of economic obsolescence.

Policy of government to permit 100% T.D.R. over and above permissible F.S.I. on certain types of lands, resulted in severe economic obsolescence of the buildings. Several developers demolished even 20 years old building in good and sound condition for optimum use of the plot.

Dilapidation of a building or heavy structural repair cost for a building is also example of economic obsolescence. The structure becomes uneconomic to maintain. Due to dilapidation, repair cost becomes prohibitive. Similar situation arises when rental value of premises in a particular locality falls severely either due to bad neighborhood or due to migration of population to buildings in newly developed towns having better amenities.

124. Obsolescence - Functional:

The buildings which have become outdated mainly due to their planning and designing and being unsuitable for current requirements are good examples of

functional obsolescence. An old palace becomes obsolete for usage as there is no demand for such palaces in the market though they are in good structural condition. Due to the functional obsolescence many of such palaces have been converted to hotel users for which there is a high demand and usage in the market.

Old chawl buildings with common toilet blocks is yet another excellent example of functional obsolescence. Such buildings are outdated in planning and design. Now-a-days people require self-contained tenements and flats. Today's trend of constructing new shopping Malls and Multiplexes is likely to make present shopping centers and single screen theatres obsolete in a few years' time.

A brand-new computer suffers from functional obsolescence within one or two year's period with more advanced technologies introducing superior product at much lesser cost. A new machine may become functionally obsolete; if product manufactured by the said machine does not have any demand in the market.

125. Obsolescence - Technological:

The load bearing buildings with thick walls are now-a-days usually not preferred in urban areas. Now there is a trend to live in high rise R.C.C. framed buildings having thin partition and external walls. This is now possible due to technological advancements. Timber structures are also now replaced by R.C.C. framed or steel framed constructions. Wooden windows are replaced by aluminum windows. Due to modern technologies, new building materials and planning concepts have made it possible to design and erect even intelligent buildings.

126. Original cost:

Actual cost of the asset to its present owner.

127. Payback period:

The length of time required for investors to recover their initial cash investment from any project, with reasonable or expected interest.

128. Perpetuity:

Everlasting.

129. Personality:

It includes tangible items which are not real estate. These are items not permanently affixed to real estate and are generally characterized by their moveability e.g., plant and machinery, furniture and fixtures.

130. Plant and machinery:

Plant and machinery means installations and support facilities for manufacturing in an industry designed to perform a specific predetermined function, whether used

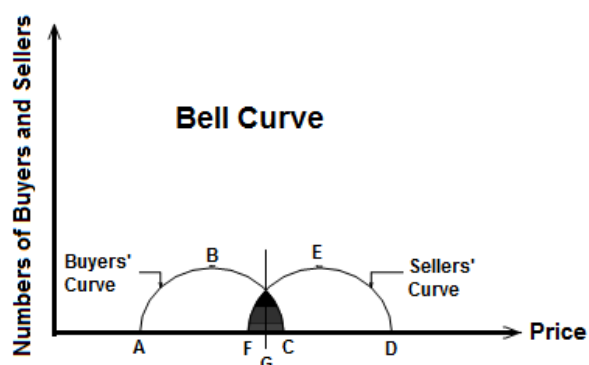
singly or in combination with other items to enhance the productivity or operating facility; and includes all devices in fixed or movable form, other than real estate, deployed in manufacturing, processing or assembling of products from the stage of raw materials to finished goods.

131. Price:

Price is a fact while value is an estimate. Price can be the amount of money a purchaser actually pays or a seller receives. Price is what is asked to be paid whereas cost is what is primarily intended to be covered by price; they may or may not be the same.

Price is the mechanism through which scarce resources are distributed in an open market over space and time. Different individuals may receive different measures of utility from the same goods. Depending on wealth and alternative purchase possibilities, each individual determines the highest price he is prepared to pay for the goods. This is investment value. The prices individuals are willing to pay or receive may never appear in the market place because they are too high or too low for a transaction to occur.

This concept is shown in a diagram below:



Everyone in the market place who owns or desires a particular good has a schedule of price indicating his mental offer to sell or purchase that good. The bell shaped curve above, from “A” to “C” represents the distribution of buyers, who at various prices would purchase some hypothetical goods. The curve, from “F” to “D”, represents the distribution of potential sellers. The buyer at “A” and seller at “D” would respectively offer or accept prices so far from the average that they would never become an actual participant in the market i.e., at price “A” no seller is prepared to sell and at price “D” no buyer is prepared to buy.

The area where the curves intersect, from “F” to “C”, represents the range of prices where transactions might take place if right sellers and buyers make contact. This area represents the range of market prices which are possible. “G” represents the point of greatest probability where the most sellers and buyers will agree.

As the competition increases for this good, “F” and “C” move close together so that under perfect competition, all transactions take place at “G” which then is cost.

Economics define price as the monetary exchange value of a product or service. To a consumer the price is an expected agreement between seller and buyer concerning what each is to receive. Price is the mechanism or device for translating into quantitative terms (rupees) the perceived value of the product to the consumer at a point of time.

The buyer’s interest lies in the “price” of the gamut of elements comprising the physical product together with the bundle of expectations or satisfactions. The consumer has numerous expectation such as accessories, after sale service, replacement of parts, technical guidance, repairing services, credit and many other benefits. Thus price must be equal to the total amount of benefits (physical, economic, social and psychological) in order to be acceptable.

Price means the money consideration for a sale of goods. [Sec.2(10) of Sale of Goods Act, 1930] Price is a fact and representation of market phenomenon. Price is a term used for the amount asked, offered, or paid for goods or services. It is a historical fact, whether it is publicly disclosed or retained in private. On account of differences in financial capabilities, motivations, or special interest of a given buyer and seller, the translated price for the goods or services may not always be an indication of relative value placed upon the goods or services by the particular buyer and/or seller under particular circumstances.

Price and cost do not mean the same thing either in an economic sense or in valuation procedure. Price is the phenomenon of the market place depending on what sellers choose to ask and buyers choose to pay under all the peculiar and often unknown conditions prevailing in the market place. Price variation depends on factors like supply and demand, trade barriers and restrictions, grey markets, the quantity of money in circulation, its velocity, etc.

132. Property:

The concept of property is fundamental to valuation. Value does not exist where there is no property in some form or other. Again property obtains its entire justification because it has a value. Now the question arises as to what property actually is? Is it basically something which is tangible? Or, is it conceivable apart from the tangible object? In exploring the concept of property, it can be said that a property simply defined is something which is owned. It can be either tangible or intangible and it can be solely owned or co-owned by a number of persons, individuals or juristic person. Ownership includes the exclusive right to possess, use or dispose of the property owned. Short of full ownership, rights may be of lesser domain and of different varieties. For example, leased property have two sets of holders of rights - the lessor and the lessee.

Ownership or the rights to use or derive benefit out of it constitute the property. It is these rights which are the subject matter of valuation. The bundle of rights attached to a property allows the holder to use, exploit, keep or dispose of the thing held; each of these rights is capable of being valued in accordance with the applicable methods.

133. Real estate:

Physical land and those human made items which are attached to the land. It is the physical tangible “thing” which can be seen and touched, together with all additions on, above, or below the ground.

134. Real property:

It refers to all the rights, interests, and benefits related to the ownership of real estate. Real property is normally represented by some evidence of ownership separate from the physical real estate. Therefore, real property is a non-physical concept.

135. Recession:

Decline in economic activity.

136. Recoverable amount:

It is the higher of an asset’s net selling price and its market value in highest and best use.

137. Reproduction cost, Replacement cost, Reinstatement Value and Replacement Value

As these words are used interchangeably, it is necessary to thoroughly understand the meaning of each one.

- **Reproduction cost**—the cost of construction, at current prices, of an exact duplicate or replica, using the same material, construction standards, design, layout and quality of workmanship, and embodying all of the deficiencies, super adequacies, and obsolescence of the subject building. When depreciation is deducted then the resultant amount is called Depreciated Reproduction Cost.
- **Replacement cost**—the cost of construction, at current prices, of a building having utility equivalent to the building valued but built with modern materials and according to current standards, design and layout. This is Replacement Cost New (RCN). When depreciation is deducted from RCN the resultant amount is called depreciated replacement cost.
- **Reinstatement Value is synonymous of Replacement Cost New.**
- **Replacement Value- though called value, actually it is an estimate of cost.**

Let us take an example of a 5 year old table. This can be replaced in following ways:

- (a) Replacing it by an identical 5 year old table

(b) Replacing it by an identical new table.

In the former case, the price at which 5 year old table is available is popularly termed as Replacement value.

In the second instance, the cost of a new table duly discounted on account of depreciation for 5 years will constitute Depreciated Reproduction Cost which is also popularly known as Replacement Value.

138. Return of capital:

The recovery of the capital invested through income and/or reversion.

139. Return on capital:

A profit earned by the capital invested; the rate of interest on capital.

140. Rule of thumb:

A relationship between or among a number of variables based on experience, observation, hearsay or a combination of these.

141. Scrap Value (Junk Value):

It is the value of the property receivable for its usable material content in the market when it has become completely useless for any further use. In case of old buildings, to be demolished, it is the sale price of material content obtained from the building on demolition of the building less cost of labour for demolition.

142. Salvage value:

It is the price expected for a whole property, e.g. a house, or a part of a whole property e.g. a plumbing fixture that is removed from the premises, usually for use elsewhere.

143. Secured loan or advance

It has been precisely defined in clause (n) of Section 5 of Banking Regulation Act, 1949, as:

“a loan or advance made on the security of the assets the market value of which is not at any time less than the amount of such loan or advance”.

144. Sinking fund:

It is an annual recurring amount required to be set aside every year, for a given period of time, at the given rate of interest, to recoup capital invested in a landed property.

145. Special purpose asset:

Asset with limited market having unique design; use for special purpose which restricts its utility to the only use for which it is made.

146. Straight line depreciation:

Method of providing depreciation by which assets are written off in equal annual amounts.

147. Surplus productivity:

Net income remaining after paying for labour, capital, organization and management; it is surplus and may represent the contribution of land.

148. Unique property:

It means rare articles like fine arts, antique, decorative, and luxury properties.

149. Useful life (sometimes referred to as normal useful life):

(a) the estimated period over which a depreciable asset is expected to be economically used, or the benefits represented by the asset are expected to be economically derived, in the business of the entity.

or

(b) the estimated total service, expressed in terms of production units that is expected to be economically obtained from the asset when employed in the business of the entity.

150. Valuation:

Process of estimating various kinds of value e.g., insurable value, market value, investment value of an identified interest in a specific asset at any given point of time.

151. Valuation process:

A systematic approach to estimate value of asset.

152. Value:

The concept of value comprises many influences and the variety of such influences is so great that no one classification of them would be final. Thus, physical things may have an economic value or social value or aesthetical value or natural value. Similarly, a concept may have an intellectual value or moral value or religious value or recreational value. But to a valuer of real estate the term is used in a qualified sense. One is concerned here with the relationship of value to the thing owned in the mind of the owner. It is owner's measurement of the anticipated sum of future services that the thing will procure. It is in the nature of an estimation that forms the owner's decision to exercise his right with regard to the thing transacted. Since value is an estimate of the anticipated future utility of the thing owned, the concept of

value is linked to a knowledge of the past that is projected into the future but measured in the present.

153. The essential elements of value are:

- (a) Utility
- (b) Scarcity
- (c) Demand
- (d) Transferability

An object can have value only if it has the four elements of value indicated above.

Air, desert, sea water are useful for certain purposes; but they are not scarce, hence possess little value in commercial term. Modern new houses and office buildings are very useful objects, but if they are in over supply market price will be reduced. Utility and scarcity cannot create a market unless there is a demand and purchasing power to implement it; if there is no transferability the demand is ineffective.

154. Broad forces influencing value:

- (a) Physical
- (b) Social
- (c) Economic
- (d) Legal

155. Distress Value:

Value of a property offered for immediate sale by its owner, who is under legal compulsion for immediate recovery of legal dues from him. The sale under this situation is called distress sale of the property. There is absolute urgency to liquidate assets. Owner may be in financial difficulty due to which he has been unable to meet legal or social liabilities. This value is quite often lower than market value of the property.

156. Forced Sale Value:

Forced sale value is an estimate of the gross amount that the tangible assets would fetch when the seller is forced to sell the assets compulsorily without proper marketing time / exposure time. There is an urgency to sell and the seller does not have control of sale process (generally sales by the banks/ courts/receivers, etc.).

Note: So far as price obtainable in the forced sale condition is concerned, it is very difficult to predict because one is attempting to define a moving target. Is forced sale the one which is expected to take place within 3 months, 2 months, 1 month, 1 week or 1 day?

157. Going Concern Value:

It is an estimate of the price of the running business of an industrial or commercial establishment, in an open market, with its all tangible and intangible (including Goodwill) assets as well as all liabilities of the enterprise on the date of valuation. It is an estimate of the business assets as a whole block and the pre-condition is that the business unit must be profit- making and a running unit. It is also assumed that the unit will continue to operate in future i.e. continued use of all assets. Total break-up value of each individual asset of the enterprise plus goodwill value of the business may or may not be same as the Going Concern Value of the enterprise.

158. Hope Value:

Sometimes property owners expect some likely changes in Government or Municipal policies and such likely sellers, expect value of the property to rise in the near future. Relaxation in coastal regulations or scrapping of U.L.C. Act or likely increase in F.S.I. rules etc. are instances of Hope Value.

159. Liquidation Value - orderly:

It is an estimate of the price that would be realized by putting up the property for auction sale in the market. The sale under public auction is carried out after proper advertisement and due publicity. Such auction may be under an order of the Court. But it is generally a case of sale by unwilling seller and willing buyer. The enterprise may be a running unit or a closed unit. If adequate time (which is less than required as per market value definition) is given to liquidate the assets, it is known as Orderly Liquidation Value.

160. Monopoly Value:

Certain property may command an excellent situation in highly developed area or enjoying unique advantages not enjoyed by any other property. Due to prime location and absence of supply of any other similar property in the vicinity, the said property will be sold at premium i.e. at a fancy price. This is the monopoly value or a special value due to its unusual and peculiar advantages.

161. Mortgage Value:

It is an estimate of value of a property offered as a security by a borrower to the bank/financial institution for loan advanced. Each financial authority has its own regulations about safety margins etc. to arrive at the safe mortgage value of the property; in case of a bank having safety margin of 25%; mortgage value works out to 75% of market value.

162. Potential Value:

Property put to residential use in the commercial zone (where commercial use is lucrative) will generally have a high potential value of the property by putting it to commercial user.

Again, a property which is fully developed with permissible F.S.I. of 1.00, will become an underutilized property due to additional permissible Transferable Development Right available on account of introduction of TDR policy.

This extra benefit is potential value of the property.

163. Sentimental Value (Personal Value):

It is a value of the property, to the buyer or seller, as the case may be, who determines price on sentimental grounds rather than considering market forces. It may be a special or fancy price due to sentimental attachment to the property. A buyer may offer higher price for an old dilapidated house in a village only because he was born in the said house and sweet memories of the golden days of child hood are attached with it. An owner may refuse to part with his plot even at a higher price than what rules in the market only because he has cultivated an excellent rose garden in his property and he loves each plant as if his own child. Thus, "sentimental value" is the personal value to an individual and has no consideration whatsoever in the market value estimation.

164. Speculative Value:

It is the value of a property to a speculator who invests in the property with the sole motive of selling at a profit within a short period of time. If the speculator thinks that certain area is likely to command greater importance in near future, he may invest funds by acquiring properties in the said sector, even by paying a little higher price than that is prevailing in the said sector. A speculator may foresee, whether with or without reasons, that there is likelihood of change of zoning in certain area, from "No Development Zone" to "Residential Zone". If such guess work materializes the speculator would earn enormous profit. The value presumed by him for the future is the speculative value.

165. Special Value:

This is also a personal value because it is a value to a particular buyer or seller. However, here sale or purchase is not governed by sentiments of individual but is governed by personal reasons of an individual. A purchaser may pay special price for a flat only because it is close to his work place as well as close to his children's school. Other competing purchasers have no such criteria in mind. An entrepreneur may be willing to pay higher price than prevailing in market for an open plot of land next to his factory because said extra land would enable him to expand his rapidly developing industry in most profitable manner. Other buyers have no such consideration. In one of the cases a trust was prepared to pay higher price for purchasing shares of a private company yet the English Court adopted lower value by observing "The price which the trust would have paid, was not an element of the open market value of the shares, but was a fancy price, beyond the open market

price, which such a trust would have paid for special reasons of its own". Purchase price paid by a sitting tenant of a property to acquire full ownership rights in that property, is also the special price and not market price of such a property.

166. Statutory Value:

It is a value of the property estimated in accordance with the provisions of the concerned statute. Value for Wealth Tax worked out as per Schedule III of W.T. Act is the classic example of statutory value.

Value estimated for wealth tax under Schedule III, has no consideration of "willing buyer" and "willing seller" but it has only legal base of various provisions of W.T. Act. Actual market value of a property may be say, Rs.60 lacs. However, as per Schedule III, of W.T. Act, its statutory value could be as low as Rs.1 Lac.

167. Stigma Value:

It is an estimate of the price of the property based on assumption of unwilling purchaser for such a property. Many a time, it is seen that some properties though in good physical condition do not get any buyers in the market because most of the prospective buyers have belief in stigma or disliking about the said property for certain reasons. House may be believed to be haunted by Ghosts. It may also be possible that a murder of a popular personality might have taken place in the said house or the property and hence the stigma. Stigma could be due to belief or suspicion that the plot was used as burial ground or cremation ground in the past or that land is affected by radio activity due to atomic reactor working on plot in the past.

2.0 COST, VALUE, MARKET VALUE, SPECIAL VALUE, VALUE IN USE/EXCHANGE/TO THE OWNER/TO THE OCCUPIER

2.1 Value of a property could be more than its actual cost, may be equal to the cost or it may be even less than the cost; it all depends on demand for and supply of the property in the market at the relevant period of time.

Another important point for consideration for the valuers while estimating value of the property:

- the rights held by the owner in the property or asset being valued.

It is rightly said that what the valuer values is not brick and mortar or land and building, but valuer values the rights of the owner in the property. We can therefore say that the value is the probable payment that a prospective buyer would be willing to make to acquire rights in the property, for anticipated future benefit.

Value of the property in following situations would vary to a great extent:

- (i) Property may be fully owned with owner's possession.
- (ii) Property could be owned but would be wholly in use and possession of tenant who is protected under applicable Rent Act paying rent for use of the property.

2.2 Let us study some practical cases to understand the difference between the words 'Cost' and 'Value'.

A dream resort was built on a hill of Khandala in the year 2000, by actually spending an amount of Rs.500 lakh (Fifty million). In the year 2001, said property was offered as a security for mortgage. Mortgagee's valuer, valued it at Rs.300 lakh only. The reason was that the certain area was found to be built in excess of permissible F.S.I. Here, Rs.500 lakh was actual 'cost' whereas Rs.300 lakh is to be termed as 'value'.

A doctor constructed a four storied building in the year 1990 by purchasing the plot for Rs.5 lakh (500 thousand) and spending Rs.15 lakh on building construction. On completion of the building, it was fully let out to tenants protected under the applicable Rent Act for total rent of Rs.15,000/- per month. For bank mortgage, in the next year, i.e. in the year 1991, the valuer valued this property at Rs.7.50 lakh. Here Rs.20 (5+15) lakh is 'cost' to the owner and Rs.7.50 lakh is 'value' of the property.

It is equally important to understand the proper meaning as well as the difference amongst the words 'market value', 'special value' and 'forced sale value'.

A flat (area 3,000 sq. ft.) at Colaba was sold for Rs.450 lakh. It was purchased in February, 1995 in public auction of Income Tax Department. The purchaser was staying in the flat next to the flat purchased by him in auction and he wanted to use the flat as an office. It was 80 years old load bearing structure. Similar flat in the same building was sold in November 1994 for Rs.300 lakh. There was hardly any price rise from November 1994 to February 1995. Both these transactions have taken place in open market. The price paid in both the cases is genuine. However, Rs.450 lakh is a 'special value' of the property to the purchaser. Special price was paid for adjoining flat with a special motive of using the flat for the office purpose.

In a building at Peddar Road, Mumbai, outside purchasers after making market survey offered a rate of Rs.8,000/- per sq. ft. in the year 2001, for a flat. However, many residents of the building offered a rate of Rs.12,000/- per sq. ft. for same flat as they wanted flat for their expanding family with whom they desired to stay close. Here Rs.8,000/- per sq. ft. is market value whereas Rs.12,000/- per sq. ft. represents special value. Special purpose calls for a special price. Other prospective buyers consider alternative flats available in the market, which is ignored by a special purpose buyer.

A flat (area 2,875 sq. ft.) in Nariman Point area fetched Rs.4.60 Crore in March 2000 in public auction. In the same building, in April 2000, another flat of the same area was sold through a broker after proper marketing at a price of Rs.6.04 Crore. We can say that Rs.4.60 Crore is a 'forced sale value' (price paid under forced sale situation) and Rs.6.04 Crore is the 'market value'. Here 24% less price was obtained in market, for similar flat, under forced sale condition.

- 2.3** There are number of factors, which affect value of real estate. Increase in F.S.I. can increase value of the land if there is a demand. Increased money supply also could increase sale price of properties in the market, which we are experiencing since 2007. On the other hand, construction of fly-over in front of the building could reduce the value of flat. Flats on main road would normally fetch higher price than flats in by-lanes. Sea front properties generally fetch higher prices. Flats in new building built under Slum Redevelopment Scheme would generally fetch lower rate.
- 2.4** A well-known personality approached a bank for a loan and offered his large office premises (area 3,300 sq. ft. with 400 sq. ft. terrace) at Thakur Complex, Kandivali (East), as a security. Borrower's valuer reported value of office block at Rs.90 lakh. Bank's panel valuer valued at Rs.65 lakh. Bank's valuer mentioned that though society had not objected to change of user of premises from residential to office use, as per Development Control Rules, office use was not permissible and hence he had valued the premises as residential flats and not as commercial office premises. The valuer also deducted for the cost of restoration of single office premises back into five residential flats as before. Lesson to be learnt is that the commercial user do increase

the value of premises provided the said use is legally permissible and there is a demand for commercial premises. **The sealing order of the Supreme Court in the year 2006, for properties situated in Delhi, is an eye opener in such cases. Those premises were approved as residential premises but were used as shops and offices, which were contrary to zoning regulations.**

- 2.5** A hotel was built in barren area 50 km away from a city. Water supply was by tanker – power supply was by generator- the hotel was linked with main city by a regular road. The hotel was next to the stadium.

The cost of the hotel was 50 million US dollars. The bank finance was 40 million dollars. The hotel occupancy was only 3% (10 days in a year) during car race in stadium. There were additional losses because of extra cost of providing water and power services in the said area. There were no buyers in market due to losses. An expert valuer advised bank to convert hotel cottages in to weekend villas by further investing 5 million dollars for conversion. Ultimately, the said property was sold for 200 million dollars to various city dwellers as a weekend house. This example shows us that **alternative and better use of the property is also one of the important criteria in valuation.**

- 2.6** A hotel having 100 rooms is built in the desert of Sahara at an investment of Rs.100 Crore (one billion) 10 years back.

Its occupancy in each of last five years did not exceed 10%.

The owner of this hotel approaches bank for a loan. The bank appoints a valuer. The valuer first calculates the cost of replacing an identical hotel which works out to Rs.200 Crore. Then he calculates the depreciation for age of the building as Rs.20 Crore and reports the value at Rs.180 Crore. Is it correct? It is not, simply because the valuer has not taken into consideration the earning potential. No prudent investor would invest in a property which does not generate sufficient return on investment. Though the Depreciated Replacement Cost (DRC) is Rs.180 Crore, its value is much less in this particular case mainly due to factors external to the property itself - the economic obsolescence.

- 2.7** A building is constructed with bricks made out of 22 carat gold and the owner wants to let out the building. A prospective tenant is not aware of the fact that the building is constructed with golden bricks and he quotes the rent prevailing in the locality. On the owner informing him that the building is constructed with bricks made out of gold, the tenant poses a question - Can I take out the bricks? To this, the owner replies negatively. If rent is calculated on the basis of return on investment, then it will be very high as building is made out of golden bricks.

The tenant simply replies that even if the building was made out of platinum bricks, then also he would not pay more than the rent prevalent in the locality.

The prospective tenant will offer to pay rent based on utility and benefit to be derived by occupying the property and for that purpose he will be prepared to pay rent prevalent in the market.

In this case, if the property is fully developed and located in Mumbai and the tenant is protected under the Rent Act paying a net rent of Rs.1.0 lakh per annum, will command a price of say, Rs.15.0 lakh. Vacant property is available in the locality for about Rs.2.0 Crore. If alternative accommodation at a cost of Rs.2.0 Crore is given to the tenant then the landlord will get the vacant possession of the property and if the property is demolished and golden bricks are recovered, it may fetch several Crore of rupees.

2.8 In the context of value, it is worthwhile to have an idea of two expressions 'value-in-exchange' and 'value-in-use'.

Value-in-exchange is the price that would tend to prevail in a free, open and competitive market on the basis of an equilibrium set by the forces of demand and supply.

Value-in-use is the worth of an asset to a specific user or set of users. As value-in-use is related to specific user's needs, it is often referred to as subjective value.

The following illustration throws light on various terms - cost, price, value and worth. The management of a chemical plant 'A' wanted to acquire chemical plant 'B'. The management of plant 'B' who knew the dire need of the management of plant 'A', offered to sell at Rs.200 Crore (rupees two hundred Crore). 'A' appointed valuers of immovable property and plant and machinery for valuation of plant 'B', who did an excellent job and estimated value at Rs.1,25,00,00,000/- (Rupees one hundred and twenty five Crore). Keeping these figures in mind, 'A' started negotiations with 'B'; and ultimately transaction was settled for Rs.1,75,00,00,000/- (Rupees one hundred and seventy five Crore), and there was a big hue and cry from the shareholders of plant 'A' for entering into transaction. Board of Directors of Plant 'A' convinced the shareholders that, what they are paying is Rs.50 crore higher than the market value; but for the company that also will makes a sense. Because there are extremely good orders on hand with plant 'A' to be executed in next 2-3 years and if plant 'A' cannot execute these orders due to installed capacity not being sufficient and green field project would take minimum 2 years, the company will loose profit to a great extent and therefore it is desirable to buy the plant 'B'. Even by paying higher price, there will be excellent surplus profit on execution of the orders.

In the above case, Rs.1,25,00,00,000/- (Rupees one hundred and twenty five Crore) is the market value, whereas Rs.1,75,00,00,000/- (Rupees one hundred and seventy five Crore) is price paid and cost to 'A' and also worth to 'A'. While advancing loan, bank has to consider market value and not the cost to 'A'. If cost to 'A' is taken as market value, then assets offered as security will not fall under secured assets as defined under section 5(n) of Banking Regulation Act, 1949.

- 2.9** A landlord wanted to let his premises when rentals were considerably rising; he offered the premises to a prospective tenant (who was fully aware of the market that the rentals are going up) at a slightly lower rent for a long period with a condition that in the event of his vacating the premises before the expiry of agreed term/period, he will pay damages/compensation to the landlord. The tenant agreed to this condition because according to his calculations the rentals were to go up further. But, in reality it so happened that in a short span of one year, rentals went down to 50% i.e. the next door identical premises were available at 50% of rent paid by him; the tenant could not vacate the premises as the benefit of 50% rent was less than the damages required to be paid to land lord in the event of vacating the premises as per the terms of contract.

Here value to the owner, value to the occupier and market value are all different.

This is indicative that in valuation process, what we are valuing is the rights of the individuals in the property; and not the land and buildings as such, and for this, it is necessary to study the agreement amongst parties in order to understand the contractual obligations of various parties involved. For this purpose, it is the duty of the valuer to study the contract/agreement.

- 2.10** Bridges, roads, flyovers and other infrastructural assets are generally not exchanged and they have value-in-use and their value depends on the benefit derived by the society.
- 2.11** Value of a thing/commodity in terms of other thing/commodity i.e. power of one commodity to command over other commodities in transaction of exchanges, is known as exchange value. When however, an object/commodity is exchanged for and is measured in terms of standard monetary unit i.e. money, it is known as 'Price' of a commodity. Price is determined by the on-the-spot interaction of demand and supply. Price tends to restore the balance between supply and demand and is in fact a mechanism balancing demand (at a price) and supply (at a cost). Price thus takes into consideration both demand schedule and supply schedule.

3.0 VALUATION MAXIMS

Value of Real Estate is conditioned by following aspects and factors:

- Physical
- Legal
- Social
- Economic
- Utility
- Marketability
- Transferability
- Scarcity
- Present worth of future benefits, and
- Intangible rights

3.1 Physical aspects

- (a) Size/area, shape, access, etc.
- (b) Location with reference to amenities, facilities available in locality.
- (c) Buildings/Development which include engineering aspects, architectural aspects and facilities within property itself.
- (d) Utilities and other services in the property.

3.2 Legal aspects

The various government actions can be classified as legal forces. They have a far-reaching effect on the value of real estate.

A partial list of legal aspects affecting value which a valuer must know includes:

- (a) Zoning and land-use regulation.
- (b) Central and State Govt. Legislations
- (c) Building and safety regulations.
- (d) Environmental protection laws.
- (e) Government – sponsored urban redevelopment and housing finance programmes.
- (f) Regulation of industries.

Town Planning Laws

Draft or Final Development Plans or Master Plans prepared by Local Planning Authorities i.e. Municipal Corporations/Councils or Planning and Development Authorities, include proposals for –

- (a) Allocation of land uses or Land Use Zoning,
- (b) Proposals for new roads, road widening and designation or reservation of lands for various public purposes providing civic amenities, social facilities and Utility Services etc.

- (c) Development Control Rules for regulating development.

All these proposals have their effect on market values of properties in different ways. Land use zoning restricts type and quality of use of properties while Development Control Rules to prescribe restrictions on intensity of use.

(a) **Land Use Zoning**

Development Plans allocate lands for various uses such as residential, commercial, industrial, etc. (Land Use Zoning). Depending upon permitted land use, the value of land varies.

(b) **Land Designated for Acquisition**

Land earmarked for public reservations are not permitted to be developed by the owner and it will be acquired by local authority for public purpose. Such reserved sites, if acquired under the Land Acquisition Act, compensation is paid for it.

(c) **Development Control Rules:**

Every local authority and municipal corporation prescribe rules and bye-laws for development and construction on the land under its jurisdiction. These building bye-laws and development control rules (D.C.Rs) also affect value of land. Important provisions of these bye-laws affecting value of lands are F.S.I. (Floor Space Index) or density control provision, open space rules and height restrictions.

For certain narrow plots, only ground floor or ground and first floor are allowed to be built on plot as per provision of Development Control Rules. Many a time, such restriction results in lesser utilization of F.S.I. thereby limiting intensity of use as compared to the permissible limits for the locality. This restriction, therefore, reduces the property values. Minimum open space required to be provided all round the building, also sometimes results in less intensity of development in the plot and hence reduces value.

Central and State Govt. Legislations

There are some Central and State Govt. legislations which restrict or regulate development on land and sometimes even regulate holding of land. These restrictions in turn, reduce value of properties in the open market.

- (i) **Rent Control Act** is another Act which in effect reduces value of properties to a very low level. As per provisions of Rent Control Act of Maharashtra, rent of buildings occupied by tenants protected under the Rent Control Act is

frozen at its standard rent level and the permissible increase in rent is very less compared to inflation. Under this Act, tenants who are protected under the Act cannot normally be evicted from premises and thereby protected tenants are virtually getting permanent protection against eviction. Tenancy rights do not extinguish even after the collapse of the building. Tenant can even claim tenancy in the rebuilt building constructed on the plot. Thus, landlord does not virtually get back land, once building on land is let out.

Different states have enacted different Rent Control Acts to suit to the conditions prevalent in the respective states. However, provisions of freezing of rent and protection against eviction are almost common in all States.

- (ii) **National Highway Act and Railway Act** regulates development in the plot adjacent to Highway and Railway lines by prescribing restrictions of no construction zone or set back lines/building lines for a certain distance inside the plot from Highway center/Highway boundary. For a small plot, this restriction may result into an unbuildable plot and in turn its value will reduce drastically.
 - (iii) **Civil Aviation Authority** regulates and restricts height of **buildings** on plots in the vicinity of Airports. These height restrictions will result in low consumption of F.S.I. on plot and ultimately reduces value of the land.
 - (iv) **Coastal Regulations** restrict and regulate development on all lands falling within 500 m. distance from high tide line along the sea coasts. The Act adversely affects the value of sea front property, falling within 500 m. distance from high tide line.
- Sometimes clearance is required from irrigation canals and also 'nallah' passing through the plot. This reduces buildability in the plot. If optimum use of land is not possible because of these restrictions, value of land falls substantially.
- (v) **Indian Electricity Act** regulates development on land falling under power transmission lines. If high tension power transmission line passes through the plot, no construction is permitted in certain distance on either sides of such a line and also no development is permitted for certain prescribed safety distance. This affects land value.
 - (vi) **Ancient Monument Protection Act** which restricts and regulates construction activities.

Or

any other Acts having bearing on value of landed property like Tribal Act, Land Reform Act, etc. of various States/Central Governments.

3.3 Social aspects

The social forces affecting value include all the characteristics and customs of the people that make up the community. Here is the partial list:

- (a) In certain parts of southern India, plots on **'T' junction** have very limited marketability as hardly anybody comes forward to buy such plots. In western India, such plots are sold like hot cake. This is indicative of the effect of the social forces having effect on market value.
- (b) Family sizes and age-group distribution in the neighbourhoods and communities.
- (c) Neighbourhood stability and attitudes about property.
- (d) Population growth, decline or shifts at the community, regional and national levels.
- (e) Life-style and living standards

3.4 Economic aspects:

The major economic forces affecting real estate include:

- (a) Income level of neighbourhood and community residence.
- (b) Employment opportunity and rents.
- (c) Level of wages.
- (d) Availability of money and credit, and interest rate levels.
- (e) Price levels and property tax burdens.
- (f) Personal saving levels and investment returns.
- (g) General business activity.

3.5 Utility

Utility is the power of goods to render a service. In order to possess value an asset ought to have utility.

In other words, real estate have some use and therefore have a value.

Utility can also be termed as the power of a good or service to satisfy needs of human beings. Value is dependent on the degree of satisfaction derived, which varies from person to person and hence it is subjective.

The main criterion in the valuation of any property is its utility. The method used in the valuation exercise must have the main objective of quantifying usefulness of the property valued.

Utility is not an absolute condition but a relative or comparative term. As per example, the utility of an agricultural land is conditioned by its productivity. Its value is dependent on the quantity and quality of produce.

If the land has potential for development, then its productivity is measured by how it will support potential use as a residential, commercial, industrial, or mixed use.

Utility is measured over the normal useful life of a particular asset. At times, a particular asset may become temporarily redundant or otherwise removed from production or put to alternative use. It may also be kept idle for some time due to market forces. Valuation in such a situation requires a special skill.

The main effect of political or economic uncertainty is a variation in utility; it could be in terms of capacity or efficiency. It is the Valuer's responsibility to assess the market. The property or asset valued need to be viewed in the light of all factors, internal and external, having a bearing on its operating performance.

The utility is explained in the following illustration.

Let us consider a case of manufacturing facility established five years back as per technology available then. The buildings and plant & machinery required for the process are shown in photographs marked 'A' and 'B'. Photograph 'A' shows specially designed building with walls having abnormally high thickness (1000 mm) and height (15000 mm) and a large built-up area.

Photograph 'B' shows rows of aluminium trays used for manufacturing process. These aluminium trays are housed in the building shown in photograph 'A'. The total investment in building and equipment was approximately ₹ 15 Crores.

Now, the technology has changed and current process is carried out in a white coloured reactor (shown in Photograph 'C') which requires building area less than 80% of the old process.

The latest process has following advantages:

- Improved quality
- Improved yield
- Less capital cost
- Less running cost / operating cost

The current cost of brand new reactor and building required for the same capacity (as of old process) for latest process is ₹ 7.5 Crores

This gives an idea that buildings and equipment used in old process are functionally obsolete and utility of these assets is also adversely affected.



Photograph - A shows the building in which aluminium trays are installed. The building is specially designed with walls having abnormally high thickness (1000 mm) with height of about 15000 mm and a large built-up area.



Photograph - B shows rows of aluminium trays used for manufacture, housed in building mentioned in photograph - A



Photograph - C shows the white coloured reactor for manufacturing

3.6 Scarcity

The properties which are available in limited quantity and are not in abundance command high value.

3.7 Demand & Supply

Demand and supply have direct bearing on value. This is the most important factor, because a dilapidated building (which has out lived its economic life years back) in a main business area of metropolitan city commands high price due to its demand on account of its location as well as demand for property in the area far exceeds its supply.

3.8 Transferability/Marketability

The ownership and possession of the property can be transferred by way of sale, gift, lease, mortgage, will etc. and hence it has a value.

3.9 Present worth of future benefits

The decision of making any investment is based on the current value of the future benefits to be earned by that investment, and the value of a particular asset is represented by the present value of its projected future benefits.

3.10 Intangible rights

In the process of valuation of tangible assets, the subject matter of valuation is the value of rights derived from ownership of tangible assets. This is explained in detail in examples given under subject matter of valuation.

4.0 CONCEPTS - INCOME GENERATING PROPERTIES

4.1 In estimating market value of an interest in a property, following important aspects are required to be considered:

- (i) Net income
- (ii) Period – income flow
- (iii) Security and rate of interest
- (iv) Dual rate of interest
- (v) Rate of interest for capitalization
- (vi) Benefit
- (vii) Capital erosion and capital appreciation

4.2 Net Income

It is the annual income that can be legitimately expected to be derived by a person interested by putting the property to highest and best use. In the case of freehold interest, the net income would be gross income at the market rent less all types of outgoings like annual taxes, annual repairs, etc. In the case of lessor, net income will be rent reserved under the lease for the unexpired period of lease and after such period, reversion to net annual income of market rent with deduction of all annual outgoings. In the case of lessee/ sub-lessee, net income would be annual profit rent i.e. market rent (or rent reserved under lease) less rent reserved under lease or sublease as the case may be. In the case of a tenant or licensee, he is permitted to occupy or enjoy use of the property only on payment of rent or license fee and normally he is not legally expected to derive any monetary benefits by transferring or assigning the property.

4.3 Period – income flow

A free holder can enjoy the net income from a property, in general, in perpetuity. In case of land, net income would be perpetual. In case of building net income can be enjoyed for the future life of the building.

In the case of leasehold property, lessor is entitled to receive –

- (i) Lease rent for the unexpired period of lease
- (ii) Market rent after the expiry of lease i.e. reversion to net income (market rent less outgoings) in perpetuity, deferred for unexpired period of lease.

Or

Market value of property (as if vacant) deferred for unexpired period of lease.

In the case of lessee or sub lessee, the period for which he can enjoy profit rent is the income receivable during unexpired period of lease.

If such future life is sixty years or more, it is considered as perpetual and in case the future life is less than 60 years, net annual income can be capitalized for perpetuity allowing deduction of cost of reconstruction of the building deferred for future life of the building.

4.4 Security and Rate of Interest

The degree of security gets reflected in the rate of interest for capitalization of net annual income. Higher the security (i.e. lower the risk factor) lower is the rate of interest for capitalization (i.e. higher the Y.P. multiplier) and vice-versa. In other words, the rate of interest is inversely proportional to the degree of security. For estimating the appropriate rate of interest for capitalization of net income, it is necessary to ascertain the degree of security of investment by asking questions regarding the safety and liquidity of capital as well as regularity and ease of collection of net annual income. The estimation of market value of a property depends on correct estimation of the rate of interest for capitalization.

In the case of all types of investments, including that in real estate, there are certain criteria which go on to decide the level of safety of investment (or conversely the risk factor) or characteristics of sound investment .

The following factors determine the soundness of investment which has a direct or indirect bearing on the valuation of real estate:

- Security of capital
- Liquidity of capital
- Security of income
- Regularity of income
- Ease of purchase and sale
- Least costs of purchase and sale
- Divisibility of holdings
- Security in real terms
- Capital appreciation prospects

Security of capital is a vital feature, as only imprudent investors will invest their money in an investment in which the risk of losing money is high. The vast majority of investors will only wish to place their money in an investment if there is a strong probability that they will be able to recoup their capital at any point in time should the need arise. The greater the chances of their being able to get their original money back at any point in time (or the greater the security of their capital), the greater will be their willingness to invest.

Security of income is another vital consideration, and it must be borne in mind that, in investing money, an investor is giving up the immediate use of that money and is allowing its use to pass to some other party. In return for giving the use of his money to someone else, he requires payment, and this payment will be the interest his money earns. It is his reward for foregoing the use of his own money, and before he is prepared to give it up he will wish to be reasonably certain that he will get adequate payment for such use, and that there is a high degree of certainty that the payment will, in fact, be made.

Regularity of payment of interest is naturally coupled with certainty of interest. If regular payments are made, the borrower is less likely to get into arrears, whilst the receipt of interest at regular intervals enables the lender to phase such receipts to meet regular expenditure which he may be incurring, and this will assist his own budgetary control.

Investments which are easy to exchange at market place by buyer and seller will be particularly attractive to an investor who may be likely to require his capital in relatively short notice.

Cost incurred in investing and withdrawing is as vital as the speed with which capital invested can be realised. Some investments have little or no cost incurred in depositing money and subsequently withdrawing it, but with others there may be considerable expenses to be met, such as the payment of professional fees, stamp duty, and sometimes even a certain amount of interest as penalty if the withdrawal of capital is premature. Obviously, the cheaper it is to invest and withdraw money, the more attractive will be an investment.

Many a time an investor is interested in withdrawing part of his money. In such cases he will be at a great advantage if he is able to sell part of the holdings, but this is not always possible. For instance, if he has invested in a piece of real property it may be difficult for him to sub-divide and sell a portion of it.

During inflation, when the purchasing power of money is rapidly decreasing, it is not only important that the capital which was originally invested should be capable of recoupment at any point in time, but also that the investment in which the money has been placed appreciates at a sufficiently rapid rate to keep pace with the changing value of money. Such an investment is known as investment secured in real terms and it is also often referred to as being a good hedge against inflation, or as being inflation proof. In recent years, this quality perhaps bears the most desirable quality of an investment, and the fact that property has generally satisfied this requirement has tended to make it a very attractive investment for those who require security in real terms. A cautionary word should be added at this stage to point out that not all types of property fall into this category (e.g., rented property occupied by the tenants

protected under applicable Rent Act) and undoubtedly there will be some types of property in the future which may not be secured in real terms. Nevertheless, it is generally true to say that sound investments ought to ensure hedging against inflation compared to other alternatives.

An investment where all the above criteria are 100% satisfied is called a 'Gilt Edged Security' as found in investment in long term Government bonds and these are generally considered as gilt-edged security.

4.5 Dual Rate of Interest

Another important basic principle is in respect of use of dual rate of interest for capitalization of net income. The two rates of interest are - The '**remunerative**' rate of interest which is the remuneration on capital invested and the other is '**accumulative**' rate of interest at which the annual sinking fund accumulates, at the end of certain period, to the original capital invested.

The appropriate remunerative rate of interest which depends on the degree of security offered by investment should be estimated by conducting study of real estate market in the area concerned. The remunerative rate of interest should **never** be adopted on ad hoc or thumb rule basis.

Property having terminable income may be short term leases or building having life span of 60 to 80 years not affected by the Rent Act. As income is terminable, capital invested in building and/or premium paid to acquire leasehold interest must be accumulated within income termination period. This accumulation, therefore, requires highest and assured security with no risk whatsoever. Therefore, rate of accumulation has to be lowest possible (i.e. at minimum rate) below which it is not likely to fall during entire period of accumulation of capital. The accumulative rate of interest should, therefore, be minimum i.e. 2½% to 3½%.

The use of dual rate table (valuation table) automatically takes care of sinking fund element of net income and hence the amount of sinking fund to be kept aside need not be worked out separately when dual rate is used.

The Rate of Reversion i.e. the rate at which income or capital receivable in future should be deferred.

Then the question arises, what should be the rate of revision?

It depends on the terms and conditions of lease, mainly on reversion of the property after the expiry of the lease period. If terms and conditions are such that the lessor is assured of reversion then it should be same as rate of capitalisation. If terms and

conditions are such that on expiry of lease period, lessor is not assured of reversion on account of uncertainty, in such cases rate of reversion should be 1% to 2% more than the rate of capitalisation.

4.6 Rate of Interest for Capitalization:

The rate of interest for capitalization of net annual income for the appropriate period should be estimated by the study of the real estate market in the area concerned. Temptation to adopt ad hoc rate of interest should always be resisted.

4.7 Benefit

Expecting or anticipating a benefit is one of the natural instincts of all living creatures. No one acts or takes any action unless there is some benefit existing or anticipated.

Benefits can be tangible or/and intangible and are ultimately measured/counted in terms of saving of time and saving of money or conserving or recouping energy.

Gross Rent - In the case of real estate benefit arise out of –

- (a) Safety, design or hygienic conditions including light and ventilation, etc. of structure
- (b) Provision of utility services like water supply, sewerage, electricity, etc.
- (c) Locational advantages like nearness to facilities, amenities, shops and markets, work places, etc. which are reflected in market rent and net annual income.

Net Annual Income - The benefit accruing due to ownership and occupation is in the form of net annual income and is estimated by deducting all annual outgoings from the gross annual income from a property. In income approach to valuation, such net annual income is considered as annual interest on capital invested in buying a property.

4.8 Capital Appreciation and Capital Erosion

(a) Capital Appreciation

It is extremely necessary for a Valuer to be aware of trends in various investment markets including real estate market. A Valuer must also be aware of returns expected by the investors in real estate market at different period of time. A Valuer must also appreciate effects of additional money supply in money market as well as effects of crisis in money market. It is common knowledge that funds normally flow from one investment market to the other market depending upon possibilities of better short term and long term returns as well as security.

In the case of investment by investors in the form of Govt. bonds, saving certificates, fixed deposits, etc. the depositor either gets interest regularly with return of capital at the end of the term or gets back original investment together with interest payments accumulated at the compound rate of interest over the fixed period. In both the cases, what an investor gets back is essentially the original capital invested by him; but capital invested does not appreciate.

In case of investment in real estate, due to development of urban areas both in densification and spread over the area, a landed property which was once on the outskirts becomes almost centrally located or improves its locational aspects. Moreover, with the growth of an urban area, development & improvement of infrastructure, amenities & facilities may take place. Moreover, due to surge in population, demand for properties also increases. All these factors accordingly result in increase in prices of properties without owner doing anything for or contributing in any way to such increase in values and hence such increase is termed as 'Unearned' increase. Such an increase in capital value of a landed property is known as 'Capital Appreciation'. In view of possibility of Capital Appreciation, owners/investors usually accept interest at lower rates than those offered by Govt. Securities.

(b) Capital Erosion

As in contradiction of the aspect of 'Capital Appreciation', a valuer must also understand and appreciate another aspect or eventuality wherein the capital invested loses value in real terms. One of the main reasons of such decrease is 'Inflation' i.e. rupee value going down. Due to increase in rate of inflation with time, purchasing power of a rupee gets reduced. In case of investment made in Govt. bonds, fixed deposits, etc. i.e. in pecuniary form for certain term, there is increase in the inflation rate during that term, the investor will get back the same amount he has invested but the purchasing power of that capital amount gets reduced. In other words, value of the capital amount will reduce in real terms and thus will get eroded, i.e. wear away or get reduced. Such reduction in value of capital is known as 'Capital Erosion'.

In the case of investment in real estate/property, as inflation increases, rent levels and capital values of properties also correspondingly increase. Capital invested in a property does not get eroded or reduced in value. In view of this, the investor often determines his willingness to accept interest at rates lower than those yielded by Govt. Securities.

This phenomenon is explained by an example.

In Mumbai, in Vile Parle (E) area on Nariman Road in a good building, 1BHK apartments were available at ₹ 5,000/- per sq.ft. of carpet area on outright purchase

in the first quarter of the year 2003. These premises were fetching a gross rent of ₹ 25/- per sq.ft. of carpet area per month on leave and licence basis (the tenant is not protected under Rent Control Act). The same premises in May 2008 were available at ₹ 10,000/- per sq.ft. of carpet area and gross rent was ₹ 40/- per sq. ft. of the carpet area per month in the year 2008. All the outgoings are borne by landlord. In year 2015, the premises are available at ₹ 30,000/-per sq.ft. of carpet area and the gross rent is at ₹ 75/-per sq.ft. of carpet area per month. The net rent roughly works out to 75% of gross rent.

These figures are tabulated as under:

Year	Rate at which premises were available per sq. ft. of carpet area (in ₹)	Gross rent per sq. ft. of carpet area per annum (in ₹)	Net rent per sq. ft. of carpet area per annum (in ₹)	Rate of yield per annum (%)	Bank deposit rate on long term fixed deposits (%)	Return from Gilt edged security (%)
2003	5,000/-	300	225	4.5	5 – 6	6 - 9
2008	10,000/-	480	360	3.6	8 – 9	8
2015	30,000/-	900	675	2.25	8 – 9	8.5

The above table shows that there is an increase in capital value by 600% from 2003 to 2015. During the same period rental yield has increased by 300%. This has resulted in to the reduction of rate of yield by 50%. **The acceptance of lower yield is mainly due to anticipation of rise in capital value. Rise in capital value is much more than reduction in yield.**

But in case of property in urban areas covered by rent control laws in which the tenants are protected under the rent control act, the problem arises in a peculiar manner; capital invested in real estate gets eroded, on account of protection granted to tenants under Rent Control Act. The reduction in value is not due to actions on the part of the investor. **Rent controlled rented properties are the classic example of capital erosion of the invested capital sum. This capital erosion is due to frozen rents coupled with inflation in the country over a period of several years.** As the inflation grows, the rate of return expected by the investors in the real estate market also increases. As rents are frozen, investor tied up with tenanted property where tenant is a protected tenant, gets lesser return than that is anticipated by other investors in the market and thus he suffers erosion of capital originally invested in the property. Therefore rent act affected tenanted properties are also known as “Depreciating assets”.

5.0 PROPERTY MARKET AND SUBJECT MATTER OF VALUATION

5.1 Property Market

The economic term 'market' refers to a group of buyers and a group of sellers who are in communication with each other for purpose of transaction and both of whom are willing and able to buy and sell at a price. Competition among buyers and sellers acts as a mechanism controlling the supply, demand and prices. Under conditions of perfect competition in an open market, neither buyers nor sellers are able to influence prices by their individual decisions as in the case of monopoly. Perfect competition is facilitated due to comparability and possibility of substitution among the products mainly resulting from standardization and possibility of increasing/adjusting supply and demand by various means.

The term 'market' needs elaboration as it has a different meaning in economics from what is commonly understood. It is usual to describe a market as a place or locality where buyers and sellers congregate for the purpose of trading and fixing prices by bargains. Commodities are already there in view for the intending purchasers. But 'market' as an economic term does not refer to any particular market place but only to a group of buyers and a group of sellers who are in free communication with one another in the matter of transaction by fixing the price of any commodity on the basis of which they are ready to buy or sell. The purchaser opts for buying because the commodity has utility to him and is ready to pay the price he considers affordable commensurate with the utility he derives. On the other hand, the seller must cover his cost of production and earn a reasonable profit. They may be geographically apart by thousands of miles. Thus the market system is a pricing network that directs production and allocates resources. Market determination of price again is a feature determined by the conditions of the market. There are three important economic operations that describe the way the market works:

- (i) The schedule of demand;
- (ii) The schedule of supply;
- (iii) The equilibrium price.

The schedule of demand describes the quantities of a commodity consumers are able and willing to buy on alternative prices, while supply schedule lays down the quantities of commodities that producers will offer on different product prices. As a general rule, at higher price, more of a product is produced and offered in the market; the lower the price, the lower the quantity supplied. Demand behaves in the reverse manner. The forces of demand and supply pinpoint the price at which a product is

marketed as well as the quantity transacted at a particular market price. In other words, the price acts as a resource allocation device. The link between resource consumption and goods produced gives a price signal that is transmitted from the product market to the markets for factors of production. Thus, when the price of cloth is high, it sends immediate signal of high wage to the weavers engaged in production; or the rising return in plumbing services ensures a higher wage to the plumbers.

The pursuit of profit in a market system do not go unchecked. Competition amongst buyers and sellers acts as a control mechanism. Pure competition prevails in a market if there are a large number of independently acting buyers and sellers none of whom can influence price by their individual decisions to enter the market or withdraw from it. The product is treated as a homogeneous commodity and there is widespread diffusion of economic powers among sellers and buyers in the market place. Under conditions of imperfect competition, individual buyer or seller is able to influence the product price by his individual decision of marketing. A seller may also reserve a segments of market either by way of product differentiation, or sales promotion through advertisement, brand-naming, packaging or the like. Consequently, the price then loses much of its resource allocation influence to the extent the buyer or the seller is able to exert his own. When imperfect competition gives rise to monopoly through concentration of market power into a single hand of supplier, he is free to exercise absolute control over the market subject to the limit of any excess inviting threats from potential substitute or intervention by the government. The competition through demand and supply, therefore, provides a check and balance system to the concentration of economic power, thereby monitoring the prices, profits, incomes and ultimately the allocation of resources in a society where free enterprises plays a major role in the economy. The same approach has to be borne in mind as we deal with the real estate market.

Property market differs from market of other commodities in various characteristics due to which conditions of perfect competition are hard to obtain in a property market. These special characteristics are:

▪ **Heterogeneity and lack of standardization**

No two properties are identical and differ from each other in many respects, which act as a constraint on comparison and substitution and hence conditions of perfect competition are almost absent.

▪ **Total supply of land is fixed**

Total supply of land in all areas is fixed and land cannot be transported from one place to another as in the case of other commodities. Converting use of land say from agriculture to non-agriculture, from residential to commercial etc. may be possible, but it is time consuming.

▪ **Inelasticity of supply**

Supply of land/property cannot be increased or decreased quickly to match demand.

▪ **Effect of various legislations**

Various legislations like Rent Control Acts, Town Planning Acts and Development Control Rules, Land Ceiling Acts, etc. affect the use, quality and intensity of use, occupancy, transferability of landed properties constraining condition of perfect competition.

▪ **Imperfect and inadequate information**

Lack of correct and adequate information about transactions contribute to imperfect competition.

Such inadequacy of information is mainly due to –

- (a) **Method of conducting transactions:** Most of the transactions in the real estate market, except open auctions, are conducted privately and adequate and correct information about transactions is not easily available.
- (b) **Various rights and interests:** Various rights and interests, ownerships, tenures, etc. such as freehold, leasehold etc. are being transacted which make comparison difficult.
- (c) **Non-availability of adequate and reliable information:** Information available from authentic sources like records of Registrar's and Sub- Registrar's Offices needs to be supplemented by conducting inquiries during site inspection for obtaining correct information.

The real estate market is subject to severe imperfections, because each individual estate has a unique interest. Besides, prices are usually negotiable and there is no one method of arriving at a transaction. The nexus of the market is built up by communication channels quite different from other forms of transactions. The market does not really relate to real estate as such. What is being marketed are the legal rights, or interests, or the real estate. Since the supply of land is absolutely inelastic and fixed, the only element of elasticity relevant for market composition is the potential for divergent use and creation of new rights or interests. Whereas the total supply of land on earth can hardly be enhanced, the availability of land for any particular use can be augmented by diversion of land from one use to another. This diversion is the result of interaction between the forces of supply and demand leading to the fixation of price in each use.

Again, rights can be created in the real estate through lease, sub-lease, charge, licence, easement etc. Each segment of rights or interests has its own market giving

the shape of a collection of many markets or sub-markets within the real estate market where buying, selling, renting and other activities take place between transferors and transferees.

A thorough understanding of the structure of the market and its working is therefore essential if the market data are to be collected and applied for valuation purpose. As has already been stated, the communication of market information in the real estate market has its own unique style. Communication is effected by the words of mouth in a local market and through advertisements in newspapers and other media for a wider market. But a very important role is played by the real estate agents who act as the broker as well as the source of information. For professionals in land dealings, there are magazines and journals. The records of the registration office where landed property transactions are registered provide a storage of information that may be retrieved by property professionals.

It is also necessary to have an idea about the participants of the market. The people who buy real estates are guided primarily by three motives – purchase for use, acquisition for investment to obtain income or investment for capital gains by way of speculation. Thus, there are persons who want to own a house or place of business; and there are persons who build house for letting out to tenants for rent; and there are again others who seek only for a resale value. In practice, buyers can be motivated by a combination of all three of the above. A knowledge of all these characteristics of a real estate market as well as market trends is a requirement for the valuer advising on real estate. The real estate market is in effect of the amalgam of the transactions of buying, selling, leasing, renting, mortgaging etc. and includes the consideration of the impact of demand and supply that influence the market price and the forces that accelerate or decelerate the volume of transactions. But the responsibility of a valuer demands much more. He does not go merely by the catalogue of prices obtainable in the market since value is not always the price but an 'estimate of price as it ought to be'. Thus the nature, direction and futurity of the market price are the major concern of a valuer. That is why an understanding of the concept of 'market value' is of vital importance. The market price may act as the major indicator of market value, but it is not always equal to the market value. The price prevailing in the market may be due to transient situation that has dominated the forces that make the price what it is. But a valuer has to look beyond the smoke-screen of the present. That is how a detailed treatment of 'market value' becomes imperative.

Property valuation perspective:

Value of a commodity is often mentioned in a market context. In our everyday life we feel inquisitive of value of many commodities every now and then. In fact whenever we make an attempt to purchase a commodity we try to be judicious as regards the price to be paid for it and look back to the market as regards an information on its value. As

we collect information from different parts of the market we get the same answer or nearly the same answer in most cases. But this is not always true with the property market. Answers from the market are only rarely directly available. And even when answers are obtained they attract further questions for clarification. To explain this we must first check up what is the target of a property valuer. What we get as an answer is that his task is the same as with other valuers of goods and commodities i.e., to estimate the price. But why a person with as much of skill and experience is needed for this job? Primarily, this is due to the peculiar nature of the landed property itself – the peculiar aspects of durability, non-transferability and fixity of supply. Durability makes a valuer conscious of not only of the current circumstances of the property but also of the fact that the property will last much longer than perishable goods like a packet of Amul butter or even an Ambassador car and its demand as well as supply may change at any point of time in future both recent and remote depending upon so many factors. Similarly non-transferability and fixity make him conscious of the risks as well as the monopoly advantages.

But not only do the property characteristics themselves pose a problem to fix a value. The characteristics of the property market itself do not sponsor to the fulfillment of the target of a valuer. This is owing to the fact that knowledge of prices is difficult to obtain in the property market because of the nature of the transactions themselves. Again knowledge is costly to obtain as every transaction document might require an examination by an expert say a lawyer or a valuer. Also even with price information, potential purchasers are tied to their social context and other circumstances and do not move from one place to another in response to an advantageous price ignoring their personal background altogether.

Over and above the market context the extreme heterogeneity of property as an economic commodity makes valuations still more complicated. There are a large number of physical characteristics by which a property may differ from any other. Also goods purchased and sold in a property market are in fact various types of rights. The characteristics of these rights greatly influence the price paid for land and buildings in the same manner as the physical aspects of property do.

Lastly the overall macro-economic climate of a country viz. the condition of the financial market, growth of national income, urbanization etc. may influence the property market as a whole.

Again market value itself is not always needed. Sometimes what is needed is a statutory valuation only. This requires special knowledge of the relevant statute.

There are other purposes of valuation too, such as, a valuation for mortgage. Although this primarily aims at market value consideration has to be given for special aspect for such a purpose. Similarly valuation for auction reserve or insurance each

has its appropriate aspects to be looked into.

To summarise, therefore, the valuer's advice is needed for the following reasons:

- (1) Special knowledge of various property characteristics
- (2) Imperfection of property market
- (3) Heterogeneity of real property
- (4) Macro-economic and financial aspects
- (5) Knowledge of various statutes

Property market aspects:

The imperfections of the property market arising out of insufficient knowledge of property prices at different parts of the market and the social bondage of the purchaser playing a substantial role in the property transaction end up in geographical segregation of the property market itself.

What we mean is that a person's choice of property is more influenced by his personal and social connections, such as, place of work, children's schooling and how much he is bound with his inherited or acquired community connections. He is unlikely to move away beyond his horizon of known world because of an advantageous price. His market is therefore largely local in character. Again absence of an organized information system gives insufficient information on suitable properties beyond a person's community enclave. So these two reasons taken together set geographical limits of the real property market. Hence at any point of time there exists a large number of local property markets operating side by side.

Again the demand of prominent sites in national or provincial capitals is mainly guided by investment motive. These sites are appropriate locations to discharge high administrative or business functions. For this reason substantial clients with high paying capacities compete for space in these locations. With growth of a nation there is an ever-increasing demand for these sites and therefore they offer lucrative investment channels with high capital gains prospect. The large institutional investors are indifferent between locations of sites in these centres as they are solely guided by financial gains motive and they make large capital outlay in these locations. So a second category of market exists, covering the chief administration and commercial centres of importance in provincial and national capitals – called a national market.

With liberalization policies adopted in many countries in the world and barriers of territorial restrictions for fund movement being lifted money flows freely from one country to another for investment in suitable locations in world trade centres or commercial centres. Sites therefore may even be in global demand in most important commercial business centres across the world. For example, the advantage of building

up possible business links, say for negotiating capital, has made gold rush of land prices in Tokyo as capital is surplus in this world business centre and available cheap for investment. Firms from all countries of the world compete for space in the heart of central business district of Tokyo for possible business connection. This causes a tremendous rise in land and property prices as sites are attractive to international developers for investment. For this reason the main business and commercial centres of prosperous nations are considered as safe haven for international investment. We therefore discover that for Dic, Tom and ram there is the local property market; for large institutional investors the national property market; and for international investors and developers the very best international business centres.

The commodity in the real property market:

Although we say that we purchase land and buildings in fact what actually changes hands in real property market is nothing but a bundle of rights associated with property. 'The paradox of the land market is that it does not deal in land'. The subject-matter of valuation in a property market is proprietary land units each composed of rights in and over a volume of space which may be above or below the land surface. What is being sold or purchased in a market is an interest in land an abstract thing over a certain building and fixtures having erected on the land. What we buy therefore is proprietary right in the space stated above and over any building that is included in it. The commodities dealt with property market are therefore nothing but proprietary "rights". There exists a number of such rights starting from the occupational rights of a monthly tenant protected by statute against eviction by landlord up to fee simple absolute freehold right in possession. There may be rights wide and varied in nature each having its different value over the same physical land and building. For example, a leasehold right for 30 years with a restriction on subletting by the lessee is different in value from the lease of same duration where the lessee is allowed the power to sublet – although they are associated with the same property. There may be a number of other types of property rights but the most conventional ones are the freehold rights and the leasehold rights. The highest form of these rights is freehold rights. When we value a property, we must be careful enough to recognize the bundle of rights and their variations that are being marketed. So the abstract – the "rights" and the physical entity – the "land and building" together form the proprietary unit and what is transferred is a bundle of rights.

Factors affecting value:

It must be understood that the estimation by a valuer does not create 'value'. Value or price is in fact fixed by the market. The valuer attempts to foresee the price through his methods and skills. It is the demand and supply in a market that truly fix value or price.

Since price is formed by the operation of demand and supply, estimation of price is likely to be affected by a change in their circumstances. Factors governing demand and supply therefore shall be the factors affecting the value of a property. If these factors are undergoing a change then the overall value of all properties shall also suffer from a change. For this reason for the purpose of examination of factors affecting value we will take up the examination of the factors affecting demand and supply of landed property.

Factors affecting demand of landed property:

In a given condition of supply of property demand for landed property may undergo a change owing to the following circumstances:

(1) ***Movement in population***

An increase in population may put greater demand on landed property for both occupation and investment. Land is not only a necessity for providing shelter, land is also the fundamental platform of all human activities. More the people pour in an area more the land needed to accommodate the various activities. The per capita allocation of space for various needs reduces in an urban area with the growth in population. This is very prominent as supply of land is fixed. As a result the gap between demand and supply widens and price rises.

(2) ***Economic activity***

With a rise in economic activity such as industrial growth land needs for other purposes such as commercial centres, roads, houses, hospitals, aerodromes and the like grow. So demand for land for these services and facilities increases steadily. With economic prosperity general income of people rises and demand for individual land uses such as home ownership, recreation, health facility, educational facility etc. also increases. So economic activity pushes up demand for landed property in every sphere.

(3) ***Improved accessibility***

With opening up of new communication facility and transport routes more outlying districts gain advantage of accessibility to urban service centres. This gives rise to a demand for residential land use in the outlying areas and a demand for trade, commerce and service centres in the central areas.

(4) ***Inflation***

The demand for investment in landed property may rise due to inflation, as land is not only a factor of production but also can be advantageously utilized as a store of wealth. Any purchase of real property is an investment. Capital conscious investors prefer landed property as their channel for investment. This is particularly so as landed property shows a steady and certain rate of appreciation in value and is

indestructible in character. For this reason land is regarded as an ideal medium for maintaining real value of money in inflationary times. With inflation occurring in an economy there is a strong demand for investment in land amongst the business communities.

(5) ***Change in taste and social circumstances***

A change in social circumstances may trigger new set of demands for a particular type of landed property. For example, increased trends for independent small family units in urban areas have given rise to large scale development of small flats and flat-lets for upper middle class society.

In general, demand for landed property occurs either for occupation or for investment. Occupational demand may be either out of necessity such as for residential purpose where the property is needed for direct consumption. Occupational demand may also arise for production of services such as when a property is occupied for selling goods (shops) or for producing a commodity (factory). Population rise and economic activity may have a secondary demand for the latter type of needs whereas accessibility and inflation may increase both occupational and investment needs.

Note that none of the points quoted i.e. (1) population changes (2) economic activity (3) improve accessibility or (4) inflation are intrinsic to the property, i.e. these factors are able to change property values although no changes have been made within the property itself. We therefore conclude that value of a property may be increased or decreased without objectively changing the quality or quantity of the property itself. This occurs due to changes in the force of demand which is external to the property.

Factors affecting supply of landed property:

Having thus examined the factors affecting demand of landed property that in turn go to influence its value, we shall now examine the supply side. We shall take into consideration the basic fact that property is valued generally in a market context. That is, at any point of time there is always a given supply of properties and the buyers shall have their choice or selection in the given property stock before they express their willingness to pay. If it were possible to increase supply at a point of time price changes could have been kept low. We will therefore have a closer examination of the factors governing the supply side.

The following aspects are to be noted on the supply side:

- (1) It is noted that in the short run supply of property cannot be increased. This is because development of real property is a time consuming process. So if demand rises suddenly price rise is steep in the short run, as the gap between demand and supply suddenly widens.

- (2) Even in the long run there is a limit up to which property supply could be augmented. This is because supply of land in an area is fixed and increase in demand gives rise to more intensive use of land but because supply is ultimately fixed price rises in the long run too.
- (3) On the other hand, once property has been constructed and demand suddenly recedes away then supply cannot be reduced. Property is a durable capital asset and is consumed slowly over time. The fall in demand has the effect of a fall in property value as existing stock cannot be reduced in the short run excepting by demolition. This may result in capital risk in property investment as property might have to be sold off at reduced price to prevent further loss in a falling market.
- (4) Supply of landed property is dependent upon availability of finance for property development. Imperfections in capital market causing hindrances to flow of fund in the property sector may give rise to inadequate response in supply for a change in demand.
- (5) Due to unfavourable legislation property development may be unattractive to investors. As for example, rent control act may shy away fund from development of rental accommodation because of a chance of fall in real value of income. As a result prices may rise in the new letting sector.
- (6) Planning decision is one of the chief devices by which normal supply of property in the land market could be highly interfered with. The total property market scenario could be controlled by an outline development plan that allocates different extent of land to different uses, prescribes use zoning or density zoning. Thus if restrictions are imposed on commercial development, price of existing commercial properties might be increased and this might give rise to intensive development of permitted commercial lands. Again if liberal permission is granted for any use, say, for residential, that may bring competitive projects for residential accommodation leading to fall in prices.

Although planner's tools such as land use maps and outline development maps are criticized for bringing about a distortion in the normal functioning of the land market by controlling supply, the measures seem to be unavoidable for a long time to come. This is particularly so as private initiative tends to ignore the collective needs of community over urban land such as provision for open space, water bodies or wide roadways in public interest the supply of which is solely brought about by public authorities through the tools of planners. Provision of these service land uses form the quality and the standard of goods in the property market that may in the long run reap higher returns for the private developers' projects.

We may therefore conclude that planning may artificially control supply of goods in the property market and help formation of their standards.

Having thus considered the aspects of supply and demand we are led to the finding that it is difficult to cause an increase in the supply of landed property in the short run. In fact land being fixed in supply it is also difficult to increase the supply of property even in the long run to match with an ever growing demand. As a result with an increase in demand price changes in the land market are more marked than in the case of other goods and commodities. On the other hand, it is difficult to achieve a reduction of supply of existing stock or properties excepting by demolition. Property once produced continues to last longer than human lives. So price changes due to a fall in demand are also well pronounced. In terms of economics we may say that supply of landed property is highly inelastic in character. That is a change in demand has little effect on supply. Again in most cases land being a necessity it is difficult to bring about a reduction in demand in case the supply falls. It is therefore concluded that price changes are more pronounced in landed property with a change either in demand or in supply as neither counterpart is able to adjust with the market.

Since price is formed by the interaction of supply and demand each of the factors influencing supply or demand described above has its effect on market price and hence on value. It is for this reason that we had made a systematic study of the nature of the factors that affect the demand for and supply of landed property. Since the valuer forms his opinion of estimation of value from the evidences of what people have paid for them he must have a reasonable knowledge of how circumstances and other factors had since undergone in a change or going to change since the transaction on which he is depending took place. Property valuation is essentially a matter of comparison and the valuer must be able to analyze the circumstances having their impact on value. Hence the study of supply and demand.

A little of demand, supply and the market:

In economic studies whenever a market is referred the idea conveyed is not purported to mean an organized location for the purchase and sale of goods and commodities. A market in economic parlance means any arrangement by which the buyers and seller are made to interact with one another to form a price at which goods can be exchanged. There are always two sides of a market – the demanders or buyers demanding a commodity or service and the suppliers or sellers supplying the commodity or service in the market. The formation of price is the central objective of the market because both the buyers and the sellers seem to gain from price formation.

Demand and supply are the basic tools for studying an economic market. Demand and supply can be demonstrated by a demand schedule and a supply schedule by relating quantity to price. Alternatively, they may be demonstrated pictorially again relating quantity to price. We intend to explain how the demand and supply tools work in an

economic study in a goods and commodities market first and then extend their domain in understanding the behavior of the property market.

Demand

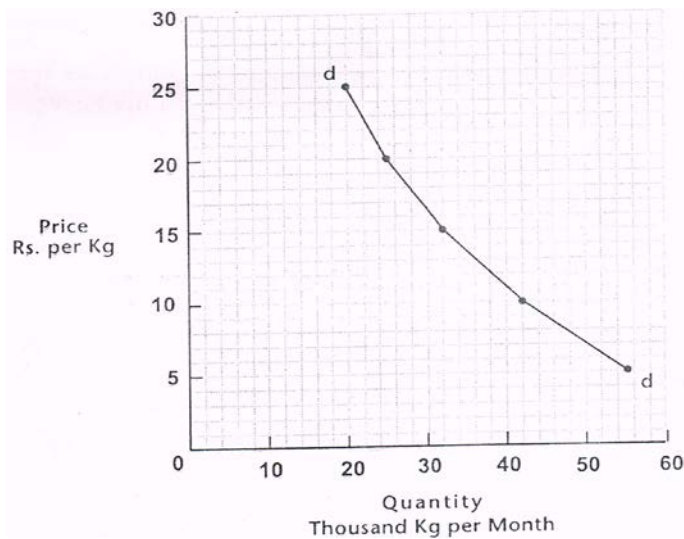
A demand schedule of rice may be demonstrated by the following chart.

Price-Quantity Relationship for Demand of Rice

<i>Observations</i>	<i>Price (₹ per kg)</i>	<i>Quantity demanded (Thousand kgs per month)</i>
	P	Q
1	25	20
2	20	25
3	15	32
4	10	42
5	5	55

The chart relates quantity to price and is called the Demand Schedule of rice. It is evident from the demand schedule that at higher prices the quantity demanded falls whereas lower the price the quantity demanded goes up. This is true at any point of time in respect of any market-price existing at that point of time. This definite relationship between a quantity demanded and its market-price is called a demand schedule of a commodity.

The demand schedule can also be displayed pictorially in the form of a curve, as shown below. This is called a demand curve.



As the demand curve clearly indicates Price and Quantity are inversely related. When price goes up quantity goes down. And when price goes down quantities goes up. This important property holds goods universally for almost all commodities in a business

or trade and is called ‘the law of downward sloping demand’ – signifying that the demand curve slopes downwards from left to right.

Supply

The demand schedule or curve demonstrated the relationship between quantity of goods or commodity the purchasers intend to buy and the market price at various points of time.

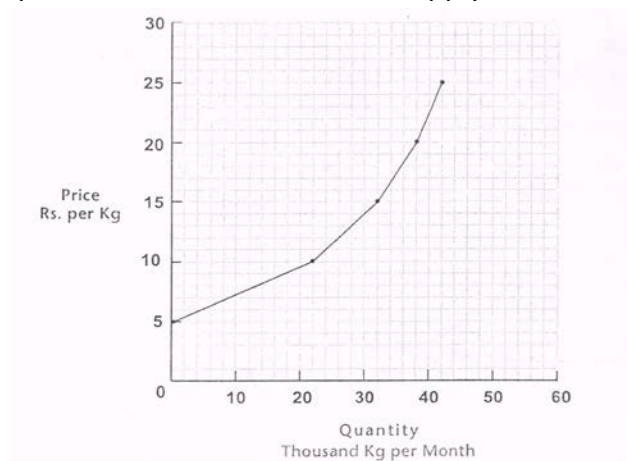
By the supply schedule or curve it is intended to show the relationship between the quantity the suppliers are willing to supply and the market prices existing at various points of time.

The supply schedule of rice in a market can be demonstrated by the following chart.

Price-Quantity Relationship for Supply of Rice

<i>Observations</i>	<i>Price</i> <i>(₹ per kg)</i>	<i>Quantity demanded</i> <i>(Thousand kgs per month)</i>
	P	Q
1	25	42
2	20	38
3	15	32
4	10	22
5	5	0

The supply schedule can also be explained pictorially by a curve, as shown below by relating quantity to price. The curve is called the supply curve.



The supply schedule or curve demonstrates an inverse relationship between price and quantity as with a demand curve or schedule. As prices go down suppliers are less and less inclined to supply a commodity. Whereas they are able to supply more of a commodity when prices go up. The supply curve therefore moves upwards from left to right in the opposite direction of the demand curve as shown in the picture.

So far we have studied separately the demand and the supply schedule. That is, we can say that if price is ₹ 20 per kg (point No.2 in demand schedule) the quantity demanded is 25 thousand kilograms per month or if the price is ₹ 10 per kg the quantity demanded is 42 thousand kilograms per month (point No.4 in demand schedule). Similarly, if price is ₹ 20 per kg (point No.2 in supply schedule) the amount the suppliers will bring in the market for sale is 38 thousand kilograms per month. And at ₹ 10 per kg they will bring for sale 22 thousand kilograms per month. So what will be actual competitive *equilibrium market price*?

For this to understand we are now to cause the demand schedule and the supply schedule combine in a single box first in the following manner:

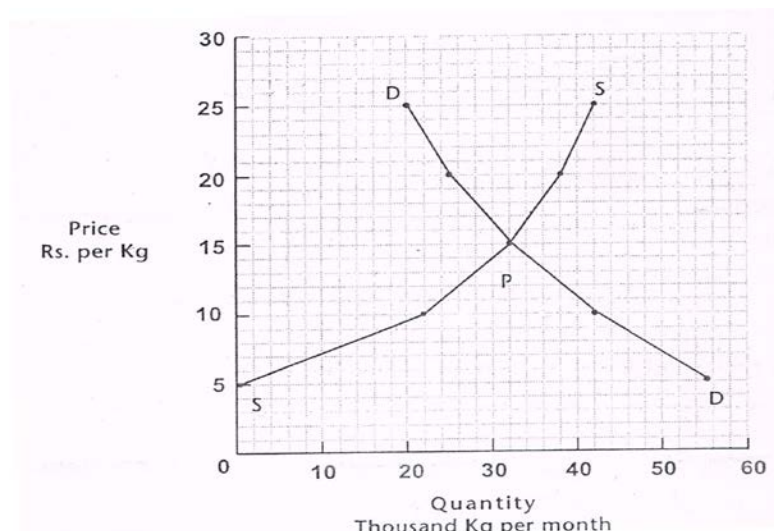
Price-Quantity Relationship for Demand and Supply of Rice

<i>Observations</i>	<i>Price (₹ per kg)</i>	<i>Quantity demanded (Thousand kg per month)</i>	<i>Quantity supplied (Thousand kg per month)</i>	<i>Trend of Price</i>
1	25	20	42	downwards
2	20	25	38	downwards
3	15	32	32	stationary
4	10	42	22	upwards
5	5	55	0	upwards

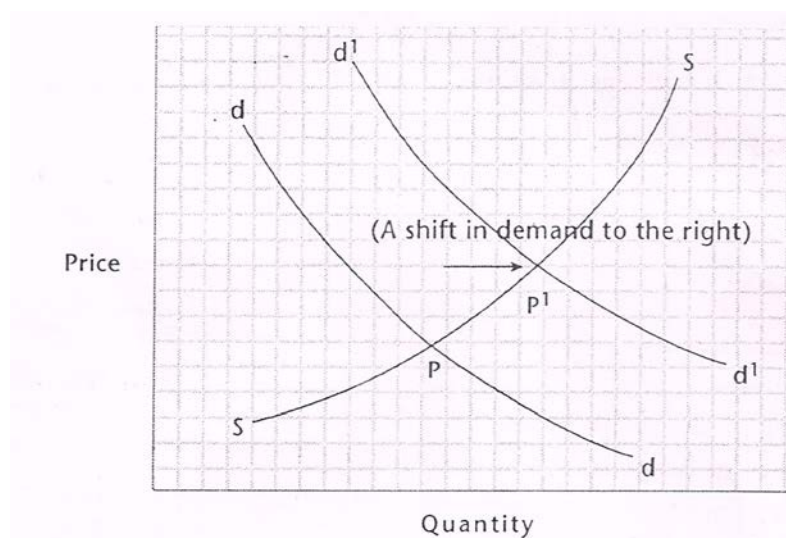
It will be seen that at any price above point No.3 the supply exceeds demand and therefore in order to sell their products, to minimize losses, the suppliers must allow a concession in price. Thus the sellers will compete among themselves to bring down the price.

Whereas at any point below No.3 the purchaser wants more than what the suppliers are able to supply at any price. So in order to satisfy their demand the purchasers will compete among themselves to offer higher price – those who can afford. There will thus be an upward trend of price due to competition of the demanders.

This behavior of the market will occur at any other point excepting at point No.3 where the amount demanded equals exactly with the amount supplied. Such a price is called the *equilibrium price* where the market ultimately sets. Pictorially, this will be at the intersection of the demand curve and the supply curve as demonstrated below.



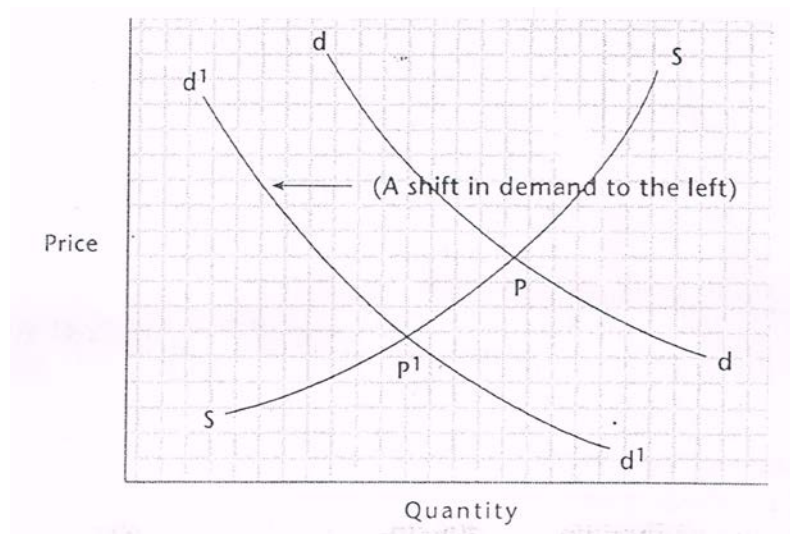
The equilibrium price P as shown in the picture is not set by a single flight. This is settled after an initial trial and error period around the equilibrium level in the market.



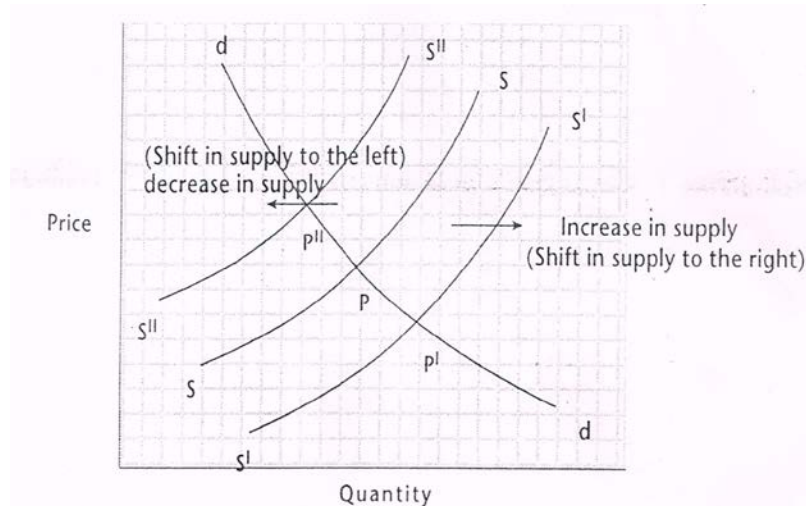
What would happen if at any point of time the total demand in the market is suddenly increased? Such a thing may happen when income of wage earners in a country suddenly shoots up, may be due to a favourable trade balance or exploration of fossil fuel deposits etc. This fact is represented by the movement of the demand curve as a whole to the right. The previous position of the demand curve was at d . Now at every point corresponding to a price on the demand curve people would demand more of a commodity than before till their satisfaction is reached. So if we arrange the new quantum of a commodity demanded against price under this changed circumstance we find a new 'Price to Quantity' relationship denoted by the new position of the demand curve d^1 . Since there is no change immediately of the supply curve in the market the supply curve S remains in its previous position. The movement of the demand curve is called a "shift" in demand. This is different from a

change in demand where the change takes place along the demand curve, may be due to a change in price. Now that the demand curve has shifted as a whole to the right it now intersects the supply curve at a higher point than before. So the level of equilibrium price goes up. This is verified practically when we find that arrival of large number of tourists in a place of tourism interest increases the general level of prices. The total demand of goods in the market has undergone a change – it has been suddenly increased. So the prices have gone up. The demand curve has shifted to the right.

Instead of shifting to the right the demand curve could have shifted to the left. Such a thing can happen when the general level demand for a commodity suddenly drops may be due to a movement of population to some other area or a fall in general income of people. Under such circumstances – the supply remaining constant – the demand curve would have shifted to the left and have intersected the supply curve at a lower level thus reducing the equilibrium price. The position is demonstrated by the diagrams below.



Just as the demand curve shifted to the right or left thus denoting a rise or fall in equilibrium price the supply curve could also have shifted to the right or left effecting a fall or rise in price respectively the demand remaining constant. The position is indicated in the diagram below.



Liberal import policy may result in abundant supply of computer spares and there may be several fold enhancement in the supply of computers by firms. This is denoted by a shift of supply curve of computers to the right (S^I S^I) and a corresponding fall in the price of the computers at the new equilibrium level P^I . Conversely, a rise in the prices of spares due to import restrictions could result in a contraction in the supply of the computers. Eventually, the supply curve would then shift to the left intersecting the fixed demand curve at a higher point P^{II} – indicating a higher equilibrium price.

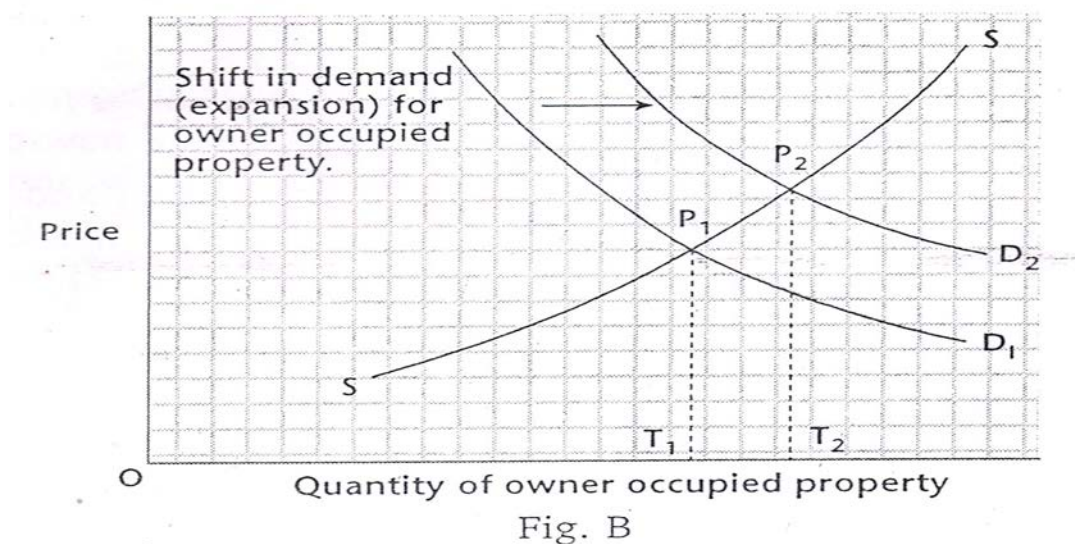
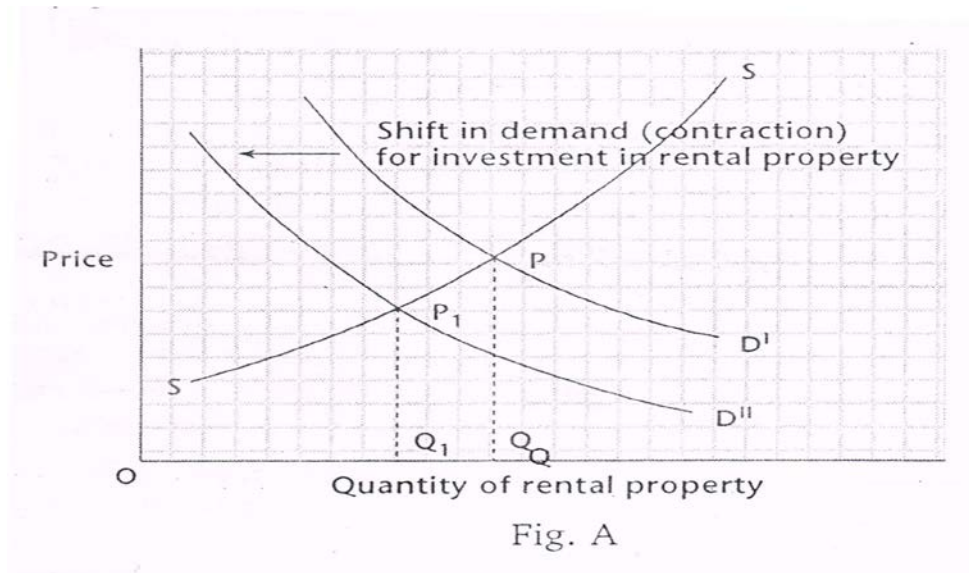
Now that we have demonstrated how the demand and supply tools are made to work in any market of goods are commodities we will extend their application in the case of forces at play in the real property market.

The function of the real property market and demand and supply curves

The main functions of the real property market can be classified under five heads

- (1) To determine the pattern of allocation of interests and resources in real property amongst various land uses and potential proprietors.
- (2) To reflect the changes in the demand pattern of various types of interests and class of property parcels.
- (3) To attract supply to respond to a change in demand.
- (4) To indicate how technology or other external changes can cause a change in supply and hence price.
- (5) To indicate how demand and hence price of substitutes moves as a result of change in prices of a property resource.

The demand and supply curves can be made to demonstrate many of the property market functions quite simply. Thus when rent control acts cause letting out of property a non-attractive investment the demand of owner occupied houses may go up. This is indicated as follows:

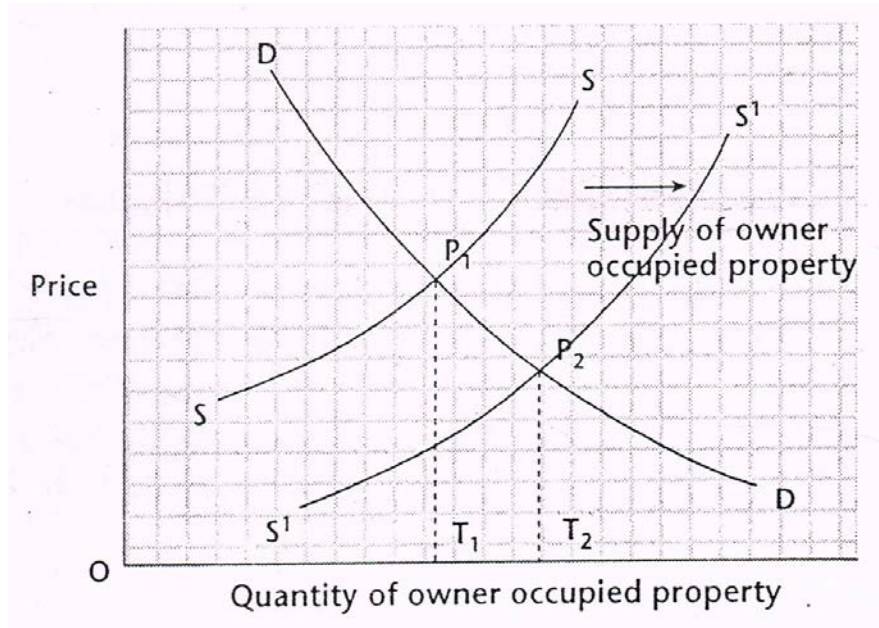


Figures A and B demonstrate one of the important functions of the real property market described at (2) above. It will be seen from figure A that when rent control acts serve as a disincentive to property investors demand for purchase/investment for letting out falls. This is indicated by a shift of the demand curve from D^I to D^{II} to the left. Eventually, supply remaining constant price for rental accommodation drops from PQ to P_1Q_1 . The quantity purchased at new equilibrium price reduces from OQ to OQ_1 .

Again from figure B it will be noted that as rent control persists there is an increasing demand for owner occupied property. This is reflected by a shift of demand curve from D_1 to D_2 to the right. As a result equilibrium market price of owner occupied accommodation rises from P_1T_1 to P_2T_2 , supply remaining constant. The quantity of owner occupied accommodation rises from OT_1 to OT_2 at the new equilibrium price.

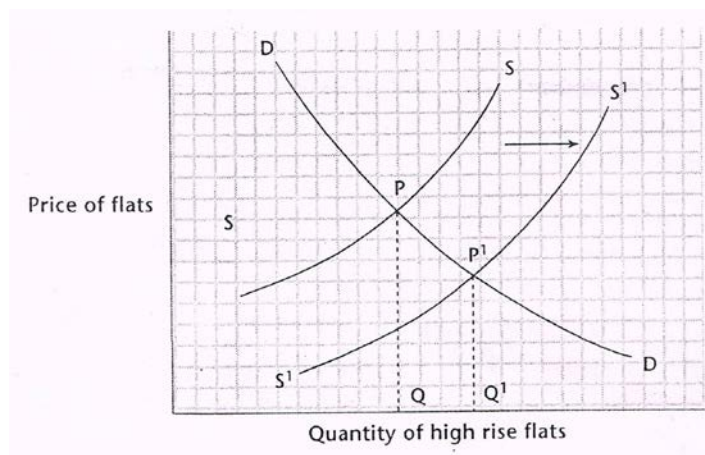
In figures A and B we have demonstrated a change in demand resulting in a shift of the demand curve while the supply remains stationary. Now when price rises due to an expansion in demand the suppliers find it profitable to enter the market. The price

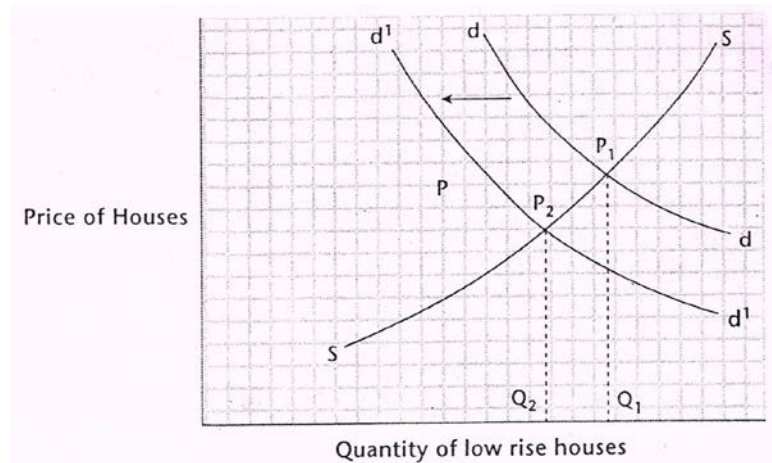
serves as their incentive. But in short run supply of real property cannot be suddenly augmented – development of property being a time consuming process. However, after sometimes supply increases pulling down price to an extent in a new equilibrium level. This is indicated by figure below:



Thus, in the long run as more people construct for their own occupation rather than letting supply is increased from SS to S^1S^1 (a shift in supply to the right) the new equilibrium price for owner occupied property drops from P_1T_1 to P_2T_2 . The quantity supplied increases from OT_1 to OT_2 at the new price.

Similar observation can be made from movement of demand and supply curves in other area of functions of the property market. Thus when cheaper economic methods of construction are developed owing to technological advancement and cost of high rise construction falls, suppliers may be able to produce larger number of high rise flats in tall building blocks. This is indicated by a shift in supply of flats to the right. The price of high rise flats thus falls as indicated from PQ to P^1Q^1 .





As a result of fall in prices of flats more people may want to purchase flats in preference to low rise houses. Consequently the demand for small houses may fall and their price also falls from P_1Q_1 to P_2Q_2 as indicated in the figure above. This demonstrates the function of property market described in (5) above, that prices of alternatives move in the same direction with the original commodity i.e. property resource in this case.

Market analysis – how important in property valuation?

In any exercise of property valuation an analysis of the market is indispensable. The valuer must keep it in the background of his mind that the property to be valued is one of the commodities offered for sale or demanded amongst a number of competitive properties. The market analysis includes an analysis of the neighbourhood where the property is situated as well as the region in the broader context of which several such neighbourhoods are located.

A specific analysis of the neighbourhood would mean to identify the number of properties that are on sale or sold in the market. The physical, external, circumstantial and environmental features of the competing properties are compared with the subject property. Again the study of the region and other macro-economic forces may help sorting out the potentialities of the property – what are the future trends and how the property could be made to adjust or be redeveloped in response to the changes. Many such regional factors are discernible from major Government policies, population movements and large investment decisions. The valuer has to remain alert on all these issues to come to a decisive answer of his market analysis. The methods of valuation operate under this overall background.

How efficient is the real property market?

A market helps allocation of scarce resources in an economy through the price mechanism. The price acts as both an indicator and an incentive of demand and supply

of goods and commodities in the market. When the price of a commodity rises at one part of a market the purchasers flee to other parts to buy. By doing so they cause the demand of the commodity to fall at the costly part of the market. As a consequence price falls. Again when purchasers rush to a part of the market where price of a commodity is low the demand rises due to competition amongst purchasers and if the number of demanders are too many the commodity indicates a shortage of supply as compared to the demand. Its price then begins to rise. As soon as the price rises it is now the suppliers' turn to enter the market to take advantage of high prices. The suppliers are eager to supply in such a market. Their competition now injects a huge flow of the commodity and that may exceed the demand. Eventually the price falls.

In order to make such a price mechanism to be successful certain condition should prevail. First of all, all purchasers must have a clear knowledge of prices of a commodity at different parts of the market. Secondly, there must be an open choice by the buyers to move to different parts of the market to purchase according to their will. Thirdly there must be an uninterrupted flow of goods and commodities from one part of the market to other to enable supply to respond to a change of demand.

These actions to take place any market must have the appropriate technical and economic characteristics.

In the technical characteristics aspect we note that (1) the price aspect of real property is very hazy. First of all, accurate knowledge of price of real property is difficult to obtain due to the nature of transaction and knowledge being quite costly to obtain too. (2) Secondly even with knowledge of price buyers are rarely free to move from one part of the market to another because of an advantageous price owing to their family and social connections. A man is always tied up in a location owing to deep-rooted relations with his surroundings that took years for him to build. Also real property being non-transferable from one place to another flow of goods from one part of the market to another is impossible either to augment the supply or to respond to a receding demand. (3) Thirdly the dealing cost of the real property is quite high because of the existence of a high incidence of stamp duty and associated legal costs of transfer. This cost is comparable to transportation cost of goods and commodities in a commodities market. If the transportation cost is prohibitive the price may fail to cover it and the commodity may remain non-supplied in a part of the market though in abundance in another part.

Thus the lack of knowledge of price, the personal circumstances of the individual buyers and the high dealing cost may cause price differences to prevail in different parts of the same market causing market imperfection.

The second aspect of the market to note is its economic characteristics particularly as regards the extent to which competition prevails by allowing participation of large

number of buyers and sellers in the market so that no one enjoys a monopoly to dictate a high price artificially.

First, it is noted that there is no licensing in the real property market. So entry is free in the market – a large number of buyers and sellers can participate fostering a condition of perfect competition.

But then it is also to be recognized that since property is demanded in local market within a person's known horizon of social and economic connections there is a geographical division of such markets. This leads to an imperfect competition and results in high prices. Also the imperfections of finance market may lead to non-availability of funds to some potential purchasers and deters competition.

Lastly, the peculiar characteristic of real property as regards its spatial fixity leads to a monopoly situation enjoyed by certain site owners to ask for exorbitantly high price. For example, when a small shop owner located in front of a big site realizes that the proposed redevelopment scheme cannot be successful without integrating his land with the property he may withhold supply till he succeeds to squeeze a handsome share in the marriage value that the property would fetch when his interest combines with the rest of the site.

Thus, so far as economic characteristics are concerned though entry is free in the property market for suppliers and buyers the deep-rooted personal connections of an individual may cause restraint to purchase freely at any part of the market thus disallowing participation by a large number of buyers. Local markets may therefore be limited geographically. Also spatial fixity, as described, prompts non-participation by a large number of sellers thus again restraining competition. So price formed may not be competitive market price but influenced by a monopolistic condition and eventually maintains an unduly high level.

The poor efficiency of the real property market however can be attempted to be improved. Experience suggests that the haziness of the knowledge of price can be overcome by using sophisticated valuation techniques, publication of data on sale analyses and market information and professional estate agencies. For this to happen knowledge and education in valuation and development of professional skill are important where Government, universities and professional institutions have a role to play. This is well recognized today in all developed countries and even amongst many of India's south-east and south Asian neighbours.

Similarly, Government initiative to minimize dealing cost by reducing stamp duties and other fees may help substantial influx of funds in the market where again competitive price may be formed.

Also the monopolistic condition owing to spatial fixity of certain lands may be overcome by state intervention through Land Acquisition Act thus causing a supply of the required land and thus keeping down the supply price.

In spite of various imperfections it has been held by property economists that property market cannot be grossly identified as an inefficient market.

First of all, it has been held that difficulty in marketing arising out illiquidity and poor divisibility coupled with high transactional cost is not unique to property market alone. Such characteristics may impair the operational efficiency of a market but not the allocational efficiency which is more important. Property market can allocate land for various uses amongst variety of holders of property rights with reasonably good efficiency (Brown 1991).

Secondly, an efficient market reacts on the basis of new informations impounded in valuations. This is noted to hold good in the case of property.

Thirdly, if poor liquidity and high transactional cost of property were to render the market grossly inefficient then all investors would have abandoned property and have switched their funds to other parallel forms of investment. But it is noted that funds are diverted by investors by comparative performance of alternatives but not necessarily by exhausting property altogether.

It has been held that special knowledge of an intending investor or the special choice of an intending investor may import some inefficiency in the market but these special and uncommon factors cannot upset the general equilibrium level of price in the market. So, there is no reason why property market should be held as totally inefficient. That there exists ways of price estimation of property in a fair play market only confirms the market efficiency.

Finally, if property market was totally inefficient, people would have abandoned all other investments and put their fund to property when real estate was performing extremely well. Conversely, if property indicated poor performance people would have abandoned property and would have diverted funds to other form of investments. But neither of these happen in practice. When performance of property is poor, investment is low but no such phenomenon occurs as abandoning property altogether.

5.2 Interest in a Property : Subject matter of Valuation

5.2.1 The subject matter of valuation i.e. what is to be valued is the 'interest' in a property and **NOT** the physical asset comprising of land i.e. soil, morum etc., and building i.e. bricks, mortar, steel, cement etc. 'Interest' is defined as "Right to derive **benefits** by **legal use** of a property". A person interested is a person who has legal rights of

deriving benefits by putting a property to legal use.

A person may have legal right as:

- (a) An owner or lessor including legal heirs bearing right to derive benefits in perpetuity,
- (b) Lessee having right to derive benefit of profit rent (difference between market rent and rent reserved (payable) under the lease/sublease or for a limited (short term or long term) period of lease, sublease etc.,
- (c) Monthly tenant, protected or unprotected tenant, holding property from month to month i.e. extremely limited period of 30 days and therefore virtually having no right to derive monetary right except as may be provided by law,
- (d) Licensee occupying property by specific permission (usually from the owner) to do so at the pleasure of owner (i.e. so long as the owner pleases) and having no right to derive any benefit except of occupying the property on payment of license fee.

Use of land or property is subject to, or restricted by, existing land laws, such as:

- Transfer of Property Act relating to title and tenures, sale, lease, mortgage etc.
- Town and Country Planning Acts including Development Control Regulations,
- Municipal Acts/Housing Acts,
- Rent Control Acts,
- Land Ceiling and Reforms Acts,
- Acts relating to Contract and Torts,
- Easement Act,
- Succession Laws,
- Any law regulating usage and transfer of property, e.g. environmental laws, Coastal Regulations, etc.

A valuer is therefore required to be familiar with provisions of these laws concerning valuation aspects.

5.2.2 If there are no rights in the property there is no value:

As stated earlier, in valuation of property, we are valuing the rights of individuals in the property and **there can even be a negative right of an individual in a property.**

An interesting case came up before the Supreme Court of India - Dr. K. A. Dhairawan

and Others - The appellants, as trustees, of the Mankeshwar Temple Trust vs. J. R. Thakur and Others - The Respondents (AIR 1958 SC 789).

The lessor 'A' granted a lease to lessee 'B' for a period of 21 years on certain terms and conditions –

- Lease rent of ₹ 50/- per month.
- Under the terms of the lease, the lessees were to construct a double storied building on the land at a cost of not less than ₹ 10,000/-.
- On the termination of the lease, either at the end of 21 years or earlier, the lessees were to surrender and yield up the demised premises including the building with its fixtures and appurtenances to the lessors free of cost.

Accordingly, lessee constructed a building and sub leased to various parties on certain rent.

Lessors served a notice to quit before the expiry of lease and as lessee did not quit, the lessor filed a suit and Supreme Court held as under:

Lessee has no right over the land after the expiry of lease period. The building constructed by the lessee shall vest with the lessors and rent received by the lessee shall be received by the lessor after the expiry of lease period.

The gist of the judgement is given below: Facts of the case –

The lessors granted a lease of a parcel of land to the lessees for 21 years at a rent of ₹ 50/- per month. Under the terms of the lease, the lessees were to construct a double storied building on the land at a cost of not less than ₹ 10,000/-. The construction had to be to the satisfaction of the lessors' engineers, and the building had to be insured for at least ₹ 12,000/- in the joint names of the lessors and the lessees with an insurance firm approved by the lessors. In case of damage or destruction, the building was to be repaired out of the money received from the insurance company. On the termination of the lease, either at the end of 21 years or earlier, the lessees were to surrender and yield up the demised premises including the building with its fixtures and appurtenances to the lessors free of cost. After the expiry of 21 years, the lessors filed a suit for a declaration that they were entitled to the building, and were entitled to claim possession of the same and to recover the rents and profits thereof. The lessees pleaded that they were lessees of the building and were protected from eviction there from by the provisions of the Bombay Rents, Hotel and Lodging House Control Act, 1947 and that the covenant for delivery of possession of the building could not be enforced as the lease in respect of the land could not be terminated on account of the protection given by the Act.

Held,

That upon a proper construction of the lease there was a demise only of the land and not of the building and consequently the provisions of the Act did not apply to the contract for delivery of possession of the building. The ownership in the building was with the lessees and in which the lessors had no right while the lease subsisted.

The appellants are entitled to a declaration that the building constructed on the land demised under the lease, belongs to the Mankeshwar Temple Trust and the said trust is entitled to recover all the rents and profits from the same and the respondents have no right, title and interest therein since the expiration of the said lease. The first respondent is directed to render an account of the rents received by him from the tenants of the building from 23-5-48 and to pay to the appellants the amount found due, after accounting, with interest at 6% per annum from 23-5-48 until payment. There will be an order of injunction restraining the respondents, their agents and servants from interfering with the collection of rents and profits by the appellants from the tenants of the aforesaid building. **Appeal allowed.**

Comments

If the above property had been mortgaged by lessee to the bank one year prior to expiry of lease period and repayment period of loan is 10 years, in case lessee becomes a defaulter after 2 years and at the time of taking loan, valuer had valued as land and building without considering the fact that lessee had a right for one year only. Imagine the fate of the bank!

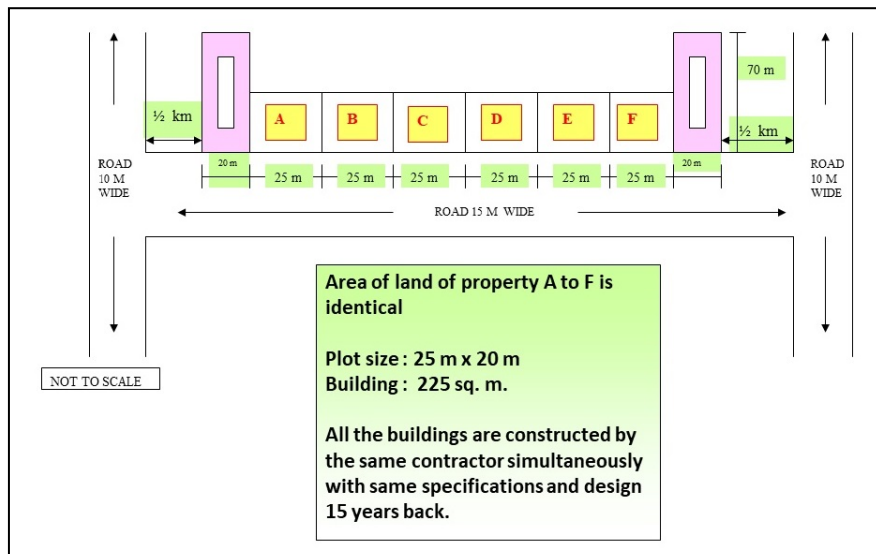
The consideration of this legal aspect falls in the jurisdiction of a valuer.

In fact, such a situation had arisen where a public sector company advanced loan on a property mortgaged by the lessee. After mortgaging the property, the lessee had handed over the possession of the property to the lessor as per the terms of lease agreement. Thereafter the lessee became the defaulter. The mortgagee wanted to recover the money by liquidating the security and for that served a notice to the lessor. **The lessor replied that he is the owner of the property, but he is not the party to mortgage transaction, and hence mortgagee has no right to recover money by liquidating his property.**

The mortgagee approached a senior valuer in the Government Department for the advice. He advised that mortgagee can only recover from their valuer and legal advisor. These consultants did not look into lease agreement and did not advise that mortgagor is not the owner of the property but possessing lease hold rights for the certain period only and therefore **mortgagee had to ensure that period of loan need to be less than the balance period of lease.**

5.3 Illustration

Let us consider the case of six properties mentioned below consisting of land with buildings located in Gujarat (having same area, size, maintenance, shape, design and age). There is no balance potential for further development for all buildings.



Purpose for which valuation is made : Bank finance

Date as on which valuation is made : 1st April 2015.

Prima-facie it appears that value of all the property will be the same. Actually, that is not the case on account of the following facts:

- (a) **Property 'A'** is owner occupied.
- (b) **Property 'B'** is rented at net rent of ₹ 15,000/- per month on 4th September, 2001.
- (c) **Property 'C'** is also rented at net rent of ` 15,000/- per month on 6th September, 2001.
- (d) **Property 'D'** is constructed on land taken on lease and there is a covenant for lessee to pay unearned increase to lessor at 50% in the event of sale or transfer. (Lessee is the borrower).
- (e) **Property 'E'** is also constructed on land taken on lease. Unexpired period of lease is 10 years. There is no renewal clause. There is a covenant to surrender the building constructed by lessee to the lessor free of cost after expiry of the lease period. (Lessee is the borrower).
- (f) **Property 'F'** is in the residential zone as per Development Plan in force and as per revised draft plan which will come into force as on 30 April 2016, it falls under

commercial zone and commercial zone is lucrative than residential. Property is entirely owner occupied.

The value of each of the six properties will be different as out lined below:

- (a) **Property 'A'** is owner occupied and purchaser can get the vacant possession and similar vacant property are sold for ₹ 75 Lakh; giving a market value of Property 'A' at ₹ **75 Lakh**.
- (b) **Property 'B'** is fetching net rent of ₹ 15,000/- per month.
- (c) **Property 'C'** is also fetching net rent at ₹ 15,000/- per month.

Prima facie it will appear that the value for both the property '**B**' and '**C**' will be same as both property are fetching net rent of ₹ 15,000/- per month. But, that is not the case due to following reasons:

- Section 4(1A)(a) and (b) were introduced w.e.f. 5th September 2001 in the Gujarat Rent Control Act, 1963; due to this, Rent Act is not applicable to property let out for the first time on or after 5.9.2001.

Property 'B' was rented for the first time on 4th September 2001.

Tenant of property '**B**' paying a **net rent** of ₹ 15,000/- per month is protected under the Rent Control Act; as it was let out a day before the amendment to the Rent Control Act came into force. Therefore, landlord will not get the vacant possession of property, if tenant abides by the provisions of Rent Control Act. Due to this, value of right of reversion will be negligible. Its market value by rent capitalisation is say ₹ 22.00 Lakh.

Property 'C' was rented for the first time on 6th September 2001.

Due to amendment in the Rent Act from 5th September 2001, the tenant of this property falls under the category of a tenant **NOT** protected under the Rent Control Act.

Therefore, owner is entitled to recovery of possession of property after the tenancy period is over. He has a benefit of right of reversion. The value of property consists of capitalising the net rent for balance period of tenancy plus value of right of reversion. Property having market value of ₹ 75.0 Lakh will be available to landlord on expiry of tenancy period. Value of right of reversion will be present value of ₹ 75 Lakh available after expiry of tenancy period. Value of property C will be higher than the value of property B and lower than property A, say it is ₹ 45 Lakh.

(d) Value of lessee's interest (borrower) in property 'D'

In case of **Property 'D'**, lessee has taken a land on lease and in the event of sale or transfer by lessee 50% unearned increase is payable to lessor and it is a liability which requires to be deducted.

Let us assume that the land was acquired at ₹ 10 Lakh and current market value of land is ₹ 50 Lakh. This gives unearned increase of ₹ 40 Lakh and 50% of unearned increase = ₹ 20 Lakh. Value of lessee's interest without considering unearned increase is say ₹ 60 Lakh. Then after considering unearned increase it will be ₹ 40 Lakh.

(e) Value of lessee's interest (borrower) in property 'E'

In case of default by lessee of this property, if the lessee's interest is required to be sold then the purchaser of lessee's interest in this property can receive the benefit for unexpired period of lease i.e. for 10 years only. This will depress the value considerably. After 10 years, property is to be surrendered to lessor free of cost. Therefore, purchaser can expect rent / derive benefit for the next 10 years only.

The purchaser of lessee's interest can enjoy the property for 10 years. Let us assume that the property is capable of fetching net yearly income ₹ 3.0 Lakh as on 1st April 2015 and YP is 10, then the value of the property is ₹ 30 Lakh.

(f) Value of property 'F'

In case of property 'F', existing use is residential but has a potential for commercial use and commercial use is lucrative. Due to this, it will command high value for commercial use. **Current land rate for commercial land in the locality is say ₹ 35,000/- per sq. m. which gives a value of land ₹ 140 Lakh.** This amount is required to be deferred for one year as D. P. will be implemented after one year. It works out to say, ₹ 127 Lakh.

Scrap value of structure is ₹ 3 Lakh and same will be available after one year as it will be necessary to demolish the building for commercial development. Present value of ₹ 3 Lakh available at 10% after one year is ₹ 2.7 Lakh.

Value of property F will be ₹ 127 + ₹ 2.7 = ₹ 129.7 Lakh.

Summary of value:

Property –A	₹ 75.0 Lakh	(Owner occupied)
Property - B	₹ 22.0 Lakh	(Occupied by tenant protected under rent act)
Property –C	₹ 45.0 Lakh	(- do - not protected under rent act)
Property - D	₹ 40.0 Lakh	(Lessee’s interest)
Property - E	₹ 30.0 Lakh	(- do -)
Property – F	₹ 129.7 Lakh	(Owner occupied)

The land and building in all the six properties are having same area, location, size, maintenance, shape, design and age. But value varies from ₹ 22.0 Lakh to ₹ 129.7 Lakh depending upon occupancy and future potential. **This means, in valuation exercise what we are valuing is not the land and building but the rights derived in owning land and building.**

6.0 MARKET VALUE

6.1 Market Value and related issues

Definition of Market Value:

The Law Commission of India, 1958 under principles of determining compensation under Land Acquisition Act, 1894, under Para 45, has defined 'market value' as –

the price, which a **willing vendor** might reasonably expect to obtain from a **willing purchaser**. The disinclination of the vendor to part with his land and the urgent necessity of the purchaser to buy must alike be disregarded and both must be treated as persons dealing in the matter at **arm's length** and **without compulsion**.

The Courts have held that market value is conditioned with '**willing buyer**' and '**willing purchaser**'.

The following case laws throw further light on determination of market value:

(a) Commissioner of Wealth-Tax vs. Purshottam N. Amersey and anr. (1969) 71 ITR 180 (Bom)

".....it would fetch **if sold in the open market**....." it must have regard to the actual facts and the actual circumstances and decide whether the asset could be sold or not in the open market. In that respect, it seems to us that the Tribunal was clearly wrong on a point of construction. When the statute uses the words "if sold in the open market", it does not contemplate any actual sale or the actual state of the market, but only enjoins that it should be assumed that there is an open market and the property can be sold in such a market and on that basis directs that the value should be found out. It is a hypothetical case, which is contemplated by those words of the sub-section. The tax officer must assume that there is an open market in which the asset can be sold and proceed to value it on that basis. The use of the words 'if sold' creates a fictional position, which the tax officer has to assume."

(b) Raghubans Narain Singh vs. The Uttar Pradesh Government (1967 AIR SC 465)

"Market value on the basis of which compensation is payable under s. 23 of the Act means the price that a willing purchaser would pay to a willing seller for a property having due regard to its existing condition, with all its existing advantages, and its

potential possibilities when laid out in its most advantageous manner, excluding any advantage due to the carrying out of the scheme for the purposes for which the property is compulsorily acquired.”

(c) In case of R.C. Cooper vs. Union of India (AIR 1970 SC 564) Supreme Court, has observed that -

“The market value may be determined from sales of comparable properties, proximate in time to the date of acquisition, similarly situated, and possessing the same or similar advantages or disadvantages. Market value is the price, the property may fetch in the open market if sold by a willing seller unaffected by the special needs of a particular purchaser.”

(d) Prithvi Raj Taneja vs. State of Madhya Pradesh and Others (1977) AIR SC 1560, (1977) SCR (2) 633

“The market value means the price that a willing purchaser would pay to a willing seller for the property having due regard to its existing condition with all its existing advantages and its potential possibilities when laid out in the most advantageous manner excluding any advantage due to the carrying out of the scheme for which the property is compulsorily acquired. In considering market value the disinclination of the vendor to part with his land and the urgent necessity of the purchaser to buy should be disregarded.”

(e) Jawajee Nagnatham vs. Revenue Divisional Officer (1994) SCC (4) 595

“Evidence of bona fide sales between willing and prudent vendor and prudent vendee of the lands acquired or situated near about that land possessing same or similar advantageous features would furnish basis to determine market value.”

The above development from the year 1958 to 1994 provide us a conceptual framework of ‘market value’ definition as under:

- **if sold in the open market**
- **willing vendor**
- **willing purchaser**
- **arm’s length transaction**
- **without compulsion.**

The above conceptual framework will also be found in the definition of Market Value given by International Valuation Standards Council (IVSC).

This is an excellent definition of ‘market value’ and valuer must consider all these

aspects while estimating value.

We have to study this definition by understanding the proper meaning of each and every word used in the definition:

- (i) As valuer has to estimate the amount, he should assume hypothetical buyer and hypothetical seller both willing to transact the deal in hypothetical market and no one being under any compulsion. This means that sentimental aspect and forced sale conditions are to be ignored in market value estimate.
- (ii) Both the buyer and seller must be knowledgeable. If they are ignorant of ruling market trend, the transacted price cannot be fair. Deal should be in accordance with normal business practice.
- (iii) Hypothetical market should be open market where all types of buyers and sellers compete with each other. It should not be a closed or restricted market.
- (iv) Transaction has to be considered at arm's length. It means that transaction between related persons or between close friends should be ignored.
- (v) The words "estimated amount for which an asset should exchange" means that valuer's estimate should be as close and near as possible to the asset's probable sale or exchange price in the actual market.
- (vi) Words "after proper marketing" means after due advertisement, without time constrain at a fair price i.e. price determined after a process of higggle/haggle.

In addition to the various factors considered above, we can also add following two important considerations while valuing a property.

- (i) The valuer while estimating market value of the property should ensure that assumptions and limiting conditions are minimum.
- (ii) The valuer should give reasons for adoption of a particular approach to value, while undertaking valuation for market value.

6.2 Importance of conceptual framework of 'market value' in actual practice

This is explained by an illustration given below.

The client purchased a commercial office premises in New Marine Lines area, behind Income Tax Office, near Bombay Hospital and Churchgate Railway Station at Rs.300/- per sq. ft. in 1981.

Valuation was required for Income Tax purpose. According to the Income Tax Officer (ITO), purchase price was too low.

The client requested a valuer to issue a certificate stating that the market value of the property was Rs.300/- per sq. ft. It was explained to the client by the valuer that mere issuing a certificate will not be of any help, but a speaking report is required in justification of the same; as the transactions in nearby area were taking place at almost double the prices than the price at which the property was purchased.

In this case, to help and protect the client, it was necessary to carry out a detailed exercise in order to satisfy the ITO.

The client furnished the document by which the ownership of the commercial premises was acquired by him. While going through the document, following vital facts were noticed and the client's explanation was sought:

- (a) The land, on which the multi-storeyed building was constructed, was a leasehold land, and
- (b) Whether the purchaser is aware of terms and conditions of lease by which land is given on lease in the year 1901.

The client replied that he was not aware of those details. He had signed the document without reading it. The client was a highly educated professional person.

The client was informed that it would not be possible to proceed further without going through the lease document.

The certified copy of lease deed was procured.

While going through the lease deed it was noted that the lease was to expire in the year 2000 giving an unexpired period of the lease as 19 years and there was no renewal clause. As per one of the covenants of lease, the entire property was to be delivered up to the lessor, free of cost on expiry of lease. In nearby area, properties were sold at more than double the price, because in case of those leasehold properties, the unexpired period was more than 70 years and there was a clause for further renewal for 99 years. There was also no covenant to surrender the property

free of cost. This was a strong justification for transaction, taken place at a lower price.

In order to substantiate the case, research on judicial pronouncements on such covenants was carried out. The Supreme Court case laws were identified, upholding that such covenants are valid covenants. The relevant Supreme Court decisions are:

- Dr. K.N. Dhayraman & Others vs. J.R. Thakur & Others (1958 AIR SC 789)
- Kanji Manji vs. The Trustees of the Port of Bombay – AIR 1963 SC 468

In the same building, other clients also had acquired the premises. As an abundant precaution, they were interviewed to find out whether they were aware of lease of land referred in the agreement by which they purchased the property. They also had signed the document without reading the contents of document. This is indicative that buyers were not falling under the category of **'willing, knowledgeable and prudent buyers'** as they had signed the document without knowing its contents.

This information was collected as an abundant precaution – as the transactions had taken place in the same building at the higher rate and if same are relied upon by the income-tax department, then it can be argued that these transactions are not by **'willing buyers'** and under the Income Tax Act - Fair Market Value to be computed must satisfy the criteria of **'willing buyers and 'willing sellers'**.

The Income Tax Officer accepted the valuation prepared based on the covenants of lease and Supreme Court judgements.

Judicial decisions on market value

The term “market value” has acquired definite connotation by judicial decisions. Any addition to the value of the land to the owner which is the result of such factors as are unrelated to the open market cannot be regarded as a part of the market value (*Union of India v. Shri Ram Mehar* AIR 1973 SC 305; (1973)1 SCC 109).

Much time has been given by the courts in determining what is meant by market value and it is worthwhile to study some of the findings of Their Lordships. Let us take up the judicial decisions pronounced in the context of land acquisition which have shaped the concept since early days of valuation of real estates.

The judgment of the case Sm. Swaranamunjury Dassi v. Secretary of State for India-in-Council ((1927)32 CWN 421), states inter alia:

“I should like to point out the principle of valuation of lands acquired, which has been laid down authoritatively in a number of cases. Mr. James refers to the case

of *Kailash Chandra Mitra v. Secretary of State for India* ((1910)17 CLJ 34) where Sir Lawrence Jenkins observes that the market value of the land acquired is the price that the owner willing, and not obliged, to sell might reasonably expect from a willing purchaser with whom he was bargaining for the sale of the property. That proposition cannot be disputed. Again, it has been decided in the case of *Government of Bombay v. Morwanji Muncherji Cama* ((1908)10 Bom LR 907) that there is no difference between the term 'value to the owner' as used in the Land Clauses Act in England and the expression 'market value' as used in s.23 of the Land Acquisition Act (now s.26 of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013). Therefore, in arriving at the market value of the property, it must be considered what the owner was actually receiving from the property and what would be the amount of loss to him by the acquisition.

The same thing was said in the case of *Secretary of State v. Shanmugaraya Mudaliar* ((1893) LR 20 IA 80 (88)) where Their Lordships observed that the District Judge was right in estimating a rent for the whole of the land instead of taking the rent actually received for a part by the owner in coming to his conclusion as to the valuation of the property acquired. It was, Their Lordships stated, the best, if not the only, method he had for getting at the 'market value of the ownership'. Lastly, I should refer to the case of *Rai Bahadur Lala Narsingdas v. Secretary of State* ((1924)29 CWN 822 (824) (PC)), where Their Lordships of the Privy council observe:

'Now the principle upon which the valuation of the property compulsorily acquired should be measured has been repeatedly laid down by this Board and by the House of Lords. To use the words to be found in *Fraser v. City of Fraserville* ((1917) AC 187 (194)) it is the value to the seller of the property in its actual condition at the time of its expropriation with all its existing advantages and with all its possibilities excluding any advantage due to the carrying out of the scheme for the purposes for which the property is compulsorily acquired'."

The decision in *Fraser's* case was that of the Judicial Committee and it was pronounced by Lord Buckmaster himself who also delivered the judgment in the case of *Narsingdas v. Secretary of State* ((1924)29 CWN 822 (PC)). It has therefore been laid down by the highest authority which we are bound to follow that the value to the seller of the property in its actual condition at the time of the sale should be taken into consideration in arriving at the market value.

An extract from the judgment of Mr. Justice Mookerjee in *Alaul Haq v. Secretary of State for India-in-Council* ((1910)11 CLJ 393) is also to the point.

"There can be no question that in valuing land, which has been taken for public purposes under the Land Acquisition Act, the fairest and most favourable principle

of compensation is to enquire what is the market value of the property, not according to its present disposition but laid out in the most lucrative and advantageous way in which the owner could dispose of it. This principle was recognized by this Court so far back as 1876 in the case of *Prem Chand Bural v. Collector of Calcutta* ((1876)2 Cal 103 (106)). With reference to this decision it may be pointed out that the most lucrative and advantageous way in which the owner can dispose of the land is to be determined with reference to its future utility, but it must not be entirely conjectural. As was observed in the case of *Rajendra Nath Banerjee v. Secretary of State* ((1904)32 Cal 343) future utility is a thing that people have an eye to in buying land and the market price of the land is affected by it: such future utility must, however, be estimated by prudent business calculations and not by mere speculation and impractical imagination. See also *Fink v. Secretary of State for India* ((1907)34 Cal 599). The same principle has also been adopted by the Bombay High Court (In re *Dorabji Cursetji Shroff* (1907)10 Bom LR 675; *Trustees of Bombay v. Karsondas* 33 Bom 28; In re *Dhanjibhoy Bomanji* (1907)10 Bom LR 701; *Collector of Poona v. Kashinath* (1886)10 Bom 585 and in *Munji Khetsey* (1890)15 Bom 279. In the last case it was pointed out that in the neighbourhood of a town where building was going on, it would be unfair to assess the value of land upon its present income if there is a fair probability of the owner being able, owing to its situation, to sell or lease the land for building purposes. Substantially the same principle was recognized by the Judicial Committee in *Secretary of State for Foreign Affairs v. Charlesworth Pilling* ((1901)28 IA 121; 26 Bom 1 (PC)).”

An extract from pages 174 and 182 of Crips on *Compensation*, 8th Edition is pertinent and to the point.

“The principle of compensation is indemnity to the owner and the basis on which all compensation for lands required or taken should be assessed is their value to the owner as at the date of notice to treat and not their value when taken to the promoters. The question is not what the persons who take the land will gain by taking it but what the person from whom it is taken will lose by having it taken from him. The application of this principle must depend upon the special circumstances in each case.”

Again “in assessing the amount of compensation payable when land is taken the probable use to which such land may be put is necessarily an element to be taken into consideration. Land which may probably be used for building purposes cannot be valued on the same basis as merely agricultural land.”

As has already been stated, the basis on which compensation for lands taken is to be assessed is the value of the lands to the owner as it existed at the date of the notice to treat and not their value, when taken, to the promoters. The propositions which follow are set out in a slightly different form by Eve, J, in *South Eastern Rail Co. v.*

L.C.C. ((1915)2 Ch 252 (258)).

“All advantages which the land possesses, present or future in the hands of the owner may be taken into consideration *Cedar Rapids Manufacturing & Power Co. v. Lacoste*; ((1914) AC 569); *Re Lucas & Chesterfield Gas and Water Board* ((1909)1 KB 16); *Fraser v. City of Fraserville* ((1917) AC 187) and the owner is entitled to have the price assessed with reference to those advantages which will give the land the greatest value. The value of an owner’s interest is not properly compensated by assessing the amount of pecuniary benefits obtained by past user in disregard of possible benefits in the future (*Trent Stoughton v. Barbados Water Supply co.* (1893) AC 502; but see *Eldon (Earl) v. North Eastern Rail co.* (1890)80 LT 723). The probability of a more profitable future use is one such advantage which may be taken into consideration. Thus land which may be probably used for building purposes must not be valued on the same basis as purely agricultural land (*R. v. Brown* (1867) LR 2 QB 630; *south Eastern Railway v. Cooper* (1924)1 Ch 211).

But although prospective value is a necessary element in the assessment of compensation, such value must be entirely excluded where it would arise from the construction of the particular works authorized by the Act which gives compulsory powers (*In re Lucas & Chesterfield Gas and Water Board* (1909)1 KB 16; *Cedar Rapids Manufacturing & Power Co. v. Lacoste* (1914) AC 569; *Fraser v. City of Fraserville* (1917) AC 187). It is a recognized principle to exclude from the assessment of compensation any enhancement or diminution in value consequent on the construction of works authorized by the special Act under which the assessment is made, unless there is a special provision in the private or public Act authorizing the compulsory acquisition. There may be a special provision allowing the acquiring party to set off a claim for improvement or betterment.”

In assessing the value of any probable future advantages, it is the present value alone of such advantages which falls to be determined (*Cedar Rapids Manufacturing & Power Co. v. Lacoste* (1914) AC 569 (576)).

The general principles applicable to compensation cases were summed up by Mr. Justice Eve in the case of the *south Eastern Rail Co. v. L.C.C.* ((1915)2 Ch 252), as follows:

- “(a)The value to be ascertained is the value to the vendor, not its value to the purchaser.
- (b) In fixing the value to the vendor all restrictions imposed on the user and enjoyment of the land in his hand are to be taken into account, possibility of such restriction being modified or removed for his benefit is not to be overlooked.
- (c) Market price is not a conclusive test of real value.

- (d) Increase in value consequent on the execution of the undertaking for or in connection with which the purchase is made must be disregarded.
- (e) The value to be ascertained is the price to be paid for the land with all its potentialities, and with all the use made of it by the vendor.
- (f) The true contractual relation of the parties that of purchaser and vendor is not to be obscured by endeavouring to construe it as another contractual relation altogether that of indemnifier and indemnified.”

Eve, J, also epitomized his judgment in the following terms, which are of general application:

“Where an owner of two contiguous pieces of land forming an area suited, and it may be best suited, for development, and use as one building site, sells under compulsion a part of one piece, as a part of that piece, and without any reference to his interest in the other piece, the purchase price of the land so contracted to be sold must be ascertained without reference to the vendor’s interest in the other piece, and is not to be ascertained by deducting the value of what is left to the vendor of the two pieces after the sale from their aggregate value immediately prior to the sale.”

The general principles for determination of market value of land under the Land Acquisition Act (since repealed and replaced by the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013) were laid down with great lucidity by the Privy Council in the case of *V. Narayan v. Revenue Divisional Officer* (66 IA 104; 43 CWN 557). This judgment is of special importance as it explains how far the potentiality of a land should be considered in determining its value. Prior to this case, it was generally understood that where a piece of land possessed a potentiality which was of special value to a particular purchaser who was acquiring it for utilizing that potentiality, there being no other possible purchaser in the field, that potentiality should be disregarded. In *re Lucas v. chesterfield Gas & Water Board* ((1909)1 KB 16), Fletcher Moulton, LJ had said that “the decided cases to his mind laid down the principle that when the special value exists only for a particular purchaser who had obtained powers of compulsory purchase, it cannot be taken into consideration in fixing the price because to do otherwise would be to allow the costs of the Scheme to enhance the value of the land to be purchased under it.” The Privy Council after an elaborate examination of the authorities negative this dictum of Fletcher Moulton, LJ and held that “Even when the only possible purchaser of the land’s potentiality is the authority that has obtained the compulsory powers, the arbitrator in awarding compensation must ascertain to the best of his ability the price that would be paid by a willing vendor of the land with its potentiality in the same way that he would ascertain it in a case where there are several purchasers. Potentialities to be taken into consideration are, however, not realized potentialities, that is to say, land is not to be valued as if it had already been developed and put to

the possible use.”

The Privy Council in its judgment referred to *Inland Revenue Commissioners v. Clay* ((1914)3 KB 466), as an instance: “There was a house of which the value to anyone excepting certain Trustees was no more than £ 750. Those Trustees were the owners of a Nurses’ Home which adjoined the house and they were desirous of extending their premises. They accordingly purchased the house for £ 1,000, the owner thus receiving £ 250 for the potentiality his house possessed by reason of its position adjoining the Nurses’ Home. It was held by the Court of Appeal that £ 1,000 was the value of the house to a willing seller.

“*** Had the house in that case been acquired by a Railway Company or a Local Authority under the provisions of the Land Clauses Consolidation Act 1845, before the purchase by the Trustees, the house ought, in their Lordships’ opinion and for the reasons already given, to have been valued at £ 1,000 and not merely at £ 750.”

It is not, however, easy to assess the addition in value on account of the potentiality of a plot of land. As was said by Lord Romer in that case the expert will have to “value the potentiality on such materials as are available to him without indulging in any feats of imagination”. It must, however, be borne in mind that the land has to be valued as it stood at the material time by taking into consideration that the potentialities are not realized potentialities, as will be seen from the judgment. The learned Collector in this case had valued the land at ₹ 17,745-1/3 inclusive of Statutory Allowance. The land possessed natural advantage for water supply from a spring. The acquiring authority, e.g. Vijagpatam harbor Authority badly needed this water and the acquisition was made for that purpose. On a reference under s.18 of the Land Acquisition Act (now s.33 of the Right to fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013) the learned Subordinate Judge valued the land at ₹ 1,05,000 on the basis of the income that the owner would get from the spring by the supply of water to the Harbour Authority after construction of elaborate and difficult engineering works. In effect the learned Judge took the potentiality as a realized potentiality. The High Court set aside the award of the learned Subordinate Judge taking the view that fifthly of s.24 of the L.A. Act 1894 applied to the facts of this case as the value of the spring as a source of drinking water arose entirely from the requirements of the Harbour Authority. The Privy Council as stated above, held that the potentiality of the land must be taken into consideration, but as it was not a realized potentiality, the Judicial Committee determined the value at ₹ 46,000 inclusive of statutory allowance. The value of the potentiality was thus assessed at a little over ₹ 28,000.

In *Clay’s* case cited by the Privy Council, the addition on account of potentiality or special adaptability that was furnished by the sale figure of the property works at 33-1/3%. The Privy Council case was approved by the Supreme Court in *H.M.E. HAZ V.*

State of West Bengal ((1959)1 SCA 477). The Supreme Court upheld and additional award of 10% “in view of the potential value or special value of the building which was situated in an important commercial locality and in the neighbourhood of the building where another Government office was located”. This was a case of assessment of compensation for the requisition of premises No.9, Chittaranjan Avenue, Calcutta under the Defence of India Act 1939.

Dealing with the doctrine of potential value of this court in *N.B. Jeejabhoy v. District Collector, Thana*, Civil Appeal Nos. 313-315 of 1963 decided on 30.8.1965, observed as follows:

“A vendor willing to sell his land at the market value will take into consideration a particular potentiality or special adaptability of the land in fixing the price. It is not the fancy or the obsession of the vendor that enters the market value but the objective factor, namely, whether the said potentiality can be turned into account within a reasonably near future The question therefore turns upon the facts of each case. In the context of building potentiality many questions will have to be asked and answered: whether there is pressure on the land for building activity, whether the acquired land is suitable for building purposes, whether the extension of the said activity is towards the land acquired, what is the pace of progress and how far the said activity has extended and within what time, whether buildings have been put up or lands purchased for building purposes, what is the distance between the built-in-land and the land acquired and similar other questions will have to be answered. It is the overall picture drawn on the said relevant circumstances that affords the solution (*Raghubans Narayan Singh v. State of Uttar Pradesh* AIR 1967 SC 465).”

The opinion of experts in valuation of properties was recognized by the Supreme Court in *Special L.A. Officer v. T.A. Setty* (AIR 1959 SC 429).

- (1) Opinion of experts.
- (2) Price paid within a reasonable time in a *bona fide* transactions of purchase of the lands.
- (3) Number of years purchased and the actual or immediately prospective profits of the land.

What is fair and reasonable compensation is always a question of fact depending on the nature of the evidence, circumstances and probabilities in each case. The guiding star would be the conduct of a hypothetical willing vendor who would offer the lands and a willing purchaser in normal human conduct would be willing to buy as a prudent man in normal market conditions as on the date of notification under s.4(1) of the Land Acquisition Act 1894 (Now s.11(1) of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013), but not an anxious buyer dealing at arm’s length, nor façade of sale or fictitious sales brought

about in quick succession or otherwise, to inflate the market value. When the court is called upon to fix the market value of the land in compulsory acquisition the best evidence of the value of the property is the sale of land acquired to which the claimant himself is a party, in its absence, the sales of the neighbouring lands. The transactions relating to the acquired land of recent dates in the neighbourhood lands that possessed of similar potentiality or fertility or other advantageous features are relevant pieces of evidence. In proof of the sale transactions, the relationship of the parties to the transactions, the market conditions, the terms of the sale and the date of the sale are to be looked into. These features would be established by examining either the vendor or vendee and if they are not available, the attesting witnesses who have personal knowledge of the transactions (*Periyar and Pareekanni Rubbers Ltd. v. State of Kerala* AIR 1990 sc 2192; (1991)4 scc 195).

In the determination of market of acquired land the court requires to consider the relative values of the lands in the neighbourhood, the soil condition and same or similar advantageous features on comparable sale prices (*Gurlingappa v. Assistant Commissioner and L.A.O., Gulbarg* (1997)3 SCC 627).

Concept to evolve rather than be predetermined

The basic concept in respect of 'fair market value' is that of the price which property would ordinarily fetch on sale in the open market on the date of the transfer. Market value is a very generalized concept. What any particular purchaser pays for land whether at public auction, or by private treaty, is not of itself market value.

The Law Commission of India, in 1958, which considered the question of defining the expression 'market value' in the context of ss.23 and 24 of the Land Acquisition Act 1894 (now s.28 and ss.28 and 69 of the Right to Fair Compensation and Transparency in land Acquisition, Rehabilitation and Resettlement Act 2013 respectively) made the following observations in their report:

"A considerable volume of case-law has, however, been built up on the interpretation of the expression 'market value'. It is not possible to define the expression, nor is it possible to lay down any uniform set of rules for the determination of market value of the land applicable to all cases. In the nature of things, therefore, it must be left to the Courts to evolve the principles for the determination of the compensation in different classes of cases having regard to the nature of the property, its situation and other relevant considerations. Though the Bill of 1893 which was subsequently enacted into At 1 of 1894 contained a definition of market value, it was dropped by the Select Committee which preferred to leave the term undefined. The Committee observed:

"No material difficulty has arisen in the interpretation of it; the decisions of several High Courts are at one in giving it the reasonable meaning of the price a willing

buyer would give a willing seller; but the introduction of a specific definition would sow the field for a fresh harvest of decisions, and no definition could lay down for universal guidance in the widely divergent conditions of India, any further rule by which the price should be ascertained." We agree with this view."

Some Judges have attempted a definition but we feel that no useful purpose will be served by a critical examination of these views expressed by them.

The principles for determining the market value have been fully expounded by the Privy Council in *Raja Vyricherla Narayana Gajapatraju Bahadur Garu v. Revenue Divisional Officer, Vizianagaram* (AIR 1939 PC 98 (now known as the *Chemudu* case.)

"The first principle established by the *Chemudu* case is that, in the case of compulsory acquisition 'the land is not to be valued merely by reference to the use to which it is being put at the time at which its value has to be determined but also by reference to the uses to which it is reasonably capable of being put in the future'. This proposition was treated by the Judicial Committee as axiomatic. The second principle laid down by this decision is that when the land has unusual or unique features or potentialities, the valuing officer must ascertain, as best as he can from the materials before him the price a willing purchaser would pay for the land with these features or potentialities. It is further laid down that the value of potentialities is to be taken into account even where he only possible purchaser for the potentialities is the acquiring authority.

The 'market value' is defined by the Judicial committee as "the price which a willing vendor might reasonably expect to obtain from a willing purchaser. The disinclination of the vendor to part with his land and the urgent necessity of the purchaser to buy must alike be disregarded and both must be treated as persons dealing in the matter at arm's length and without compulsion. The principle of awarding compensation is based on the right of the owner to be indemnified by the community for whose benefit he is deprived of the property against his will."

The Law Commission was, therefore, disinclined to lay down any uniform set of rules for determination of 'market value' and considered it advisable to leave it to the courts to evolve the principles for the determination of the same, having regard to the nature of the property, its situation and other relevant considerations.

Market price as test of value

'Market value' has been defined as the price the property may fetch in the open market if sold by a willing seller unaffected by the special needs of a particular purchase (*Special LAO, Davangere v. P. Veerabhadrapa* AIR 1984 SC 774; (1984)2 SCC 120).

Market value means the price which a purchaser willing to pay for similar land to a willing seller. An offer of sale of land to industrialists on concessional rate with a view to induce them to set up their industries in a particular area does not reflect the prevailing market value of the land. The industrialists are not willing purchasers in the case (*Mahabir Prasad Santuka v. Collector, Cuttack* AIR 1987 SC 720).

In *Collector of Jabalpur v. Babulal* ((1961) Jab LJ 1088; 1961 MPLJ 1219), the following principles were laid down in the matter of determination of market value when the question of compensation for compulsory acquisition came up for decision:

1. Compensation must be determined by reference to the price which a willing vendor might reasonably expect to obtain from a willing purchaser.
2. The value to be ascertained is the value to the vendor and not its value to the purchaser.
3. In fixing the value to the vendor all restrictions imposed on the user and enjoyment of land in his hands are to be taken into account but the possibility of such restrictions being modified or removed for his benefit is not to be overlooked.
4. Market price is not a conclusive test of real value.
5. Increase in value consequent on the execution of the undertaking for, or in connection with which the purchase is made must be disregarded.
6. The value to be ascertained is the price to be paid for the land with all potentialities and by reference not merely to the use to which it is being put at the time at which its value has to be determined but also to the uses to which it is reasonably capable of being put in the future.
7. The true contractual relation of the parties – that of purchaser and vendor – is not to be observed by endeavouring to construe it as another contractual relation altogether that of indemnifier and indemnified.
8. The value of the land in general can also be measured by a consideration of the prices that have been obtained in the past for land of similar quality and in similar positions. But a sale of a plot situated in a locality far removed from the locality in question can furnish no guide for determination of the market value.

In *Government of Bombay v. Morwanji Mancherji* (10 Bom LR 907), the Bombay High Court held that 'market value' means the price which at the given time and place the land would fetch on sale according to the then existing rates of the market which depended on general pre-existing conditions apart from the individual projects of a particular purchaser. It is price offered by a willing and not forced seller to a willing purchaser.

The method of ascertaining market value with reference to market price has been particularly focused upon in the case of *State of West Bengal v. North Brook Jute Mills Co.* ((1971)75 CWN 985) and the following principles were laid down:

1. The market price has to be fixed by reference to date of declaration under s.6 of the Land Acquisition Act (Now s.19 of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013).
2. The market value of the land is its value to the owner when he is willing to sell and what he may expect to get from a willing purchaser.
3. The value to be ascertained is the value to the seller of the property in its actual condition at the time of exploitation with all its advantages and with all its possibilities.
4. The value of the potentialities must be ascertained with such materials as are available without indulging in feats of imagination.
5. In the context of building potentiality many questions will have to be asked and answered, like, -
 - (a) whether there is pressure on the land for building activity;
 - (b) whether the acquired land is suitable for building purposes;
 - (c) whether the extension of the said activity is towards the land acquired;
 - (d) what is the pace of progress and how far the said activity has extended and within what time;
 - (e) whether buildings have been put up on lands purchased for building purposes;
 - (f) what is the distance between the built-in land and the land acquired;

It is the overall picture on the said relevant circumstances that affords the solution.

6. For ascertaining market value, the value to the owner may also be ascertained by capitalizing the rent as one of the methods, though not the only method; but the method of valuation by annual crop value is not always adequate.
7. Methods of valuation may be:
 - (a) opinion of experts;
 - (b) price paid within a reasonable time in *bona fide* transaction of purchase of lands acquired and possessing similar advantages; and
 - (c) a number of year's purchase of the actual or immediately prospective profits of the lands acquired.
8. The market value of the land on the relevant date may also be assessed on the basis of the rate shown by *bona fide* transactions of sale and purchase of land which are comparable units. It is also settled law that for such comparison certain definite kinds of elements have to exist, for example:

- (a) the lands must be:

- (i) of similar character as far as may be,
 - (ii) reasonably proximate to acquired land, and
 - (iii) having similar amenities and advantages; and
 - (b) there should be transactions in time reasonably proximate to the date of acquisition.
9. For capitalizing the annual income, it is the probable income per year of the owner expropriated by acquisition that has to be taken into account.

The next significant case on this matter is that of *Udayan Girija Prasad v. Special Land Acquisition Officer* ((1976)17 GLR 668) in which the Gujarat High Court laid down the following principles:

1. Market value is that value which is not affected by any special need of a particular purchase.
2. Where the market value of a built-up structure is to be assessed, one method which could be adopted is to find out the expenditure likely to be incurred for the construction of a similar house as reduced by depreciation.
3. The property in question should ordinarily be valued as a whole composite unit; aggregate of valuation of its different components such as land and structure would normally not give an idea of the market value.
4. The fact that the purchaser or the acquirer of property does not intend to use the property for the same purpose for which it is used or that he desires to demolish it, is irrelevant in determining its market value.
5. The market price is that price which a normal and prudent buyer, would pay after evaluating the prices prevailing in the round about area and which a normal and prudent seller is willing to accept. It is, therefore, the consensus between the buyer and the seller which would decide the price at which a particular property is bought or sold.

When a person is deprived of his property by compulsory acquisition, he must be paid compensation therefor by determining the value of the property to him, but that does not mean that in calculating the market price, the value to the seller alone must be taken into account even in the case of a voluntary sale. Market value can only be properly ascertained by finding out what a willing purchaser would pay and what a willing seller would accept (*State of U.P. v. Ram Swarup* (1971)3 SCC 857).

Market value as on date

The crucial date of determination of the market value would be the date of the publication of the notification under s.4(1) of the Land Acquisition Act 1894, now s.11(1) of the Right to fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 (*Mehtar v. Collector, Durg* AIR 1975 MP 46;

Nursing Das v. Secretary of State AIR 1925 PC 91; 29 CWN 822 (PC).

The date of notification under s.4(1) alone is relevant for computation of market value. The declaration under s.6 now, s.19 of the Act of 2013 only provides conclusiveness to the public purpose specified in s.4(1) notification, now s.11 of the Act of 2013 (*N. Narasimhaiah v. State of Karnataka* (1966)3 SCC 88).

What has to be determined under s.23(1) now, s.28 of the Act of 2013 is the market value prevailing as on the date of notification under s.4(1) now, s.11(1) of the Act of 2013 but not what was claimed by the parties (*Basant Kumar v. Union of India* (1996)11 SCC 542).

In *Dollar Co. v. Collector* (AIR 1975 SC 1670), the Supreme Court observed that the best evidence of the value of property is the sale value of the very property to which the claimant is a party. Proximity of highway or ports and many industrial and social imponderables enter the verdict of evaluation. It was also decided *inter alia* that compensation for compulsory acquisition as governed by s.23 of the Land Acquisition Act gives high priority to market value of the land as on the date of notification under s.4 (now s.11). The main criterion for this is what a willing purchaser would pay a willing vendor.

An actual transaction with respect to the specific land of recent date is a guidebook that courts may not neglect when called upon to fix the precise compensation. The best evidence is the very sale that is made recently. All that need normally be proved, is that the sale was between a willing purchaser and a willing seller, that there has not been any appreciable rise or fall in value.

Market value envisaged in s.23(1) of the L.A. Act (now s.28 of the act of 2013) is designed to award just and fair compensation for the land acquired and postulates price of the land prevailing on the date of publication of the notification under s.4(1) (now s.11(1)). The acid test for determining market value of the land is the price which a willing vendor might reasonably expect to obtain from a willing purchaser and which would form the basis to fix the market value. The price paid in sale or purchase of the land acquired within a reasonable time from the date of acquisition of the land in question would be the best piece of evidence. A land possessing similar advantages to the land in the neighbourhood of the land acquired in or about the time of notification would supply the data to assess the market value. But exclusion of *bona fide* and genuine sale transactions in respect of the same land under acquisition and to place reliance on the award of some other land is obviously illegal (*Special Tahsildar, Land Acquisition v. Mangala Gowri* AIR 1992 SC 666 (DB)).

In determining market value of agricultural lands, the appellants produced two sale transactions in respect of land acquired in 1961 at ₹ 3,250 per bigha and another

acquired in 1958 at ₹ 5,000 per bigha. The appellants have not produced any evidence to show that the lands were developed and fit for construction of houses and the reference court wrongly put reliance on the sale transactions of 1958 sale deeds at ₹ 5,000 per bigha. Since the lands as on the date of notification were agricultural lands, the value of the land has been rightly determined on the bigha basis instead of yard basis. The appellants have produced sale deeds indicating the maximum which was secured viz. ₹ 3,250 per bigha and so entitled to the enhanced compensation at the rate of ₹ 3,250 per bigha, *solatium* at 15% and interest at 6% on the enhanced compensation.

Market value should be determined according to the use to which the land was put on the date of notification under s.4 of the L.A. Act (now s.11 of the Act of 2013) (*Saraswati Devi (Smt.) v. U.P. Government* AIR 1992 SC 1620 (DB)).

For the purpose of determination of market value sale instance executed after a lapse of two years of notification under s.4 (now s.11 of the Act of 2013) for acquiring land in question cannot be relied on (*Bhikhubhai Kedarbhai Patel v. Deputy Collector, Modasa* AIR 1996 Guj 16).

Relevance of potentiality to market value

Potentiality means 'future utility'. It is the probable use of the property in a more lucrative manner. It is synonymously called 'special adaptability'. The relevancy of potentiality for valuation of land was considered in *Chemudu's* case (AIR 1939 pc 98). The facts of this case are:

Certain lands were acquired by the harbor authorities who were constructing a harbor in Vizagapatnam. They allotted some land in the south of the harbor area to certain oil companies and other industrial concerns. These lands were said to be malarial. The appellant's land was to the south of this land and contained a spring which yielded a constant and abundant supply of good drinking water. The latter could be made available for the oil companies and the people engaged in the harbor works. The land of the appellant was acquired for execution of anti-malarial works and the appellant claimed compensation for the area as a building site. The Land Acquisition Officer disallowed this claim of potential value as a building site. Compensation was awarded as partly waste and partly cultivated land taking into consideration also an allowance for some building and trees. The appellant moved for a reference to the subordinate Judge urging a further claim of potential value of the land as a source of water supply.

The court approved of his claim as a source of water supply but dismissed the claim as a building site. The potential value as a water source was real, the water could be sold to the oil companies and others at a profit. Such compensation could be allowed even where the only possible buyers could be the oil companies and the harbor authorities.

In appeal the High Court was of the opinion that supply of drinking water had no value apart from the scheme for which the acquisition was made. The harbor authorities were the only possible purchasers and the land could not be considered as a building site.

The matter was further taken up to the Privy Council. Lord Romer delivering the judgment stated:

“The compensation must be determined, therefore, by reference to the price which a willing vendor might reasonably expect to obtain from a willing purchaser. The disinclination of the vendor to part with his land and the urgent necessity of the purchaser to buy must also be disregarded. Neither must be considered as acting under compulsion The value of the land is not to be estimated at its value to the purchaser. But this does not mean that the fact that some particular purchaser might desire the land more than others is to be disregarded. The wish of the particular purchaser though not his compulsion, may always be taken into consideration for what it is worth It is often said that it is the value of the land to the vendor that has to be estimated. This is not in strictness accurate. The land, for instance, may have for the vendor a sentimental value far in excess of its ‘market value’. But the compensation must not be increased by reason of any such consideration. The vendor is to be treated as a vendor willing to sell at ‘market value’ to use the words of s.23 of the Indian Act There is not in general any market for land in the sense in which one speaks of a market for shares or a market for sugar or any like commodity. The value of any such article at any particular time can readily be ascertained by the prices being obtained for similar articles in the market. In the case of land, its value in general can also be measured by a consideration of the prices that have been obtained in the past for land of similar quality and in similar positions, and is what must be meant in general by the ‘market value’ in s.23.

But sometimes it happens that the land to be valued possesses some unusual, and it may be unique features as regards its position or its potentialities. In such a case, the arbitrator in determining its value will have no market value to guide him and he will have to ascertain, as best as he may, from the materials before him what a willing vendor might reasonably expect to obtain from a willing purchaser for the land in that particular position and with those particular potentialities The land is not to be valued merely by reference to the use to which it is being put at the time at which its value has to be determined but also by reference to the use to which it reasonably capable of being put in the future No one can suppose in the case of land which is certain, or even likely, to be used in the immediate or reasonably near future for building purposes but which at the valuation date is waste land, or is being used for agricultural purposes, that the owner however willing a vendor will be content to sell the land for its value as waste or agricultural

land as the case may be. It is plain that in ascertaining its value, the possibility of its being used for building purposes will have to be taken into account. It is equally plain, however, that land must not be valued as though it had already been built upon, a proposition that is embodied in s.24(5) of the Act and is sometimes expressed by saying that it is the possibilities of the land and not its realized possibilities that must be taken into consideration. But how is the increase in the value of the land by reason of its potentialities or possibilities to be measured? In the case instanced above of land possessing the possibilities of being used for building purposes, the arbitrator would probably have before him evidence of the prices paid in the neighbourhood for land immediately required for such purposes. He would then have to deduct from the value thus ascertained such sum as he would think proper by reason of the degree of possibility that the land might never be so required or might not be so required for a considerable time. In the case, however, of land possessing potentialities of such an unusual nature that the arbitrator has no similar case to guide him, the value of the land must be ascertained in some other way. If the owner of the land is the only person who can do, the value to him must be ascertained by reference to what profit he might thereby have been able to derive from the land in the future. Take as example the case of an owner of vacant land that adjoins his factory. The land possesses the potentiality of being profitably used for an extension of the factory. But the owner is the only person who can turn the potentiality to account. In valuing the land, however, as between him and a willing purchaser the value to him of the potentiality would necessarily have to be included.

“The same consideration would apply to cases where the owner is not the only person but merely one of the persons able to turn the potentiality to account. The value to him of the potentiality will not be less than the profit that would accrue to him, by making use of it had he retained it in his own possession But Where the owner is himself unable to turn the potentiality to account in such a case, there may be several other persons who would be able to do so or there may be only one. If there are more than one the owner is entitled to be paid the value to him of the potentiality, though the ascertainment of its value may, in some cases, be a matter of considerable difficulty The value of the potentiality must be ascertained by the arbitrator on such materials as are available to him and without indulging in feats of imagination Upon the question of the value of the potentiality where there is only one possible purchaser The value should be the sum which the arbitrator estimates a willing purchaser will pay and not what a purchaser will pay under compulsion.”

The Privy Council finally concluded that the special adaptability of the land for the supply of drinking water had no value apart from the scheme for which the acquisition was made. The only really possible purchaser of the special adaptability of the appellant's spring as a water supply was the harbor authority. In such circumstances

the possibility of the appellant's water being made available for the harbor by any one other than the harbor authority was altogether negligible and the only enhancement in value to the appellant of his land by reason of its special adaptability as a water supply was the sum that the harbor authority as a willing purchaser would have been willing to give in excess of the land's 'poromboke' value. Their Lordships added:

"In the present case the land must be valued not at the sum it would be worth after it had been acquired by the Harbour Authority and used for anti-malarial purposes but at the sum that the authority in a friendly negotiation Would be willing to pay in order to acquire it for these purposes It is plain, therefore, that in view of the fact that the water could not be exploited by the appellant himself and that it would necessary be some years before the water could become a profit earning asset in their hands, the harbor authority, however willing purchasers they might be, would not have agreed to pay anything like that sum (claimed)."

Their Lordships in the end awarded compensation to the tune of ₹ 40,000 as against ₹ 1,05,000 awarded by the subordinate Judge.

In *Chemudu's* case market value was considered to be the value to the owner in its actual condition at the date of the notification under s.4 with all its then existing advantages and disadvantages and defects and with all its future possibilities. It is not permissible to take into consideration any advantage due to the carrying out of the scheme for the purpose for which the property is acquired. But the value of the potentialities may be taken into account, even where the only purchaser is the authority purchasing under powers of the eminent domain.

In *Mirza Nausherwan Khan v. Collector* (AIR 1974 SC 2247; (1975)1 SCC 238), the Supreme court laid down the following principles as to potential value in a case under the Hyderabad Land Acquisition Act (9 of 1309 Fasli):

1. The determination of potential value is quite within the ken of the Appellate Judge.
2. As to the principle of belting, no general principle can be laid down. Local circumstances guide the court. It is however clear that in dealing with the value of an extensive plot of land in a city, the strip that adjoins an important road will have a higher value than what is in the rear, for obvious reasons of potential user or commercial exploitation.
3. The compensation paid for the value of a tiny plot is no measure when a large area is acquired.
4. The story of potential user disbelieved by the courts below would not be reopened by the Supreme Court.

In *Raghubans Narain Singh v. State of Uttar Pradesh* (AIR 1967 SC 465), the Supreme

Court held that the potential market value is the value that a willing purchaser would pay to a willing seller for a property, having due regard to its existing condition with all its advantages and its potential possibility when laid out in its most advantageous manner excluding advantages due to carrying out any scheme for which the property is compulsorily acquired.

In *Gulazra Singh v. State of Punjab* ((1993)4 SCC 245) the Supreme Court accepted the potential value as a basis to determine the market value for the purpose of compulsory acquisition. The same view was taken in the case of *Inder Singh v. Union of India* ((1993)3 SCC 240) in which the Supreme Court found that *abadi* land fetching ₹ 33,600 per acre had potential value for development, such as for building houses etc. as in the immediate neighbourhood, and accordingly redetermined the market value of such *abadi* lands at ₹ 42,000 per acre, after recording the finding that the lands at ₹ 42,000 per acre, after recording the finding that the land possessed of potential value. But in the case of *Land Acquisition Officer, Eluru v. Jasti Rohini (smt.)* ((1995)1 SCC 717), the Supreme Court rejected the plea for fixation of compensation on the basis of potential value and made the following observations in the particular circumstances of the case: "In fixing the market value on the basis of its potentiality for use for building purposes, it must be established by evidence *aliunde* that the potential purpose must exist as on the date of acquisition by other possible purchasers in the market conditions, prevailing as on the date of the notification. Existence of constructed house or construction activity in other similar lands in the locality for the purpose contended for or of purchase for such purposes as on the date of proposed acquisition *prima facie* indicates that there is demand for and the possibility of the immediate user of the land and it is a reasonable possibility to infer that the acquired lands also are possessed of potential value. Therefore, the existence of a demand for and market at the time of acquisition for potential use must be established as a fact from reliable and acceptable evidence to show that if the acquired land has been thrown into the market, others would have bought it for the special purposes or for building activity which would show the demand for and a market to purchase the land possessed of potential value for the purpose of building activity at that time. On proof thereof the land must not be valued as though it has already been built up but the possibility to use for building purpose existing as on the date of the notification must be taken into consideration. The question whether the land has potential value as a building site or not is primarily one of fact depending upon diverse factors as to its conditions, the use to which it is put or is reasonably capable of being put and its suitability for building purpose. Its proximity to residential, commercial or industrial area, existence of educational, cultural, industrial or commercial institutions, existence of amenities like water, electricity, drainage and the possibility of future extension in that area, the existence of or prospects of development schemes, the existence or absence of building activities towards the acquired land or in the neighbourhood thereof are the relevant facts to be taken into consideration in evaluating the market value on the basis of potential use of the land.

It is true that an element of guess, in an estimate, would have a play in determining the market value. But the present value alone falls to be determined and feats of imagination should not run riot or travel beyond its manifest limits nor be an arbitrary or whim of the court in determining the compensation or the fixation of the market value. The existing conditions, the demand for the land in the neighbourhood and other related and relevant facts should be taken into consideration in determining the compensation on the basis of potential value of the land.”

The court must consider the suitability of the acquired land for putting up the buildings for residential, commercial or industrial buildings which have already come up in the neighbourhood and also the possibility to obtain amenities like water, drainage, electricity supply etc. Absence of statutory impediments like obtaining sanction for layout would be yet another relevant circumstance. It must be established that the land is possessed of potential value as above as on the date of notification under s.4(1) (now s.11(1) of the Act of 2013). The determination of compensation under those circumstances must be just and adequate (*G. Narayan rao v. L.A.O.* (1996)10 SCC 607; cases referred *L.A.O. v. Jasti Rohini* (1995)1 SCC 717; *P. Ram Reddy v. L.A.O., Hyderabad Urban Development Authority* (1995)2 SCC 305; see also *Union of India v. a. Ajit Singh* (1997)6 SCC 50; AIR 1997 SC 2669).

Agricultural land acquired for staff quarters of the Damodar Valley Corporation was in the vicinity of important schools, offices, court and residential buildings. There was continuous rise in the valuation of immovable property which was required to be considered in assessing the market value of the land (*Ram Narain Gope v. Deputy Commissioner* AIR 1990 Pat 108).

For the purpose of determining the market value of the acquired land the future potentiality of the land and nearness to the capital city have to be taken into consideration (*State of Punjab v. Surjan Singh* AIR 1990 P&H 312).

In the case all the plots of the acquired land are situated adjacent to national highway and the relevant factors of each plot are similar keeping in view the purpose of construction of Barog bypass road for which lands were acquired. The main factor is potentiality which was indisputably the same in respect of all the plots of acquired land as all of them could be used for the establishment of commercial units, guest-houses and residential houses. *Held*, assessment of market value of all plots at flat rates proper (*L.A. Colelctor v. Sukhdev Singh* AIR 1995 hp 150; *Mangalagiri Venkata Seetaramyya v. Special Tahsildar L.A., Vishakapatnam* AIR 1994 NOC 74 (AP)).

The best method of determination of market price to the plots of land under the acquisition appears to be to rely on instances of sale of the same land or portion of it near about the date of notification under s.4(1) of the Land Acquisition Act 1894 (now s.11(1) of the Right to fair Compensation and Transparency in Land Acquisition,

Rehabilitation and Resettlement Act 2013). The next best method is to take into consideration the instances of sale of adjacent lands made shortly before and after the notification.

When market value is to be determined on the basis of sale instances in the neighbouring locality, the potential value of the land need not be separately awarded because such sales cover the potential value (*Jogendra Nath Chatterjee v. State of West Bengal* AIR 1971 Cal 458; 75 CWN 737).

Potential value is to be distinguished from the present value, and varies with passage of time, when fresh factors come into play. The Privy Council in *Vallabhdas Naranji v. Collector* (AIR 1929 PC 112) when considering the value of an irregularly shaped land near the seashore stated as under:

“This land is absolutely worthless in itself, but has no doubt a potentiality for being used for salt works and therefore the owner is entitled to the market value of that potentiality.”

Since it was necessary to expend large sums of money to set up salt works, it was considered there was no present value for the potentiality, and the value of the land to be taken was that of wasteland.

Where except for a small portion of land, the land in dispute has no value as a building site because demand for building was limited, the value of the land should be assessed on the basis of what was its worth as an agricultural land. Remote potentialities should not be taken into account (*Tara Singh v. Secretary of State* AIR 1933 Lah 503; 34 PLR 997).

When potential value is considered, it is necessary to exclude advantages due to the carrying out of the purpose of acquisition (*Bijay Kanta Lahiri v. Secretary of State* AIR 1934 Cal 97; 58 CLJ 38). The *Chemudu's* case discussed earlier throws further light on this issue.

The recognition of potential value, may be found for a variety of reasons – (i) potential value of agricultural land for building purposes, (ii) fitness of land as a base for water supply, (iii) contiguity of land to a lake making it specifically adaptable for use as a reservoir, (iv) fitness of land for reservoir, (v) future profitable working for mines, (vi) adaptability of land for railway purposes, (vii) contiguity of land to a reservoir making it suitable for building a mill, (viii) suitability for development of hydro-electric power, (ix) land though not itself adaptable for a reservoir, but is so adaptable in conjunction with other adjacent lands belonging to other owner. Examples of recognition of the doctrine of potential value and special adaptability may be found in many an English case decision (*Hughly Mills v. Secretary of State* 12

CLJ 489; 8 IC 800).

Fair market value nurtured as a concept:

It has already been stated earlier that valuation for acquisition purposes arises not only in the context of Land Acquisition Act (now repealed and replaced by the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013) but for other fiscal purposes as well. In particular, the Wealth-tax Act and the Income-tax Act contain provisions for determination of market value. Under the Wealth-tax Act, the value of an asset is to be taken at the market price on valuation date. Therefore, the admission made by the claimants with regard to the market value of the acquired property under the Wealth-tax Act, can be taken as a substantive piece of evidence for valuation under s.23 of the Land Acquisition Act (now s.28 of the Act of 2013) (*Udayan Girija Prasad v. Spl. Land Acquisition Officer* (1976)17 GLR 668).

The provisions for acquisition contained in Chapter XXA of the Income-tax Act 1961 have given rise to a number of decisions of the High Courts which shed light on the principles and methods of valuation of immovable properties. It is, therefore, worthwhile to consider the facts and the decisions given by the various High Courts in the cases directly dealing with the provisions of Chapter XXA in order to have an idea as to how the courts have viewed problems of valuation. These decisions were found relevant also for Chapter XXC as the appropriate authority had to give hearing to the parties concerned and thereafter pass the order. It is primarily in this context that the concept of 'fair market value' evolved.

A just market value concept generally require: (1) the property to be exposed for sale in the open market allowing a reasonable time to find a purchaser who buys with knowledge of all the uses to which it can be adapted, (2) neither the willing seller nor the willing buyer being under abnormal pressure, and (3) both the seller and buyer being fully informed.

The Supreme Court in *C.B. Gautam case* (199 ITR 530) has indicated some of the situations where the seller may be induced to sell his immovable property at less than what might be the fair market value. He might be in immediate need of money and unable to wait; some dispute as to the title might force him to sell at a lower price; there may be subsisting lease in favour of the intending purchaser or there might be genuine reasons for the seller agreeing to sell at a lower price to a particular person who might not be his relative etc.

In *CIT v. Smt. Vimalaben Bhagwandas Patel* (1979)118 ITR 134 (Guj), certain industrial sheds with *pucca* structures and temporary structures were sold to two persons on the condition that the transferee would abide by the terms and conditions prescribed

under the ownership scheme of Baroda Industrial development Corporation (BIDCO) since the transferor had originally purchased the said sheds under that scheme. It was also established that any purchaser under the ownership scheme was bound to pay, besides the price of the shed, a sum of ₹ 18,600 being the value of shares of BIDCO. The transferees let out the sheds on rent and the net annual yield which was realized by them was about ₹ 24,996 each. Without affording any opportunity to the transferor of being heard, the competent authority initiated acquisition proceedings. The competent authority did not disclose the report of the agent, Bank of Baroda, indicating the value of the property which the bank had estimated for purposes of advancing loans and also the particulars about the land rates prevalent in neighbouring areas. An order was passed and an appeal was filed before the Tribunal. The Tribunal allowed the appeal of the transferors and set aside the order of acquisition.

On appeal by the revenue, the Gujarat High Court held that the competent authority had acted in violation of the principles of natural justice in relying on material without disclosing it to the transferors and affording them an opportunity of being heard in the matter.

While commenting on the determination of the fair market value of property, the High Court observed that it would not be safe to wholly import the principles enunciated by the courts in ascertaining the market value while determining the amount of compensation for acquisition of a property or land since the perspective of acquisition under the Land Acquisition Act (now replaced by the Right to Fair Compensation and Transparency in land Acquisition, Rehabilitation and Resettlement Act 2013) and that under Chapter XXA of the Income-tax Act 1961 are slightly different. In the perspective of the acquisition proceedings having far-reaching repercussions, the competent authority must be satisfied and assured by cogent, reliable and relevant evidence that the fair market value of the property in question exceeds the apparent consideration by a prescribed margin. It would be too hazardous to prefer one of the recognized methods of valuation which may be advantageous to the cause of the revenue and arrive at an estimation of fair market value of the property on that basis. Such a lopsided approach on the part of the competent authority would not be in consonance with the burden of proof required to be discharged in such quasi-criminal proceedings.

It would be virtually acting on too slender a material since the decision of the competent authority to acquire would expose not only the transferee to the consequences of being deprived of the property but also the transferor to the liability of capital gains under s.52 (since repealed w.e.f. 1.4.1988) and in a given case may affect also the persons interested in the said property having tenancy rights or any encumbrances thereon. The competent authority shall, therefore, as far as possible, collect all the relevant material and evidence by applying the well-known and

recognized methods, viz., land and building method, contractor's method, rental or yield basis method and comparable sales method, and work out such estimation of the market value on application of all the four methods and for purposes of counter-check compare it with the municipal valuation for ratable purposes wherever it is possible.

It was held in the case of *Smt. Lalita Todi v. CIT* (1980)123 ITR 40 (Pat), and *vimal Agarwal v. Appropriate Authority* (1994)210 ITR 16 (Bom), that if all the germane considerations are not taken into account the determination made of fair market value would become vitiated in law.

In *CIT v. Ganesh Builders* (1979)116 ITR 911 (Bom), the respondents executed a conveyance deed whereby plot of land measuring 4,550 sq. yds. Was sold to one M or his nominees at a price of ₹ 65 per sq. yd. On the ground that the apparent consideration as *prima facie* very much less than the fair market value the competent authority issued a notice under s.269D of the Income-tax Act 1961. According to purchaser's valuer, the fair market value would be ₹ 140 per sq. yd. since the plot was a developed one. Taking the view that it would be more appropriate to take into consideration the value of the plot as if it were a developed plot and permit certain deductions, the competent authority allowed certain outgoings towards road construction, encroachments, etc., as claimed by the transferor, but claim for stamp duty, brokerage and solicitors' fees was not allowed.

Adopting the fair market value at ₹ 150 per sq. yd. and allowing the aforesaid deductions, the competent authority still found that the provisions of s.269C(2)(a) and (b) were satisfied and passed an order for acquisition. The Tribunal held that the fair market value of a developed plot in that locality would be ₹ 140 per sq. yd. and that deduction must be allowed for brokerage, solicitors' fees, stamp duty etc. On this basis, the Tribunal found that the margin between the apparent consideration paid under the document and the fair market value so determined was a little less than 15 per cent. Hence, the appeals were allowed and the orders directing the acquisition were set aside.

The department appealed against this order and urged *inter alia* that the deduction for stamp duty, brokerage and solicitors' fees had been wrongly allowed. The Bombay High Court held that when a buyer becomes willing to buy immovable property at a particular rate he knows that the documents require expenses which in law he must fully bear unless there is a contract to the contrary where the expenses are shared. Incidental expenses like stamp duty, brokerage and legal expenses may form part of the mental process of the buyer for the purpose of making an offer, but they do not form part of the price and cannot be deducted there from. The court, however, remanded the case back to the Tribunal so as to decide whether acquisition should be permitted even if the difference between apparent consideration and the fair market

price exceeded 15 per cent.

Determination of compensation for compulsory acquisition involves consideration of the price which a hypothetical willing purchaser can be expected to pay for the lands in the existing use as well as relatable potentialities. The acid test is in the armchair of the willing vendor and a prudent willing buyer, taking all relevant prevailing conditions of the normal market. Fertility of the land, location, suitability of the purpose it was purchased, the nature of the land, the crops raised and the nature of the income likely to be derived from the lands, the expenditure to be incurred for raising the crops and the net profits etc. would be the relevant factors in arriving at the net market value and, if evidence is produced in that behalf, on its basis applying suitable 10 years multiplier, the market value need to be determined. In the case of acquisition of large tracts of lands for projects situated in several villages, stray sale deeds of small extent here and there would not form the basis to determine the compensation. The reference court should be circumspect, pragmatic and careful in analyzing the evidence and arriving at just and fair market value of the lands under acquisition which could be fetched on the date of the notification. The owner or claimant should not be put to loss by undervaluation. But, at the same time public exchequer should not be put to undue burden by excess valuation. It is the statutory duty of the court to maintain the balance between diverse interests. In the instant case the court failed to apply armchair test of prudent purchaser and willing vendor or test of realized income on crops. So, the determination of compensation, was held, illegal (*K. Posayya v. Special Tahsildar* AIR 1995 SC 1641. See also *Union of India v. Mangatu Ram* (1997)6 SCC 59; AIR 1997 SC 2704.

Market value according to present disposition

The potential value of an acquired land has brought in questions of possibilities to be considered. Such considerations are not confined only to realized potentialities or possibilities. Again, it does not extend to distant possibilities but limited to market value according to present disposition. Thus, open market considerations have started creeping in the domain of valuation for compulsory acquisition. As an intermediate step to open market value, the concept of present disposition has been nurtured by judicial decisions in our country. To trace the origin of the concept, we need to give a hind look at some of the amendments of local Acts *vis-à-vis* laws for compulsory acquisition.

For lands acquired by the Kolkata Municipal Corporation some provisions of the Land Acquisition Act were modified regarding the determination of the market value under s.23(1) (now s.28 of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013) first. The provision regarding land acquired by the Kolkata Municipal Corporation Act is in s.537(3), which runs as follows:

Section 537(3). For the purpose of acquisition of immovable property under this section, the Land Acquisition Act, 1894, shall be subject to the amendment that the market-value of any land or building to be acquired shall be deemed, for the purpose of sub-section (1) of section 23 of that Act, to be the market-value determined according to the disposition of such immovable property at the date of declaration under sub-section (1) of section 4 thereof in respect of such immovable property.

The Howrah Improvement Act also contains the same modifications.

Similar provision in the Madras City Improvement Trust Act 1950 omitting s.23(2) of the Land Acquisition Act 1894 has been struck down by the Supreme Court as violating Art.14 of the Constitution in *Balammal v. State of Madras* (AIR 1968 SC 1425).

As origin of the rule of present disposition, some administrative steps seem to have acted as step in aid. It appears that the Government of West Bengal appointed a Commission called "Calcutta Building Commission" on 6.4.1987 to consider what amendments were required in the law relating to buildings and streets in Calcutta. The Calcutta Building Commission in its report in paragraph 139, clause (d) made the following observations:

"The extravagant prices which the Corporation has been made to pay for property acquired by it have arisen from the interpretation put by the courts upon the decision of the High Court of Calcutta in the case of *Prem Chand Boral v. Collector of Calcutta* (13 ILR 2 Cal 103). The words, "Market Value" occasionally lead to difficulties. It is the price which a willing vendor might be expected to obtain in the open market from a willing purchaser. In the case to which we have referred, it was held that the fairest and most valuable principle of compensation to the owners was to enquire, 'what is the market value of the property, not according to its present disposition but laid out in the most lucrative and advantageous way in which the owners could dispose of it'. This expression of opinion had induced the courts to assess lands at a price in excess of what the owners would ordinarily have obtained for them in the market. We think, it is not unfair for the purpose of Land Acquisition Act that land should be valued according to its disposition at the time the declaration is made.

"In the opinion of the majority, if it is shown that before the declaration is made, the owner had taken active steps towards the more favourable disposition of the land and he spent money for that purpose, further compensation might be given to him, such compensation being based on his actual loss.

"The value which ought to be paid is the value of the land to the owner and nothing more."

The Commission also recommended the introduction of the clause as to valuation at 25 times the municipal valuation.

It appears from the speech of the Hon'ble Mr. Risley in introducing the Calcutta Municipal Bill in 1898 before the Council that the modifications of the Land Acquisition Act had been made in the Bill in accordance with the recommendations of the Calcutta Building Commission.

Now the principles enunciated in *Prem Chand Boral's* case are well-established principles for finding out the market value of the lands acquired under compulsory powers. Indeed those very principles regulate the price of lands in the open market. "Under the Land Clauses Act, Tribunal in assessing compensation may take into account not only the present purpose to which land is applied, but also any other more beneficial purpose to which in course of events, it might within reasonable period be applied just as an owner might do if he were bargaining with a purchaser in the market (Halsbury: *Compulsory Purchase*, 3rd Ed., vol. 10)."

These fundamental principles of assessment of market value have been expressed in varied language by the learned Judges both in England and in this country, all pointing to the basic principle that the owner must be paid the price which he could obtain in the open market for his land.

It would also appear from the extract of the recommendations of the Calcutta Building Commission quoted above that Legislature did not intend to lay down any different principle. All that was intended, was to guard against the assessment of compensation at a price in excess of what owners could get in the open market and the 'disposition clause' was introduced as a matter of abundant caution having regard to the relatively high value of land in the city of Calcutta. But the intention of the Legislature as expressed in the amending clause appears to be that all potentialities of the land must be ruled out in assessing market value.

The interpretation of this clause as to 'valuation according to present disposition' has been the subject of various decisions by the Calcutta High Court. In the case of *Harish Chandra Neogy v. Secretary of State* (11 CWN 875), the subject to be valued was a 'bustee land' acquired by the Calcutta Municipality. Their Lordships valued the acquired land on the basis of two sales and thereafter supported that valuation on the basis of 25 years' purchase of the ground rent and in doing so, observed as follows:

"Our decision is strengthened by consideration of the rentals and disposition of the two pieces of land at the date of declaration. Section 557 of the Calcutta Municipal Act precludes any valuation based on the most advantageous disposition of the land e.g., the valuation of a bustee land on its supposition for its adaptability for use as building land to carry expensive structures which is the most advantageous

use to which the land can be put in Calcutta. The Act, however, contemplates 25 years' purchase on rental or annual valuation as made by the Corporation. *The two rules must go together.*"

The interpretation of s.557 (now s.537 of the Kolkata Municipal Corporation act 1980) made in *Harish Chandra Neogy's* case was expressly approved in the case of *Manindra Chandra Nandy v. Secretary of State for India* (ILR 41 Cal 987), where in valuing bustee land acquired for the Calcutta Municipality, evidence of building sites was excluded from consideration.

In *Madan Mohun Barman v. Secretary of State* (AIR 1925 Cal 481), the subject matter was the valuation of bustee land acquired by the Calcutta Improvement Trust. The learned President of the Calcutta Improvement Tribunal refused to admit in evidence a sale relating to a land with building. On appeal the High Court set aside the judgment holding that such a transaction was admissible in evidence. The question of disposition does not appear to have been raised in the case.

In *Hindusthan Co-operative Insurance Society Ltd. v. Secretary of State for India* (ILR 56 Cal 989), the question was the valuation of land acquired by the Calcutta Improvement Trust. The Society had made a development scheme for a large block of land for selling out in plots by driving roadways. On coming to know that the Calcutta Improvement Trust was going to frame a scheme for making a 100 ft. roadway across the land, the Society left that 100 ft. strip open and sold plots abutting on that proposed 100 ft. roadway. When the scheme was framed later on and this strip of land, 100' x 1600' was acquired by the Calcutta Improvement Trust, the Collector treated it as a road and awarded value at the rate of ` 150 per kottah. The Tribunal confirmed the award of the Collector on the view that at the date of the declaration, the Society had conferred rights of way over this 100 ft. roadway to the owners of the plots adjoining the same. On appeal the High Court held that the real 'disposition' of the land was that it was a part of a scheme for the purpose of selling out in different small plots to purchasers as building sites by driving roads to the areas in order to give access to the various plots and on the evidence of case, the disposition of the acquired land cannot be considered as a road. Their Lordships valued the land at ` 94,330 after deducting the value of land for a 40 ft. road which was originally in the scheme of the Society and the cost of making that roadway on the evidence of the respondent's Valuer. It may be noted here that nothing was said in this case as to whether valuation by the development method was not permitted by the amendment of s.23 by the Calcutta Improvement Act and as a matter of fact, the valuation that was ultimately made, was made on the development method.

In *Shrosbree v. Secretary of State* (A.O.D. 192 of 1933 (unreported)), 76 bighas of land comprising solid land, low land, tank and 'Beel' was acquired by the Calcutta Municipality for the purpose of Christian Burial Ground in Tollygunj. The block of land

was accessible by a roadway issuing out from Russa Road and terminating in the land. The learned Collector (Rai Bahadur M.N. Gupta) gave detailed reasons under s.19(i)(d) of the Land Acquisition Act. It appears from the reasons that he valued the solid land by the development method and made the following deductions from the value of building sites –

Road Lands	...	...	...	20%
Largeness of Enterprise...			...	25%
Road Making	...	...	...	7%

		Total		52%

Mr. Shrosbree who examined himself as an Expert witness showed by a layout plan prepared by him that the deduction for road land would not be more than 7.5% of the total area of solid land. As regards the cost of road making he agreed with the Collector's figure of 7.5%. But on the question of largeness of enterprise and time involved he explained that the deduction should not be more than 15%, making thereby a total deduction of 30% in the place of the Collector's total 52.5%. The learned Land Acquisition Judge accepted Mr. Shrosbree's deduction of 7.5% for the road lands. But he thought that deduction for largeness of enterprise as given by Mr. Shrosbree to be too low as there would be 17 building plots of an average area of 2 bighas, and accepted the Collector's estimate on that point. On appeal the High Court accepted the evidence of Mr. Shrosbree in view of his great experience and valued the solid land by deducting 30% from the price of building sites as derived from the transactions.

A deduction of ₹ 750 per bigha was made in respect of the low lands and the tanks were valued at half the value of solid lands.

It would appear from the above that for valuing undeveloped lands under s.23 of the Land Acquisition Act (now s.28 of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and resettlement Act 2013) as amended by s.475 of the Calcutta Municipal Act 1923, the development method of valuation as adopted by the High Court, though the point of present disposition was taken. It was contended by the Government that the acquired land could not be valued on the basis of developed building sites having regard to its present disposition. Their Lordships negative that contention and observed as follows:

“We are unable to agree with the extreme contention for, if the evidence of market value of such land be not available, then the market value of such land could be ascertained from the value of the lands of developed areas in the neighbourhood by making such deductions as would be necessary for the purpose of bringing up the undeveloped area into developed state. It is true that the land under

acquisition does not enjoy the same amenity, the same convenience and the same advantages as the lands in the residential quarters in respect of which transactions have been put in evidence. But, we see that the town is extending towards the south. There are residential quarters and sites on the south and on the north of the land under acquisition; it is no wonder that the lands to the south might some day be converted into building sites.”

In *Province of Bengal v. Uma Charan Law* (48 CWN 609), ‘bustee land’ acquired by the Calcutta Improvement Trust was valued by Roopendra K. Mitra, J sitting with Akram, J on the basis of the sale price of a land with a three-storied building after deducting the estimated cost of the building. The point of present disposition was not mooted in this case.

In the case of *Province of Bengal v. Amulyadhan Auddy* (54 CWN 297), the subject to be valued was a block of land abutting on a roadway with another blind lane touching at its side. The claimant’s expert valued it by the development method, that is to say, by producing the blind lane across the land and dividing the land into two blocks abutting on that imaginary roadway. Roopendra K. Mitra, J sitting with P.N. Mtra, J held that the development method, as adopted by the claimant’s expert, was not permissible in the case of lands acquired by the Calcutta Improvement Trust by reason of the rule as to present disposition. In course of the judgment in commenting upon the method adopted by the claimant’s expert, His Lordships observed as follows:

“Market value is what an owner, not obliged to sell, would have got from a free buyer. Certainly a free buyer in estimating the price would have taken into consideration the fact that he would be able to develop the land – to have the best user – by dividing it into 3 blocks by constructing a road across the land at the place suggested by Sarkar (Claimant’s expert), but the question is whether such a method is allowable in view of the provisions of the Calcutta Improvement Act.

“The land has to be valued according to its disposition at the date of declaration. It cannot be imagined to be in a different state than what it actual was at that point of time nor can be valued with reference to its possible future user by proposing a physical change of the land.”

In support of the proposition that the development method is not permissible in cases of compulsory acquisition of land for the Board of Trustees for the Improvement of Calcutta, his Lordship cited the case of *Hindusthan Co-operative Insurance Society v. Secretary of State* (56 Cal 989). It is submitted with the greatest respect that there is nothing in the judgment in that case in support of that proposition. His Lordship also referred to the case of *Shrosbree v. Secretary of State* (A.O.D. 192 of 1933 (unreported)). It is submitted that as has already been stated above, in that case, Their Lordships valued the undeveloped land by the development method.

The question of present disposition came up for consideration before the Calcutta High Court in Apportionment proceedings of *Sitanath Pal v. K.C. Basu* (A.O.D. 80 of 1948). It was contended by Mr. Atul Chandra Gupta, Advocate, that there is no real difference between the words, 'as it then stood', which according to the Privy Council are implicit in s.23(1) of the Land Acquisition Act (now s.28 of the new Act of 2013) and the words, 'according to the disposition of the land' at the material time. According to him, these words really added nothing to the Land Acquisition Act. K.C. Das Gupta, J (as he then was) in the course of the judgment observed, "In any judgment, there is considerable force in this contention". But, as it was not necessary to decide that question, His Lordship pronounced no decision on the point. The Privy Council case referred to, is the *Vizagapatam Harbour* case (43 CWN 557) which has since found a place in English Textbooks.

In another apportionment appeal which went up to High Court regarding compensation money awarded for land acquired by the Calcutta Improvement Trust, this question was considered, vide *Santosh Kumar Dhur v. Nanda Kishore Mullick* (AIR 1958 Cal 56). In that case P.N. Mukherje, J held as follows:

"The legislature in amending the section 23 of the Land Acquisition Act for the purpose of the Calcutta Improvement Act did not really intend any change in the law so as to exclude from consideration all potentialities of an acquired property and not merely the remote possibilities or potentialities in cases of acquisition under the Calcutta Improvement Act. Remote possibilities must no doubt be disregarded and possibilities only and not realized possibilities should be taken into consideration. But, subject to these restrictions, the possibilities of the acquired property, that is their present value should be normally taken into account in assessing compensation and *prima facie* at least the law does not seem to be otherwise under the Calcutta Improvement Act."

This pronouncement made by P.N. Mukherjee, J should now be taken to have finally settled the meaning of the vexed clause. A literal interpretation of the clause as was made in the case of *Amulya Dhone Auddy* (54 CWN 297), would render it well nigh unworkable. The necessary corollary of such a literal interpretation would be that sales in the open market must be ruled out as the sale prices must be taken to be inclusive of the potentiality of the lands sold. Vide *Raghubans N. Singh v. State of U.P.* (AIR 1967 SC 465) a vendor willing to sell his land at the market value will take into consideration a particular potentiality or special adaptability fo the land in fixing the price.

The expression "market value according to the disposition of the land" came up for analysis in the case of *Mathura Prasad v. State of West Bengal* ((1970)3 SCC 730; AIR 1971 SC 465). The above expression constitutes an ingredient of s.23 (now s.28 of Act

of 2013) of the land Acquisition Act (since repealed and replaced by the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and resettlement Act 2013) as inserted by way of local amendment under provision of s.71(b) of the Calcutta Improvement Act 1911 in the matter of acquisition of land under the latter Act. It was held that such market value apparently means the value of the land in a hypothetical market which a willing purchaser may in the prevailing conditions pay for the land to a willing vendor taking into consideration its situation and advantages.

In determining the “disposition” the purchaser would normally take into consideration the advantages of the situation and the potentialities of the land. Because, the market value of land especially in urban areas depends upon its situation, special adaptability, advantages and inherent potentiality in the light of demand for land.

Estimate of market value – uncertainties and guesswork

The science and art of estimation lie at the core of valuation. It was held by the Supreme Court of British Columbia (Canada) in the case of *Rowan v. City of Vancouver* that “a recent market price is not the best test of actual value. The whole evidence surrounding the transaction, the condition of market and other factors have to be weighed carefully”. The question now arises as to what are the other factors that are to be weighed.

In *Velayudam Chettiar v. Special Tahsildar* ((1959)1 MLJ 348; AIR 1959 Mad 462) and also in *Chand Kiran Tyagi v. State of U.P.* ((1994)24 ALR 196), it was observed that valuation of immovable property is not an exact science. It is an inquiry relating to a subject abounding in uncertainties, where there is more than ordinary guesswork and where it would be very unfair to require an exact exposition of reasons for the conclusions arrived at. It has been held repeatedly that in all valuations, judicial or otherwise, there must be room for interference and inclinations of opinion which being more or less conjectural are difficult to reduce to exact reasoning or to explain to others and it is not fair to require an exact exposition of reason for the conclusions arrived at. In short the question of fair compensation is not an algebraic problem which would be solved by an abstract formula.

The same view was echoed in *Raja S.S. Kumara Krishna Yachandra Bachadurvaru v. Spl. L.A.O., Bangalore* ((1974)4 SCC 356 (358)) followed by *Administrator-General, W.B. v. Collector* ((1988)2 SCC 150) in which Bhagwati, J made the following observation:

“We are conscious that this process of determination of market value adopted by us may savour of conjecture or guess, but the estimation of market value in many cases must depend largely on evaluation of many imponderables and hence it must

necessarily be to some extent a matter of conjecture or guess. We do not, therefore, think that we would be unjustified in taking the market value of the land acquired under the notifications, dated 30.10.1951 and 28.1.1954 at Rupees 9 per square yard”.

We may on this point quote from another significant judgment which runs as follows: “In all valuations, judicial or otherwise, there must be room for inference and indications of opinion, which being more or less conjectural are difficult to reduce to exact reasoning, or to explain to others. Everyone who has gone through the process is aware of this lack of demonstrative proof in his own mind, and know that every expert witness called before him has had his own set of conjectures of more or less weight according to the experience or personal sagacity (*Secretary of state v. Charlesworth Piling & Co.* LR 28 IA 121 (PC).”

A valuer ought to envision the effect of trends and critical situations in his estimate of value. Abnormal increase of land value particularly in urban areas where financial tycoons with huge resources are always ready to offer fancy price for building sites or for commercial or industrial estates, ought to enter into estimation of value. So also when there is incessant inflow of fund from the parallel economy of the country. Extra-ordinary situations and political upheavals often bear an impact on valuation of real estates. As for example, in 1956 the value of immovable properties in Bombay had gone down considerably because of the Samyukta Maharashtra Movement demanding merger of Bombay City in Maharashtra. Similarly, the values of immovable properties in Calcutta had gone down in 1970-71 because of the Naxalite Movement. The market values of immovable properties had gone down considerably in Assam owing to the continuous agitation on foreign nationals issue. Emerging economic phenomenon like huge deficit financing or inflow of foreign fund do affect valuation. Market values of immovable properties have of late gone up in Gujarat or Bombay or Kerala due to foreign exchange remittances from non-resident Indians; the insertion of s.54E in the Capital Gains-tax provisions of I.T. Act has encouraged property owners to sell their properties. Many people prefer speculative investment in immovable properties in a situation of galloping rate of inflation. The relative security for the value of money offered by real estate enhances the demand for properties and their values. Thus, various political and economic conditions play their part in influencing the market values of immovable properties. A prudent valuer should analyse all these factors while making an intelligent and rational estimate of the value of property.

The expression ‘market value’ has been further explained by the Supreme Court in the case of *Prithvi Raj Taneja v. State of M.P.* ((1971)1 SCC 684) and the court made the following momentous observation on the issue:

“The market value means the price that a willing purchaser would pay to a willing

seller for the property, having due regard to its existing condition with all its existing advantages and its potential possibilities when laid down in the most advantageous manner excluding any advantage due to the carrying out of the scheme for which the property is compulsorily acquired. In considering market value, the disinclination of the vendor to part with, his land and the urgent necessity of the purchaser to buy should be disregarded. There is an element of guesswork inherent in most cases involving determination of the market value of the acquired land. But this in the very nature of things cannot be helped. The essential thing is to keep in view the relevant factors prescribed by the Act.”

On the basis of ss.18 and 23 of the Land Acquisition Act 1894 (since repealed and replaced by the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013), the Supreme Court awarded the mean rates of compensation for land acquired under two notifications of 1951 and 1954 from the same area and held as such. “We are conscious that this process of determination of market value adopted by us may savour of conjecture or guess, but the estimation of market value in many cases must depend largely on evaluation of many imponderables and hence it must necessarily be to some extent a matter of conjecture or guess. We do not, therefore, think that we would be unjustified in taking the market value of the land acquired under notifications dt. 30th October 1951 and 28th January 1954 at ₹ 9.00 per sq. yd. (*Raja SS Kumara Krishna Yachandra Bachadurvaru v. Special L.A.O., Bangalore* (1979)4 SCC 356).”

In fixing the value of the land an element of guesswork is inevitable and compensation in respect of the land under acquisition cannot be arrived at with any mathematical accuracy. Nevertheless there must be some material before the court on the basis of which alone compensation should be fixed (*State of Madras v. M.G. Varadarajulu* AIR 1976 Mad 164). The High Court should not base its decision wholly on the basis of L.A. Officer’s award in cases involving a lot of guesswork (*Ahmad Yar Jung v. Collector, L.A., Hyderabad* (1974)2 SCC 67).

The court can always take into account any special circumstances, apart from the methods of valuation traditionally adopted, in order to arrive, as nearly as may be, at an estimate of the market value. In some situations, the estimation of market value depends largely on evaluation of many imponderables and may involve to some extent a matter of guesswork (*Hindusthan Oil Co. Ltd. v. Damoderan Namboodri* 1986 Ker LT 1013).

Open market value – how far compensation is a guide

At this stage it is necessary to recall what 'market value' actually means. The expression 'market value' is the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties have each acted with full knowledge of the market and without compulsion but with due prudence. The art and science of estimation lie at the core of valuation. Such estimation is desired to be made in an open market situation. The necessary question that arises is what is meant by an open market. An open market is the opposite of a closed market or a market where dealings are held in secrecy behind the screen. In an open market anyone who desires to enter into the transaction should be in a position to make an offer whether for purchases or for sale. It is a market where a willing buyer and a willing seller can freely come into contact with each other and are at liberty either to withdraw from negotiation or to strike a bargain without any compulsion. The parties to the transaction act as free agents and deal with each other at arm's length. Again, all necessary publicity has been given of the proposed sale prior to such sale so that the parties have the knowledge of the market and necessary details regarding the property to be sold.

The concept of market value developed on the cradle of compulsory acquisition suffers from some inherent constraints. The very term, 'compensation' payable under the due process of law for compulsory acquisition suggests the idea of 'indemnity', although it speaks of compensation. The legal provisions bespeak of compensatory damages to distinguish them from penal damages or from awards based on the doctrine of unjust enrichment. As a matter of doctrine, the Supreme Courts in USA have construed 'compensation' in its stricter sense and have held that 'just compensation' means indemnity to the owner for the loss of the property. 'Value to the taker' is not the measure of the award. Justice Holmes has aptly remarked in *Boston Chamber of Commerce v. Boston* ((1910)217 US 189 (195)) that "the question is what has the owner lost not what has the taker gained".

The Indian Judiciary has also taken the same view that the owner of acquired property should not be permitted to profit by the acquisition. Thus the result is limiting the market value of the condemned property even when the property is worth to the owner much more than the market value in an estimation of potential worth and on the other hand, a big gain to the Government as the taker. In an open or free market for transactions of private property, the forces of competition and bargaining would have struck a different market price from the one constrained by the power of eminent domain residing with the Government for compulsory acquisition.

There is another aspect of the matter. The valuation under the law of eminent domain

prescribes a money payment equal to the market value of the property at the 'time of taking' or 'at the date of publication of the notification under s.4, sub-sec. (1)' (now s.11 of the new Act of 2013) as enjoined in s.23(1) of the Land Acquisition Act 1894 (now s.28 of the new Act of 2013). Thus the market value of the property is a regulated one. Instead of actual value or real value, the valuation should be based strictly on market conditions prevailing at the time of taking, however abnormal they might have been. It is well known that in periods of depression, price fetched is too low but in booms, the market awards an unearned profit. But these factors are to be utterly disregarded in an award of compensation, however might have been the relevance of such consideration in an estimation of market value in an open market situation.

It would, however, be wrong to assume that the Indian Judiciary has not given due recognition to the inadequacies that market value suffers at the altar of the power of eminent domain. On the contrary, there is a landmark judgment of the Supreme Court of India in *Land Acquisition Officer, Eluru v. Jasti Rohini (Smt.)* ((1995)1 SCC 717) in which the paradox of fixation of market value on the basis of the law of compulsory purchase of land has been succinctly exposed and the concept of open market value outlined. The question arose as to what would be the market value prevailing as on the respective dates of notification. The reference court relied upon the basic valuation register maintained by the municipalities on the basis of the notification issued by the Government under s.47A of the Stamp Act. In fact, the reference court mainly relied upon that document and awarded compensation on its basis.

The admissibility and evidentiary value of such entries in the basic value register was previously considered by the Supreme Court also in *Jawajee Nagnatham v. Revenue Division Officer* ((1994)4 SCC 595). After an elaborate consideration the court had in that case held that the basic value register is maintained only for fiscal purpose of collecting stamp duty and registration charges. The market value mentioned therein cannot form a foundation to determine the compensation under s.23(1) of the Land Acquisition Act 1894 (since repealed). In the same vein, the Supreme Court in the above *Justi Rohini's* case observed:

“It is settled law that the market value should be determined on the hypothesis of the price fetched in the *bona fide* sale by a willing vendor who would agree to sell the lands to a willing vendee of the acquired land or the land in the neighbourhood possessed of similar features. The notification under section 47A which is meant to be a guide for collection of revenue cannot form the basis for determination of market value of the land under section 23(1) of the Act. The question of fixation of market value is a paradox which lies at the heart of the law of compulsory purchase of land. The paradox lies in the facts that the market value concept is purely a phenomenon evolved by the courts to fix the price of land arrived between the hypothetical willing buyer and willing seller bargaining as prudent persons without

a medium (*sic modicum*) of constraints or without any extraordinary circumstances. But the condition of free market is the very opposite of the condition of the compulsory purchase which is *ex hypothesi* a situation of constraints. Therefore, to say that for compulsory purchase compensation is to be assessed and market value is to be determined in that state of affairs, has to be visualized in terms by its direct opposite.”

The Land Acquisition Act lays down in s.23 (now s.69(2) of the new Act of 2013) the principles for determining compensation on the basis of market value of land acquired. Section 24 of the Act (now s.40 of the new Act of 2013) puts an embargo on the court that it shall not take into consideration “the degree of urgency for the acquisition; disinclination of the person interested to part with possession of the acquired land; any increase in the value of the land acquired likely to accrue from the use to which it will be put when acquired; any increase to the value of the other land of the person interested likely to accrue from the use to which the land acquired will be put to; any layout or improvements on or disposal of the land acquired etc. without the sanction of the Collector or after s.4(1) notification was published; special suitability or adaptability of the land for any purpose or any increase in the value of the land on account of its being put to any use which is forbidden by law or opposed to public policy.” Therefore, in determining the market value of fixation of the compensation, it was held in the above case that “the courts should be alive to these factors and keep them at the back of the mind and should not be influenced by the future or later development in the locality or neighbourhood and should not get influenced by the prevailing situation as on the date of the determination of the compensation. Its consideration should alone be confined to the market value prevailing as on the date of the notification under s.4(1)”.

To solve the riddle, the Supreme court in the above case further held that “Courts have consistently evolved the principle that the present value as on the date of the compulsory acquisition comprised of all utility reached in a competitive field as on the date of the notification and the price on which a prudent and willing vendor and a similar purchaser would agree. The value of the land shall be taken to be amount that the land if sold in the open market by a willing seller might be expected to realise from a willing purchaser. A willing seller is a person who is a free agent to offer his land for sale with all its existing advantages and potentialities as on the date of the sale and willing purchaser taking all factors into consideration would offer to purchase the land as on the date of the sale. Future suitability or adaptability of the land for any purpose shall not be taken into account. The compensation must, therefore, be determined by reference to the price which a willing vendor might reasonably expect to obtain from a willing purchaser as on the date of the notification published under s.4(1). The disinclination of the seller to part with his land and the urgent necessity of the vendee to purchase the land must, alike, be disregarded and neither of them must be considered as acting under compulsion.”

Open market value – consideration of future possibilities

There are other judicial decisions which reflect on the concept of open market value. In *R.C. Cooper v. Union of India* (AIR 1970 SC 564) it was held that it is the price the property may fetch in the open market if sold by a willing seller unaffected by the special needs of a particular purchaser. The fact that the acquirer does not intend to use the property for which it is used at the time of acquisition and desires to demolish it or use it for other purposes is irrelevant.

The Supreme Court in *Special land Acquisition Officer v. Veerabhadrapa* ((1985 154 ITR 190 (194 and 195)) in elucidating the concept has stated:

“In *Vyricherla Narayana Gajapathiraju v. Revenue Division Officer, Vizagapatnam* ((1939) LR 66 IA 104), the Privy Council adopted the traditional legal definition of value as the price at which the property would sell as between a willing buyer and a willing seller. In its narrowest sense, it is designed to preclude a valuation based on an assumed forced sale; the property must be appraised at what it would probably bring if the owner allowed a reasonable opportunity for negotiations. But the courts have invoked a mythical willing buyer to justify a valuation higher than any attainable sale price. According to the Privy Council, ‘market value’ of the land within the meaning of s.23 of the Act is the price the property may fetch in the open market, if sold by a willing vendor unaffected by the special needs of a particular purpose. The owner is entitled to the value of the property in its actual condition at the time of expropriation, with all its advantages and with all its possibilities, excluding any advantage due to the carrying out of the scheme for the purpose for which the property is acquired. It is not only realized possibilities but also the future possibilities that must be taken into consideration.

“The Privy Council further observed that there is not in general any market for land in the sense that one speaks of market for shares or commercial goods. The value of any such article at any particular time can readily be ascertained by the prices being obtained for similar articles in the market. In the case of land, its value can also be measured by a consideration of the prices that have been obtained in the past for lands of similar quality and in similar positions, and that is what must be meant in general by the ‘market value’ in section 23”.

It is also worth taking into account the observations on the concept of open market value as nicely explained in *Smt. Lalita Todi v. CIT* ((1980)123 ITR 40 (Pat), and *Vimla Agarwal v. Appropriate Authority* ((1994)210 ITR 16 (Bom)), “it is the price which a prudent purchaser would be willing to pay taking into account the extent and the quality of title as well as all the factors which tend to push up the value or depress it. It is the price to be deduced by loading the price, reflected in the instance taken as norm, for plus factors, and unloading it for minus factors”.

In case of acquisition of undeveloped lands court has to assess the market value of the lands in their the then state. Further possibilities should not be considered as realized possibilities. It should be noted that further expenditure and trouble have to be incurred to make the land acquire the status and value of developed lands. This will consume more time to dispose of the whole land. The element of speculation in such adventures has to be borne in mind (*Rajah of Vijianagram v. R.D.O.* AIR 1954 AP 12).

Future utility is a thing that people have an eye in buying land and the market price of the land is affected by it. Such future utility must be estimated by prudent business calculations and not by mere speculative and impractical imagination (*Fink v. Secretary of State* ILR 34 Cal 599; *Dorabji Cursetji Shroff*, in re 10 Bom LR 675).

Future utility or the likely opportunity of utilizing the land for some more profitable purpose assumes relevance when there are impending prospects of development and improvement of the area of an appreciable nature in the near future. The price of lands in the locality or in the vicinity may shoot up within a short time due to such impending prospects of development. In such circumstances, it can be said that such land has potential value which should not be lost sight of at the time of assessing valuation. The assessment of the potential value on the basis of its expected user in the near future of such profitable purposes can only be done when the expected user for such purposes is almost a certainty or a proximate possibility and is so obvious that its value can be ascertained on a reasonable consideration of the realities of the situation. But where such possibilities are too remote or non-existent, the court should not take into consideration the potentiality of the land, as in that case one would himself in speculations and conjectures as to the price the land is likely to fetch in the distant future for something which is uncertain and is yet to be a reality (*State of Orissa v. Nityananda Majhi* AIR 1975 Ori 28). The land sought to be acquired is of tourist importance, so the potential value of the land must be taken into account in fixing compensation (*Kausalya Devi v. L.A.O., Aurangabad* AIR 1984 SC 892; (1984)2 SCC 324).

Whether open market includes black market

A question may arise as to whether the open market for purposes of valuation means the black market price as well. The Calcutta High Court in *CED v. Radha Devi Jalan* ((1968)67 ITR 761) held that an open market cannot include a black market. The existence of a parallel economy is well known, but documented figures cannot by its very nature be had. In such circumstances it would be dangerous to introduce a factor based on mere hearsay evidence.

The decisions of the Madras High Court in *S. Abdul Rahman v. CWT* ((1979)117 ITR 570

and of the Gujarat High Court in *CWT v. Sadiquali Samsuddin* ((1985)152 ITR 190) are also relevant in the context. In that case, valuation of money held in Ceylon at a market rate lower than the official exchange rate was upheld, having regard to the restrictions on remittances. But it was held that such consideration does not go counter to the proposition that the element of values obtaining in the black market should not weigh, in making a valuation; because, the existence of restrictions on remittance from foreign countries is the result of statutory enactments, and it is settled law that for restrictions in transfer of property an appropriate discount should be given.

In *A.S. Sivan Pillai v. CIT* ((1958)34 ITR 328 (Mad), the Assessing Officer had estimated the income from export of onion on the basis of black market profits earned by competitors by selling the goods at higher than the controlled rates. There is no presumption, it was held, that the assessee would have similarly indulged in similar activities and that there was no case for estimate. In *State of Kerala v. Annama* (air 1969 Ker 38) the High Court held that dealings with racketeers and other anti-social elements cannot afford a standard for governmental action or judicial consideration. Both the above decisions were quoted with approval in the case of *Commissioner of Agri. Income-tax v. M.J. Cherian* ((1979)117 ITR 37 (Ker) where it was held that the fact that one would be able to sell the controlled commodity at a higher price in violation of regulations does not necessarily imply that the assessee would have broken the law. It pointed out that there is no presumption in favour of any illegality about a transaction. There is no authority that any departure from this sound principle of law is justified in valuation.

Whether open market is affected by land ceiling

Does open market mean restrictions like land ceiling law have to be ignored? This was answered in the negative in successive judicial decisions. It must be understood that valuation is generally intended for a particular purpose and such purpose is regulated by legal provisions in the relevant field. So conformity to law is essential for the purpose of valuation. In that sense, where the land is saleable but subject to approval it cannot be said that it is a closed market. But it is not open in the conventional sense. Such statutory restrictions cannot be ignored in evaluation of market value. It was so held in *Corporation of Calcutta v. Smt. Padma Debi* (AIR 1962 SC 151) where it was pointed out in connection with the market rent under rent control law that the law of the land must necessarily be taken as one of the circumstances obtaining in the open market placing an upper limit on the rate of rent.

Where land ceiling laws are applicable the restrictive conditions have to be given due weight though the value necessarily does not have to be identical as held in *CWT v. Rajkumari Bhuvaneshwari* ((1995)215 ITR 198 (Raj)). There are other cases also. One such decision pertaining to pre-emptive purchase of property under Chapter XX-C of

the Income-tax Act was rendered by the Gujarat High Court in *Gordhandas Purshottamdas Patel v. Appropriate Authority* ((1996)217 ITR 62 (Guj), where fact that land ceiling law was not taken into consideration in evaluating the apparent consideration vitiated the purchase.

Open market – effect of inflation – judicial notice

In *State of Bihar v. S.K. Thacker* (AIR 1981 Pat 81) the court held that judicial notice can and should be taken of the fact of continuous inflation and rising land values. That was a case where land values rose since 1957 to 1961, the latter being the year of acquisition. The court held, “Phenomenal increase of land values have been witnessed from 1975 to 1985. The value in 1975 has been trebled in 1985. If it is a case of house structures, the capital value of these structures will be the annual income multiplied twenty times. The spurt in value have naturally a bearing on the annual income”.

In *Tribeni Devi v. Collector of Ranchi* (AIR 1972 SC 1417) the Supreme Court observed:

“It is a well-known fact and can be taken judicial notice of, that after the termination of the Second World War in 1945, there was a rise in land values due to the increased demand of homestead lands for building purposes. The general principles for determining compensation have been set out in sections 23 and 24 of the Act

“The methods of valuation to be adopted in ascertaining the market value of the land on the date of the notification under section 4(1) are – (i) the opinion of experts; (ii) the price paid within a reasonable time in *bona fide* transactions of purchase of the lands acquired or the lands adjacent to the lands acquired possessing similar advantages; and (iii) the number of years’ purchase of actual or immediately prospective profits of the lands acquired.”

“These methods do not, however, preclude the court from taking any other special circumstances into consideration, the requirement being always to arrive as near as possible, at an estimate of the market value. In arriving at a reasonably correct market value, it may be necessary to take even two or all of these methods into account inasmuch as the exact valuation is not always possible as no two lands may be the same either in respect of the situation or the extent or the potentiality, nor is it possible in all cases to have reliable material from which that valuation can be accurately determined.”

The High Court determined the market value of the acquired land under a notification. Subsequent notification was issued after one year of the previous notification for acquisition of similar land. Higher market value should be given to those acquired under subsequent notification, keeping in view of the general increase

in price of land during that period (*Ranjit Singh v. Union Territory of Chandigarh* AIR 1993 SC 227; (1992)4 SCC 659).

In *Dewan Anand Kumar v. Union of India* (AIR 1973 Del 102; AIR 1984 Del 208), it was found that after the notifications of 1959 and 1961 there was no private transactions of sale, but during the year 1959 to 1963 the prices of plots in developed colonies showed a tremendous upward trend and that had its effect on the undeveloped land under acquisition in the neighbourhood of developed colonies. Held, the Government as the only buyer could not take advantage of its position. It had to pay the proper market value and if prices have been rising since 1957 to 1959 onwards there is no reason why they would not have risen further. So, Government has to be put in the position of a willing purchaser and it must pay market value on that basis.

Speculation in land prices

The relevancy of the rise in price of land due to speculation in the fixation of market value was considered by the Bombay High Court in *Dhusabhai Polabhai v. Spl. Land Acquisition Officer* (AIR 1959 Bom 520). The Court held:

“If a person desires to acquire land or settle down in a place which is full of promise for development, the desire could not be condemned as a mere speculative desire. There could be nothing unreal or undesirable about it. If the knowledge that acquisition by the Government is imminent raises the tone of the market and gives impetus to the market, a new market rate would be created and the transaction would be governed by that rate. It would be too dangerous a proposition to lay down and too unfair a comment on human impulses to generalize and stigmatise every transaction of sale entered into after the market had risen as a speculative transaction or demonstration of a profiteering tendency of a human mind. A speculation on the effect of establishing an educational centre in an area sought to be acquired upon prices is permissible up to a certain extent. It is permissible to the extent where it is shown that it had actually entered into the market value of the land on the date of the notification. It may be unfortunate that for launching a welfare scheme of acquisition in the interests of public education a higher compensation may have to be paid on account of the market value of the land going up as the result of speculation arising out of the prospective acquisition of the lands. But so long as section 23 stands as it is on the statute book, it is inevitable that the material rate is the market rate at the date of notification.”

Expert opinion on market value

The opinion of experts as to the market value of a land is to be regarded as evidence, but its evidential value is not great, inasmuch as the value of the experts' opinion depends upon the facts on which it rests and the validity of the process by which the

conclusion is reached (*L.A.O. v. Fakir Mohomed* AIR 1933 Sind 124; 143 IC 699).

The real function of an expert is to put before the court all the materials together with reasons which induced him to come to a certain conclusion. Though the court is not an expert, may form its own judgment by its own observation of the materials before it (*State (Delhi Administration) v. Pali Ram* AIR 1979 SC 14; (1979)2 SCC 158).

The court can be guided by opinion of surveyors. A surveyor's opinion by itself is good evidence. What value the court will put to it depends entirely on the effect of cross-examination. It will save the time of the court if a surveyor prepares a concise description of the property to be valued and add nothing more except his opinion of its value. But if he gives his reason that must be based on facts and not on hypothesis (*Matter of Govt. of Bombay and Karim Tar Mohaomed, in re* 33 Bom 325; 10 Bom LR 660; 3 IC 690).

An expert knows what factors should be considered, what information he should seek for, where he should seek it and how he should test it and apply it. But experience does not enable one to dispense with enquiry and an honest and useful valuation cannot be made simply by visiting the land and picking up orally some casual and untested information or gossip which may be interested or one-sided. These conditions apply specially to land in or near large towns (*Rajendra Nath Banerjee v. Secretary of state* 32 Cal 343).

The value of expert evidence is directly proportional to the accuracy of facts which is supported by and is dependent upon the cogency of reasons. The criterion adopted by the expert must be susceptible to and admit of objective verification (*Special L.A.O., Devangiri v. Katraiah* AIR 1977 Kant 33).

Where expert witness as to value of the land gives no data in support of their opinions, their evidence should be rejected (*Pirbhu Diyal v. Secretary of State* 135 IC 183; AIR 1931 Lah 364).

In an ultimate analysis, the market value of an acquired land must be the near estimate of the price which a person by voluntarily selling the awarded land would have got from a willing purchaser. What could be regarded as the near estimate of the acquired land is often a matter of expert opinion. All valuations are estimates and carry with them a degree of uncertainty. The range of this uncertainty may vary in different market conditions. But reliability is crucial to the credibility of valuation. The users of valuation would accept such uncertainty as inevitable, provided it is kept within reasonable bounds and the results held within the range of reliability. Sometimes the degree of uncertainty will be abnormal because of the exceptional market conditions or because of physical circumstances or legal constraints surrounding the property. but the valuer need to be able enough to steer through the

smoke-screen of such situation and develop appropriate techniques for expressing the degrees of uncertainty and striking an appropriate approach.

There is an apt remark by the Supreme Court of British Columbia in the case of *Kitsul Bros. Gravel Sales Ltd. v. Barry Humbart and Country Squire Ltd.* in a matter where the property could not be said to have a market value in the conventional sense owing to non-existence of a market for sales comparison. The said court opined “there was no comparable property, and a price a developer would pay, for the property would depend entirely on the perception of the individual developer as to the economy of the enterprise. One developer might see the property as having no value: another might see a very large profit”. The range of purposes for which a valuation may be required is substantial and includes sale, purchase, letting, obtaining finance, accounting, rating, compulsory purchase and fiscal requirements. Even apparently minor differences in the purpose for which a valuation is to be used may produce significantly different figures. In such situation, valuation is largely a matter of expert opinion. But there are also principles for employing the expertise.

The valuation of both land and building made by the Commissioner appointed by the court was his opinion as an expert. For the purpose of correct assessment of valuation the court can go into such opinion for effective determination of real question in controversy between the parties (*State of West Bengal v. Phanindra Kuamr Kundu* AIR 1973 Cal 441).

Competence of experts

According to *Black’s Law Dictionary* an expert means “A person who, through education or experience, has developed skill or knowledge in a particular subject, so that he or she may form an opinion that will assist the fact-finder” (*Black’s Law Dictionary*, 9th Ed., p. 660).

An expert, in order to be competent as a witness, need not have acquired his knowledge professionally. It is sufficient so far as the admissibility of the evidence goes, if he has acquired a special experience therein. In his capacity as Commissioner and Administrator of the Municipal Corporation he appears to have gained knowledge pertaining to the value of land situated in different parts of the city as also of the house properties and the said knowledge entitles him to be considered an expert so far as to render his opinion founded on such knowledge admissible in evidence (*Collector, Jubbalpore v. Nowab Ahmad Yar Jahangir Khan* AIR 1971 MP 32).

The evidence of expert witnesses is generally of assistance to the court, but it has its limitations. Every expert witness has his own set of conjectures of more or less weight according to his experience and personal sagacity with the result that the enquiry abounds with uncertainty and gives more than ordinary room for guesswork. Further,

the expert witness sometimes begins with a predetermined conclusion, and tries to adjust his figures, his answers and his conjectures to that conclusion (*Govt. of Bombay v. Century Spinning and Manufacturing Co. Ltd.* AIR 1942 Bom 105).

In *Secretary of State v. Smt. Sarala Devi Chaudhurani* (AIR 1924 Lah 548), it was held that an expert evidence produced consisted of the opinions of certain brokers and on examination it was revealed that those were worthless. None of them produced any account book or registers that they had been selling similar plots in the vicinity, at or near the time the notification was issued and had given no real data in support of opinions. Thus the evidence of experts produced was rightly excluded from consideration as affording no assistance in arriving at the correct value of the site in question.

An expert ought to possess special knowledge on the subject of valuation and he should have had adequate practical experience. He must be in a position to express an independent opinion of his own as an expert. Mere experience is no expertise. An experienced farmer who has enough acquaintance with land transactions and land valuation may be a pertinent witness but he is not necessarily to be cited as an expert. As against his evidence and that of an expert valuer the latter has to be preferred (In *re Didailier* (1940)19 LVR 7). Before an expert can give an opinion, he must be given sufficient opportunity to form an opinion. In *Jowett v. Federal Commissioner of Taxation* ((1926)38 CLR 325) it was held that departmental experts if they are tied down to a formula and have no practical knowledge cannot be relied upon.

In *Government of Bombay v. Morwanji Mancherji* (10 Bom LR 907) it was held:

“The opinion of an expert witness is admissible in evidence not only when it rests on the personal observation and inquiry of the witness himself or on facts within his own knowledge, but also when it is founded on the case as proved by other witnesses at the trial; and under section 51 of the Evidence Act, when the opinion is admissible, the grounds upon which it is based are also admissible. But we understand it to be settled law that an expert may not be asked purely speculative, hypothetical questions having no foundation in the evidence. In other words, before the expert witness is entitled to give evidence on the hypothesis, a sufficient foundation for it must be laid by evidence of the facts assumed.”

In *re Stuart Russel* ((1908)3 CLR 193; 17 Ausir Digest 1080) it was observed that an expert must be given sufficient opportunity to form an opinion before he is called upon to give an opinion. His oral evidence before the Tribunal is more essential than his opinion in writing.

Whether a valuer can use his local knowledge in valuing property

A valuer can use his local knowledge, *i.e.* knowledge derived as a person in the locality having an intelligent concern with local affairs. But the valuer cannot use his “personal” knowledge or “specialized” knowledge which he has acquired by being intimately connected with that particular property or by being engaged in a particular business or transaction when gave him specific knowledge about that particular property (*Mahmudabad Properties (P) Ltd. v. CIT* (1972)85 ITR 500 (Cal)). The judgment catalogues English cases touching on the point. In this case, the Tribunal had, *inter alia* mentioned that it is well known that during 1954 to 1962, there was considerable increase in land values. This was claimed to be a misdirection which vitiated the finding. An extract from the English judgment cited by the High Court reads as under:

“Those statements have been severely criticized, and I have been referred to an Irish case, *Regina v. Justices of Co. Antrim* ((1985)2 Ir Rep 603), in which a very famous law Lord was held by the Irish Court to have made a mistake in acting as a Magistrate upon his own local and particular knowledge. It seems to me that a fair criticism is that the Commissioners were not entitled to use any specialized knowledge which they had about the flats or marionettes at a particular time. It may be that particular sentence must be dismissed as a misdirection, and it may be that no attention should be paid to it.”

It further concluded as below:

“From the above illuminating observations of Lord Evershed M.R., it is patent that a clear and firm distinction is being drawn between matters which may be said to be a matter of local knowledge for Judges or tribunals having a local jurisdiction. This is a knowledge which is derived by such Judges or members of the tribunals as having come to their possession as persons in the locality or to quote the words of Lord Evershed “of persons who were intelligently concerned in the relevant local affairs”. This “local knowledge” is, however, quite distinct from what has been described as “specialized knowledge” or “personal specialized knowledge” which is an individual knowledge of the person himself and which may have been derived by him as a result of some association of a specialized nature with that particular branch of human affairs. The above decision is a clear authority for the proposition that if a particular finding is based on “local knowledge” it is not vitiated as having taken into consideration something which is inadmissible. If the finding is, however, based on specialized personal or individual knowledge it would be taking into account something which is not admissible.”

Whether confidential information should enter into valuation

This question arose for consideration by the House of Lords in *Lynall v. Inland Revenue Commissioners* ((1972)83 ITR 563). In that case if the confidential information was not available then the value of each share would have been £ 3 10s otherwise it would have been £ 4 10s. Each of the five law Lords, in their separate speeches, came to the same conclusion, namely that information which was of a confidential nature and which would not be disclosed by the directors to ordinary shareholders had to be ignored in arriving at the value of the share, even if the shareholder happened to be a director. Thus the value of £ 3 10s. was considered to be the proper value. In the course of his speech Lord Reid observed:

“We must decide what the highest bidder would have offered in the hypothetical sale in the open market, which the Act requires us to imagine took place at the time of Mr. Lynall’s death. The sum which any bidder will offer must depend on what he knows (or thinks he knows) about the property for which he bids. The decision of this case turns on the question what knowledge the hypothetical bidders must be supposed to have had about the affairs of Linread. One solution would be that they must be in fact have been omniscient. But we have to consider what would in fact have happened if this imaginary sale had taken place, or at least if we are looking for a general rule what would happen in the event of a sale of this kind taking place. One thing which would not happen would be that the bidders would be omniscient. They would derive their knowledge from facts made available to them by the shareholder exposing the shares for sale. We must suppose that, being a willing seller and an honest man, he would give as much information which he could get as a shareholder. If he was a director and had confidential information, he could not disclose that information without the consent of the board of directors.”

- 2.3** The unaccounted money in circulation and its spurious impact on valuation of assets is well documented. Its extent varies from economy to economy, and from geography to geography and its impact varies from asset to asset. A valuer needs to be aware of the extent of unaccounted money and the manner it influences prices for arriving at a genuine value of an asset.

One finds a telling story of unaccounted money and consequently undervaluation of immovable properties in the report of the Wanchoo Committee submitted in December 1971. It observed:

“Evasion of direct taxes in our country is closely linked with the practice of undervaluation of properties by the taxpayers, whether in the transfer documents relating to immovable properties, or in their returns of net wealth, or when explaining the source of cost of construction. The absence of proper valuation machinery in the Income-tax department

helps the tax-dodgers in more than one way. It facilitates utilisation of unaccounted money in investments. It also provides scope for reduction of liability to direct taxes, whether on income, capital gains, wealth or gifts. Due to the opportunities available for understating the value of assets in the guise of honest difference of opinion, tax-dodgers are able to evade the penal consequences and merrily continue their game of tax evasion.”

Valuations are by and large based on data relating to sales of comparable assets. The process of valuation necessitates a valuer to conduct adequate and relevant research, to perform expert analysis and to draw informed and supportable judgements. While transaction price is quantified, transaction value is a matter of judgement and estimation and, therefore, the valuers should consider all pertinent market evidence, trends and comparable transactions.

While selecting comparable transactions, a valuer must scrutinize each transaction to ensure that there was no exclusivity in the transaction which impacted the transaction price. An ideal transaction shall be one wherein, during the transaction, (i) information was freely available, (ii) there was no priority accorded to / by any parties in the transaction and (iii) where the transaction concluded without the influence of the informal sector. In such transactions, minimal difference exists between the transaction price and the transaction value and therefore offer ease for benchmarking. A valuer, therefore, must carefully examine each of these factors while selecting a comparable transaction for valuation.

Each transaction in the real estate sector is unique as various factors influence the value in each transaction. This is also the reason why the sector is often blamed for lack of transparency. Amongst the factors influencing value in the Indian real estate market, the role of unaccounted money is usually exaggerated. However, the unaccounted money has been rapidly shrinking following various regulatory / policy measures initiated by the Government, a recent example being currency demonetisation.

7.0 CONSTRUCTION AND USE OF VALUATION TABLES

7.1 Introduction

Valuation of an asset is principally an economic decision and hence all parameters which affect this decision has to be thoroughly understood and evaluated by the valuer. Interest rates prevalent in the market at the time of relevant date of valuation is one such parameter. Similarly yield or return expected by an investor on his investment in the asset is also equally important aspect for consideration of the valuer because value of asset yielding monthly or yearly income depends on the rate of return on investment expected by the investor.

Valuer is also concerned in his working about the present worth of a rupee receivable at some future date. If an investor buys from Lessor a leased out asset which will revert back to lessor at future date, say after 20 years, as freehold land, valuer must know how to evaluate present worth of said valuable asset receivable after 20 years. It is therefore clear that the valuer must thoroughly learn and understand mathematical working process and formula to arrive at rupee value under different circumstances.

In this section we shall discuss and study various formula and its application to arrive at the rupee value. In other words, we can say that the study of these tables will enable the valuer to ascertain monetary evaluation of the asset.

By the end of this section student will learn about -

- Method to evaluate total sum accumulated (Principal + Interest) at different rates of simple interest at the end of given period of time.
- Method to evaluate capital sum (Principal + Interest) at different rates of compound interest at the end of given period of time.
- Method to find out present worth of a rupee receivable after given period of time, at given rate of interest.
- Method to arrive at accumulated capital sum of a fixed amount paid annually, for a given period of time, at given rate of interest.
- Method to arrive at annual fund to be set apart every year to accumulate required capital sum at the end of given period of time at the given rate of interest.
- Method to find out present worth of the accumulated capital sum of Re.1/Annum, at given rate of interest , for a given period of time.

- Method to find out present worth of the accumulated sum of Re.1/Annum ,at given rate of interest, for a given period of time, along with provision for recoupmnt of capital sum invested at a given rate of interest.

7.2 Working process and formula given herein after would enable the valuer to work out required rupee value under different circumstances. However ready made valuation tables are also available giving such values for different periods at different rates of interests. Valuation Tables prepared by Shri. A.E. Mirams, a prominent valuer of the past, are well known and these tables are very useful as it saves lot of time of the valuer in working out actual figures from fundamentals. Some books on valuation also gives these ready valuation tables. However, if such tables are not readily available, required figures can be worked out from basics viz. by use of respective formula discussed below. Construction of new Valuation Tables for higher or lower interest rates is possible with the help of these formulae.

7.2.1 Simple Interest Amount Working :

If we want to work out gross amount that would accrue at the end of given period of time, on the principal sum, at the given rate of simple interest, the said amount can be worked out by application of following formula worked out from fundamental concepts of interest yields.

$$(i) \quad I \quad = \quad P \times R \times N$$

$$(ii) \quad A \quad = \quad P + I$$

'I' is the total interest amount accrued in given period.

'P' is the principle amount deposited.

'R' is the rate of interest adopted.

'N' is the period in number of years.

'A' is the Gross Amount including principal sum and total interest.

By use of above formula, we can work out Gross Amount that would accrue after specified period of time at specified rate of simple interest.

Example – 1 :

A person deposits sum of Rs.5,000/- at 4% simple interest rate, for 5 years period. Calculate Gross Amount receivable after 5 years period including total interest amount at simple interest basis.

Solution – 1 :

$$\begin{aligned}
 I &= P \times R \times N \\
 &= 5,000 \times \frac{4}{100} \times 5 \\
 &= \text{Rs.1,000/-}
 \end{aligned}$$

$$\begin{aligned}
 A &= P + I \\
 &= 5,000 + 1,000
 \end{aligned}$$

Gross Amount 'A' = Rs.6,000/- (Receivable after 5 years)

7.2.2. Compound Interest Amount Working :

Gross amount that would accrue at compound interest rate, after a given period of time, can be worked out from following formula.

- (i) Total Interest Amount (I) = $(1 + R)^n$
- (ii) Gross Amount (A) = $P \times (1 + R)^n$

- 'R' = Rate of compound interest
- 'n' = number of years
- 'P' = Principal Amount
- 'A' = Gross Amount receivable at end of given period.

Example – 2 :

A person deposits Rs.5,000/- in Bank at 4% compound interest rate for 5 years period. Calculate gross amount receivable after 5 years period including total interest amount on compound interest basis.

Solution – 2 :

$$\begin{aligned}
 A &= P \times (1 + R)^n \\
 &= 5,000 \times \left(1 + \frac{4}{100}\right)^5 \\
 &= 5,000 \times (1.04)^5 \\
 &= 5,000 \times 1.216 \\
 &= \text{Rs. 6,080/-}
 \end{aligned}$$

It will be seen that investor gets Rs.80/- extra after 5 years if interest is worked out not on simple interest basis but on compound interest basis.

If you see Mirams Table No.7 compound interest computation 'I' is readily worked out and given. In 5 years period line in 4% rate column, said table 7 shows 'I' value at 1.217 which is nearly same as 1.216 value worked out in this example.

Example – 3 :

An investor purchased ,the plot of land for Rs.200,000/- and spent Rs.25,000/- towards stamp duty and brokerage charges. He started construction of house on plot after 3 years. Calculate value of land, after 3 years period, on the basis of purchase price of land and other expenses, by considering 7% compound rate of interest.

Solution – 3 :

$$\begin{aligned} \text{Principal Sum (P)} &= 2,00,000 + 25,000 \\ &= \text{Rs.}2,25,000 \end{aligned}$$

$$R = 7\% \quad \text{and} \quad N = 3 \text{ years}$$

Value of land (A) after 3 years

$$\begin{aligned} &= 2,25,000 \times \left(1 + \frac{7}{100}\right)^3 \\ &= 2,25,000 \times (1.07)^3 \\ &= 2,25,000 \times 1.225 \\ &= \text{Rs.}2,75,625/- \end{aligned}$$

7.2.3 Present Value of a Rupee :

Working out present worth of a Rupee receivable after certain period at given rate of compound interest is the reverse mathematical process of the working given in above para 7.2.2.

Following formula will give present worth of a Rupee and present worth of capital sum receivable at future date.

$$(i) \quad \text{Present value of a Rupee (PV)} = \frac{1}{(1 + R)^n}$$

(ii) Present worth of amount receivable (PVA)

$$= C \times \frac{1}{(1 + R)^n}$$

'C' = Capital sum Receivable at future date.

'R' = Rate of interest

'n' = number of years.

This process of working out present reduced value of the amount receivable at some future date, is also known as deferring or discounting of receivable sum at given rate of interest for a given period.

Example – 4 :

A Lessor will receive back leased property worth Rs.20,00,000/- after 10 years. Calculate its present worth by adopting 6% rate of interest.

Solution – 4 :

Capital Amount Receivable (C) = Rs.20,00,000/-

R = 6%

N = 10 years

Present worth of Receivable Amount (PVA)

$$\begin{aligned}
 &= C \times \frac{1}{(1 + R)^n} \\
 &= 20,00,000 \times \frac{1}{\left(1 + \frac{6}{100}\right)^{10}} \\
 &= 20,00,000 \times \frac{1}{(1.06)^{10}} \\
 &= 20,00,000 \times \frac{1}{1.79} \\
 &= 20,00,000 \times 0.558 \\
 &= \text{Rs.11,16,000/-}
 \end{aligned}$$

Note: If you refer to Mirams Table-2, you will find present Rupee value at 0.5584 in 6% rate column at 10 years period row (line)

Example – 5 :

What is the present value of the reversion of an agricultural land let for 15 years period. Assume that the value of the plot at the end of 15 years will be Rs.800,000/- and rate of interest expected is 6%.

Solution – 5 :

In this example C = 800,000, R = 6% and n= 15 years

$$\begin{aligned}
 \therefore \text{PVA} &= 8,00,000 \times \frac{1}{(1 + 0.06)^{15}} \\
 &= 8,00,000 \times \frac{1}{2.397} \\
 &= 8,00,000 \times 0.417 \\
 &= \text{Rs.}3,33,600/-
 \end{aligned}$$

Example – 6 :

Find out present amount payable for an instrument which guarantees payment of capital sum of Rs.80,000/- after 5 years. Adopt 7% rate of interest.

Solution – 6 :

$$\begin{aligned}
 \text{Present Value Amount} &= C \times \frac{1}{(1 + R)^n} \\
 &= 80,000 \times \frac{1}{(1 + 0.07)^5} \\
 &= 80,000 \times \frac{1}{1.402} \\
 &= 80,000 \times 0.713 \\
 &= \text{Rs.}57,040/-
 \end{aligned}$$

Example – 7 :

What is the present value of the right to receive following sums of money, at 6% interest rate, at 5 years intervals as given below.

- | | | |
|-------|----------------|-----------|
| (i) | After 5 years | Rs.10,000 |
| (ii) | After 10 years | Rs.30,000 |
| (iii) | After 15 years | Rs.50,000 |

Solution – 7 :

It will be necessary to compute present value in 3 parts as under :-

$$\begin{aligned}
 \text{(i) Present value of Rs.10,000} \\
 &= C \times \frac{1}{(1 + R)^n} \\
 &= 10,000 \times \frac{1}{(1 + 0.06)^5} \\
 &= 10,000 \times 0.7472 \\
 &= \text{Rs.7,472/-} \qquad \qquad \qquad \text{(a)}
 \end{aligned}$$

$$\begin{aligned}
 \text{(ii) Present value of Rs.30,000} \\
 &= 30,000 \times \frac{1}{(1 + 0.06)^{10}} \\
 &= 30,000 \times 0.5584 \\
 &= \text{Rs.16,752/-} \qquad \qquad \qquad \text{(b)}
 \end{aligned}$$

$$\begin{aligned}
 \text{(iii) Present value of Rs.50,000} \\
 &= 50,000 \times \frac{1}{(1 + 0.06)^{15}} \\
 &= 50,000 \times 0.4173 \\
 &= \text{Rs.20,865/-} \qquad \qquad \qquad \text{(c)}
 \end{aligned}$$

$$\begin{aligned}
 \text{(iv) Present value of right to receive sums in 3 stages at 5 years interval} \\
 &= \text{Rs.7,472/-} + \text{Rs.16,752/-} + \text{Rs.20,865/-} \\
 &= \text{Rs.45,089/-} \qquad \qquad \qquad \text{(d)}
 \end{aligned}$$

7.2.4 Amount of Re.1/Annum working:

Many a times valuer is required to work out Gross Amount that would accumulate after the given period of time, at the given rate of interest, on the fixed sum receivable every year. Such accumulated sum is worked out by use of following formula.

$$\text{(i) Accumulated sum for Re.1/year (APA) = } \frac{(1 + R)^n - 1}{R}$$

$$(ii) \quad \text{Gross accumulated sum} = C \times \frac{(1 + R)^n - 1}{R}$$

'R' = Rate of Interest
 'n' = Number of years
 'C' = Capital Amount received/Year.

Example – 8 :

A person saved Rs.1,000/- each year and invested this yearly saving each year at 8% interest for 25 years period. What will be gross capital yield at the end of 25 years?

Solution – 8 :

$$\begin{aligned}
 \text{APA} &= \frac{(1 + R)^n - 1}{R} \\
 &= \frac{(1 + 0.08)^{25} - 1}{0.08} \\
 &= \frac{6.85 - 1}{0.08} \\
 &= 73.106 \\
 \text{Gross capital sum} &= C \times \text{APA} \\
 &= 1,000 \times 73.106 \\
 &= \text{Rs.73,106/-}
 \end{aligned}$$

Example – 9 :

From the salary of an employee, Rs.500/- per month is deducted and said sum is invested in provident fund scheme annually at 7% interest. Calculate gross provident fund amount accumulated under the scheme after 20 years service. There are no withdrawals from the fund during this period.

Solution- 9 :

$$\begin{aligned}
 \text{APA} &= \frac{(1 + 0.07)^{20} - 1}{0.07} \\
 &= \frac{3.869 - 1}{0.07} \\
 &= 40.995 \\
 \text{Gross P.F. Amount (after 20 years)} &= C \times \text{APA} \\
 &= 500 \times 12 \times 40.995 \\
 &= \text{Rs.2,45,970/-}
 \end{aligned}$$

7.2.5 Annual Sinking Fund Working :

In order to find out depreciated worth of an old existing building, the valuer has to consider Sinking Fund amount that has to be set aside annually by building owner, at given rate of interest, for the period which is equal to past age of the building. The working of this amount is the reverse process to that adopted (Vide para 2.50 above) for finding out worth of known annual payment after given period of time at given rate of interest. In present working, we have to find out annual payment that is required to be set aside each year in order to receive Re.1 at the end of given period, at given rate of interest. Gross Sinking Fund (G.S.F.) can be worked out from following formula.

$$(i) \quad ASF = \frac{R}{(1 + R)^n - 1}$$

$$(ii) \quad \text{Gross S.F.} = C \times \frac{R}{(1 + R)^n - 1}$$

ASF = Annual Sinking Fund amount to be set aside each year for recouping Re.1 at end of given period, at given interest rate.

'R' = Rate of interest.

'n' = Number of years.

'C' = Total capital recoupment expected.

'GSF' = Gross Sinking Fund.

Example – 10 :

Find out Gross Sinking Fund required to be set aside every year to recoup total capital sum of Rs.4,00,000/- at the end of 60 years life of building at 4% rate of compound interest.

Solution – 10 :

$$\begin{aligned}
 ASF &= \frac{R}{(1 + R)^n - 1} \\
 &= \frac{0.04}{(1 + 0.04)^{60} - 1} \\
 &= \frac{0.04}{10.519 - 1} \\
 &= \frac{0.04}{9.519} \\
 &= 0.0042
 \end{aligned}$$

$$\begin{aligned}
 \text{Gross Sinking Fund (GSF)} &= C \times \text{ASF} \\
 &= 4,00,000 \times 0.0042 \\
 &= \text{Rs.1,680/- per year}
 \end{aligned}$$

If you apply the formula given in previous para 2.50, using 1680/year as annual saving ,you will notice that this sum of Rs.1,680/- per year accumulates to the gross capital sum of Rs.4,00,000/- at 4% rate of interest after 60 years period.

Example – 11 :

Mr. X has to repay loan amount of Rs.40,000/- after 20 years. What amount should Mr. X set aside every year to enable it to repay loan amount with 4% interest ?

Solution – 11 :

$$\begin{aligned}
 \text{ASF} &= \frac{R}{(1 + R)^n - 1} \\
 &= \frac{0.04}{(1 + 0.04)^{20} - 1} \\
 &= \frac{0.04}{2.19 - 1} \\
 &= \frac{0.04}{1.19} \\
 &= 0.0336 \text{ per year}
 \end{aligned}$$

$$\begin{aligned}
 \text{GSF} &= C \times \text{ASF} \\
 &= 40,000 \times 0.0336 \\
 &= \text{Rs.1,344/- per year}
 \end{aligned}$$

Example – 12 :

A person has purchased the property (Land with building) for Rs.5,00,000/-.The building on plot yields net annual income of Rs.30,000/Year. Future life of the purchased existing building is 30 years. If rebuilding cost for this building is Rs.4,00,000/- after 30 years, calculate the amount that should be set aside every year from income from the house for 30 years future life ,invested at 3% yield, so that with accumulated fund, house could be rebuilt after 30 years, to continue house income.

Solution – 12 :

$$\begin{aligned}
 \text{ASF} &= \frac{R}{(1 + R)^n - 1} \\
 &= \frac{0.03}{(1 + 0.03)^{30} - 1} \\
 &= \frac{0.03}{2.428 - 1} \\
 &= \frac{0.03}{1.428} \\
 &= 0.021 \text{ per year}
 \end{aligned}$$

$$\begin{aligned}
 \text{GSF} &= C \times \text{ASF} \\
 &= 4,00,000 \times 0.021 \\
 &= \text{Rs.8,400/- per year}
 \end{aligned}$$

Sum of Rs.8,400/- per year, for 30 years period, at 3% interest, would yield rebuilding cost of Rs.4,00,000/-

7.2.6 Present value of an amount of Re.1/year (Single rate basis) :

Present worth of future annual income flow ,for given period of time ,at given rate of interest ,could give us present market worth of the asset generating such income. Hence this Y.P. working is very useful to valuers. The income flow is normally a perpetual income.

As only remunerative rate of interest for the perpetual income is considered in this working, it is known as single rate working. The technique of arriving at years' purchase for Re.1 is very simple. We have to separately work out present value of Re.1 receivable after 1st year, P.V. of Re.1 receivable after 2nd year up to Re.1 receivable after given number of years and total up all these sum. This will give us Y.P. value for Re.1/year after given number of years. The formula for working out Years Purchase and value of asset are as under :-

$$\begin{aligned}
 \text{(i) Present value of Re.1/year (Y.P.)} \\
 &= \frac{1 - \frac{1}{(1 + R)^n}}{R}
 \end{aligned}$$

(ii) Value of asset = C x Y.P.

'R' = Rate of interest

'n' = Numbers of years

'C' = Capital income (Annuity) received each year

Y.P. = Years Purchase

Example – 13 :

A residential house yields net rental income (Annuity) of Rs.3,000/- per year. If this income ceases after 40 years (Future life of building), what is present value of this property at 7% rate of interest.

Solution – 13 :

$$\begin{aligned}
 Y P &= \frac{1 - \frac{1}{(1 + R)^n}}{R} \\
 &= \frac{1 - \frac{1}{(1 + 0.07)^{40}}}{0.07} \\
 &= \frac{1 - 0.0667}{0.07} \\
 &= 13.332
 \end{aligned}$$

Present value of property

$$\begin{aligned}
 &= C \times Y.P. \\
 &= 3,000 \times 13.332 \\
 &= \text{Rs.}39,996/- \\
 &\text{Say Rs.}40,000/-
 \end{aligned}$$

Example – 14 :

What is the present value of an Annuity which would continue yielding income of Rs.2,000 per month for 20 years period at 4% rate of interest?

Solution - 14 :

$$Y P = \frac{1 - \frac{1}{(1 + R)^n}}{R}$$

$$= \frac{1 - \frac{1}{(1 + 0.04)^{20}}}{0.04}$$

$$= \frac{1 - 0.456}{0.04}$$

$$= 13.60$$

Present value of property = C x Y.P.

$$= 2,000 \times 12 \times 13.60$$

$$= \text{Rs.}3,26,400/-$$

7.2.7 Present value of an amount of Re.1/year (Duel Rate basis) :

It is very essential in number of cases to provide for recoupment of capital sum invested also, in addition to annual yield income from the asset. As two interest rates are considered for terminable income, this working is known as Duel Rate working.

One rate is remunerative interest (yield) rate for capital sum invested and second rate is interest rate for recoupment of capital invested for period after which annual income is likely to cease. In this case the income is terminable and hence provision for recoupment of capital has to be made.

Remunerative interest rate is higher and recoupment interest rate is minimum. This is nothing but to provide for setting aside Sinking Fund amount each year for full period so as to get back capital sum invested. This is also known as Redemption of Capital. As two interest rates are considered in this working, this is known as Duel Rate. The formula for working out years purchase with redemption of capital and formula to arrive at value of asset are as under.

(i)	Present value of Re.1 per year (Y.P.) =	$\frac{1}{(R + S)}$
(ii)	Sinking Fund (S) =	$\frac{r}{(1 + r)^n - 1}$
(iii)	Value of asset =	C x Y.P.

'R' = Remunerative Interest Rate
 'r' = Interest rate for recoupment of capital
 'n' = Numbers of year
 'C' = Capital income received each year
 Y.P. = Years Purchase

Example –15 :

A Lessee took a plot on 60 years lease and on the plot he built a house yielding net income of Rs.15,000 per year. After 30 years, he decided to sale the property. Calculate present sale value of the property if expected yield on investment is 8% and rate of redemption of capital is 3%.

Solution – 15 :

$$\begin{aligned} \text{Y.P.} &= \frac{1}{(R + S)} \\ \text{Unexpired lease period} &= 60 - 30 \\ &= 30 \text{ years} \end{aligned}$$

$$\begin{aligned} S &= \frac{r}{(1 + r)^n - 1} \\ &= \frac{0.03}{(1 + 0.03)^{30} - 1} \\ &= 0.021 \end{aligned}$$

$$\begin{aligned} \text{Y.P.} &= \frac{1}{0.08 + 0.021} \\ &= 9.90 \end{aligned}$$

Present value of property

$$\begin{aligned} &= C \times \text{Y.P.} \\ &= 15,000 \times 9.9 \\ &= \text{Rs.1,48,500/-} \end{aligned}$$

Example – 16 :

Advice on purchase price of fully developed rental building yielding net rent of Rs.18,000 per year. Expected rate of return is 10% and future life of building is 50 years. Adopt rate of recoupment of capital at 4%.

Solution – 16 :

$$\begin{aligned}
 \text{Y.P.} &= \frac{1}{(R + S)} \\
 S &= \frac{r}{(1 + r)^n - 1} \\
 &= \frac{0.04}{(1 + 0.04)^{50} - 1} \\
 &= 0.0065 \\
 \text{Y.P.} &= \frac{1}{0.10 + 0.0065} \\
 &= \frac{1}{0.1065} \\
 &= 9.389 \\
 \text{Fair purchase price} &= C \times \text{Y.P.} \\
 &= 18,000 \times 9.389 \\
 &= \text{Rs.1,69,002/-} \\
 &\text{Say Rs.1,69,000/-}
 \end{aligned}$$

Example – 17 :

Mr. Y has borrowed Rs.5,00,000/- and he desires to pay off the said amount with interest in equal annual installments in 30 years period. What will be annual installment (Annuity) payable, if interest rate on loan is 7% and redemption yield rate is 4% ?

Solution – 17 :

$$\begin{aligned}
 \text{Y.P.} &= \frac{1}{(R + S)} \\
 S &= \frac{r}{(1 + r)^n - 1} \\
 &= \frac{0.04}{(1 + 0.04)^{30} - 1} \\
 &= 0.0178
 \end{aligned}$$

$$\begin{aligned}
 Y.P. &= \frac{1}{0.07 + 0.0178} \\
 &= 11.389
 \end{aligned}$$

Value of Asset (Loan sum)

$$\begin{aligned}
 &= C (\text{Annuity}) \times Y.P. \\
 \therefore \text{Annuity} &= \frac{\text{Loan Sum}}{Y.P.} \\
 &= \frac{5,00,000}{11.389} \\
 &= \text{Rs.43,902/-}
 \end{aligned}$$

8.0 INTRODUCTION TO APPROACHES TO VALUATION

8.1 Background

Valuation of immovable property utilizes logical processes which are dictated by and justified by the generally established findings of land economics. In order to carry out sound valuation, it is necessary to have economic background of immovable property. This is so because valuation is concerned with the consequence of interaction of economic forces.

The valuation process takes into account uses of land, productivity of land, land policies, geography, transportation, natural resources and alike value phenomenon. In the valuation of immovable property one values “properties”. Property refers to certain rights which an individual enjoys by virtue of ownership of wealth. Wealth consists of useful things owned by man. Wealth and property differ. The former is the material thing; the latter is the right to use the material things. The valuation technique is concerned with the valuation of the rights of ownership. One who owns wealth possesses certain rights, which are simply the rights to enjoy the benefits of wealth. It is the possession of these rights which constitutes property. These property rights are not material things but are merely abstract relationships and may be included under the term ‘ownership’. Since past benefits expire with time, the property consists only of rights to future benefits. Property may be defined as rights to future benefits arising from ownership.

Immovable properties may consist merely of land or of land and improvements. Improvements may be on the land or to the land. Construction of a building on the land is an improvement on the land. Improvements like providing means of access, drainage, services etc. are improvements to the land.

Land has productive capacity, but not without the application of labour and capital on it. In the case of agricultural land, labour for cultivating it and the working capital in the form of seeds, fertilizers and water have to be provided before it becomes productive. Similarly, labour and capital have to be applied to the urban land before it can become productive.

In the combination of these factors (land, labour and capital), an economist distinguishes rent, wages and interest. The services of labour are reckoned as wages, and the services of land as economic rent. In this system the product of land, viz., rent, was considered residual quantity remaining only after sufficient portion of the product had been allocated to wages and interest to satisfy the demands of labour and capital.

In the development of valuation technique there is a practical identity between the

elements of the product, except that the return to land is residual in character and the value of land is an appropriate proportion of the joint product which remains after adequate returns to labour and capital.

Land has value because on the application of capital and labour the joint product produces rents or services which are sufficient not only to meet the interest charges on the cost of labour and material, but also leave residual income attributable to land.

Immovable properties have value because they serve mankind and are capable of satisfying their wants. The differences in the quality and advantages of immovable properties are the difference in the utility. These differences of various kinds of properties have brought about competition between individuals in the possession of particular property and recognition of relative worth. Sales, exchange and renting of immovable properties have given them values. The differences in exchange values or prices will be found to be a reflection of difference in potential productivity that is future benefits. These future benefits may be in terms of money income or in terms of amenities.

It is the failure to recognize these economic principles that produces disagreement between valuers. On the one hand there are those who see in a property a physical thing or an area of land limited by boundaries, a pile of bricks, mortar, steel, cement, timber and with a street address. These men say "there is the thing"; that is what we are going to value. On the other hand, there are those who see in a property not only its physical features, but its legal and economic characteristics.

A purchaser of immovable property, purchases the right there in with the expectation of future productivity. The price he would pay, i.e. the capital value of the property is proportional to the character, importance and the extent of the future productivity anticipated by him. The degree of certainty attached by him to the future productivity, the period of time for which it will continue, the amount of it, and the tendency to increase or decrease of productivity over the years - all reflect into the capital value of the property to him. He first estimates the quantity, quality and duration of anticipated future productivity into a capital sum which is known as capitalization. It will be seen that the anticipated productivity is the primary consideration in the purchase. The capital value is secondary in character and derived from it.

It is now a well-established fact that immovable property market is an integral part of the investment market and therefore, the same factors which influence the investment market will influence the immovable property market.

Properties / Real Estate can be classified under three basic groups, keeping marketability in view:

- (i) Income fetching marketable properties: Rented properties whether residential,

commercial or industrial. Hotels, Cinemas or industrial properties fall under this group.

- (ii) Non-income fetching, marketable properties: Owner occupied bungalows, apartments/flats, shops, offices, factories fall under this category.
- (iii) Non-income fetching, non-marketable properties: Religious and public buildings like temple, church, school, college, public buildings, museum, town hall, fire station and Govt. buildings which are neither sold nor let out, fall in this category.

Note: In the above classification, income fetching properties are those which are fetching income at the time of valuation and not the property, which are capable of fetching income but not fetching at the time of valuation.

Based upon different characteristics of above referred three types of properties, three different approaches of estimating value of the property are evolved.

Income Approach: This approach is generally useful to value income fetching marketable properties.

Market Approach: This approach is generally recommended for all marketable properties, whether income-yielding or not.

Cost Approach: This approach is generally adopted for non-income fetching and non-marketable property.

All the three approaches to valuation involve comparison of various legal, physical, social and economic factors/aspects, as also of advantages/merits and disadvantages/demerits arising out of these various factors. In order to ensure that none of those factors and their advantages and disadvantages are over looked or lost sight of, it is advisable that a valuer should first step in the shoes of the client and think about the problem i.e. of property, its advantages and disadvantages and market value of the same from the other angle also. Thinking from points of view of both (or all) sides will ensure better and fairer estimation of market value of a property.

All these three approaches are not exclusive of each other. In income approach, market rent i.e. income is estimated by comparison. In market approach, sales analysis is carried out. While in cost approach, value of land is estimated by sale comparison and that of building by contractor's method as explained later.

8.2 The selection of a method of valuation is the prerogative of the valuer. Based on the facts and circumstances of each case, the valuer shall select appropriate method of valuation. It is not necessary to estimate market value of a property by adopting all the three approaches to valuation, unless the valuer himself desires to cross-check with alternative approach. **In any case, however, temptation to arrive at an average value should always be scrupulously or strictly avoided because in reality, average never exists. This is explained by an illustration below.**

Let us consider a case of a rented property having land area of 400 sq.m. and building area of 200 sq.m. located in a developed city entirely occupied by a very old tenant protected under Rent Control Act. There is no further potential for development as FSI is fully consumed. The net income from the property is say ` 1 lakh. Let us assume that Y.P. is 8. This gives value of property ` 8 lakh. As the tenant is protected under the Rent Control Act value of right of reversion is negligible. If we carry out valuation by cost approach by considering current market value of land plus depreciated replacement cost of building value works out to say ` 1 crore. **The average value of property works out to ` 54 lakh. No prudent buyer will buy the property at the average value. The average value worked out does not satisfy the concept of willing buyer and willing seller.**

As explained above, valuation of tangible assets involves three basic approaches:

- Income approach
- Market approach
- Cost approach

8.3 ELEMENTS OF INCOME APPROACH

Introduction

The income from the property, whether property is only land, land with building or other types of assets like plant and machinery and other equipment, is conceptually a return on investment made in acquiring such an asset. This return may be in form of rent, profit, hire charges or such other forms of return. In this unit we shall learn the basics of the Income Approach to value the asset. Only elements of Income Approach are discussed here.

This theory of return on investment is as old as art of cultivating land for agricultural purposes. Famous economist David Ricardo for the first time analysed and established theory of rent by considering and comparing return received by sale of agricultural produce with capital invested in production of crop i.e. cost of seeds, fertilizer, water and cost of labour paid for such agricultural production. He termed surplus return as “Rent” which could be paid to land owner for use of

land. Thus rent for more fertile land was higher than the rent of land having less fertile soil.

Subsequently, lot of other non-agricultural use of land started like housing, industrial and commercial developments. Depending upon its utility, demand and supply, the rental values for non agricultural use also started establishing. Land in heart of town had thus high rental value than rental values in out skirts of the town. Rental value for commercial user of land fetched much higher value as compared to rental value of land for residential use.

The basic concept of valuation under Income Approach is thus linked with rental income or yield or return on investment in the immovable property. From the details of the amount of capital invested and expected rate of return on investment, we can find out amount of receivable rent or yield. Conversely, from details of rental income or yield and given rate of interest, we can find out fair investment value of the property. The formula to estimate value of the property under income approach is :

$$C V = N I \times Y.P.$$

Where,

C V = Capital value of the property.

N I = Net Income receivable from property.

Y P = Years Purchase based on interest rates.

Details of years purchase, Gross Income and Expenses are discussed hereinafter in this unit.

To understand types of rent we must first understand relationship of land owner and land occupant (user) viz. Lessor and Lessee or landlord and tenant.

Lessor : He is the owner of the land or land with building, who gives away possession of his property, on rent, on certain terms and conditions. He can be distinguished from full owner of the property (Freeholder) in the sense that he does not possess 100% rights in the property but holds only partial rights. Some of free holder's (Lessor's) rights in property are passed on to land user (Lessee).

Lessee : He is the tenant of the property owned by and belonging to a Lessor. He holds and uses the property, for period stated in lease agreement, on rental amount mutually agreed and also at the agreed terms and conditions set out in lease agreement.

Sub-lessee : Some times under lease agreement, a right is given by Lessor to the Lessee to permit sub-letting of land or land with building to the third person. This sub-tenant is called sub-lessee. Main Lessor in such a case is called Head

lessor.

Interests of Lessor, Lessee, Sublessee.: Depending upon the terms and conditions of the lease or sublease, value of the interest of the different right holders of the property can be estimated. Thus in a leasehold property, there will be two right holders, Lessor and Lessee. Valuer will have to workout separately, value of Lessor's interest in the property and value of Lessee's interest in the property, based on lease terms.

There are basically four types of leases:

- (a) Building Lease.
- (b) Occupational Lease.
- (c) Sub Lease.
- (d) Lease for Life.

Building Lease : This type of leases are most common in which open plot of land is given on lease by Lessor to the Lessee for the construction of the building. Lease period may be 40 years, 60 years, 99 years or even 999 years. 99 years and more period is called long term lease or lease in perpetuity. Short terms leases are also not uncommon. In all these type of leases, rental income from building is received by lessee out of which he pays ground rent for the land to lessor.

Some times in the beginning of lease, some premium amount is also charged by the lessor as an advance lease rent for the land or capitalised amount of part of lease rent. These leases may be renewable for further periods on the same rent or may be renewable with enhanced lease rent with or without premium. There are leases which are not renewable and on expiry of lease period, lessee is required to surrender back land with improvements on land to the lessor free of cost. Some leases provide for payment of market value of building (Improvement on land) to the lessee by the lessor, at the time of maturity or expiry of lease. Some leases also provide increase of ground rent at fixed intervals even during initial lease period.

In many of the government leases, there is a provision for profit sharing in case of assignment (Sale or transfer) of the lease. This is called premium for transfer or payment of unearned increase. This amount is worked out at some fixed percentage of the difference between original premium rate and prevalent premium rate at the time of the transfer. If land was leased in 1985 at Rs.500/Sq.Mts, and premium rate today is Rs.5,000/S.M. then unearned increase charged to lessee for the assignment would be, say at 50 % of difference. i.e. $\frac{1}{2} \times (\text{Rs.5,000} - \text{Rs.500})$.

Occupational Lease : This lease is for use of land and building together which belongs

to lessor. The lease period is normally short, 3 years, 5 years or 10 years. There is usually a clause for rent review after 2 or 3 years period and there is a clause for renewable lease for further periods.

These types of leases are not much common in India for residential premises due to provisions for freezing of rent, under Rent Control Acts. Instead of leases, short period licenses are created for such residential premises.

However still, commercial premises are freely leased to limited companies as well as individuals by granting occupational leases.

Sub Leases : In this type of lease, Head Lessor leases land to Head Lessee for a fixed lease rent for a fixed period. Head Lessee is given right to sub lease as and when required. Head Lessee sub leases the land to sub-lessee for enhanced lease rental but for shorter duration than the period of head lease ; e.g. main lease is for 99 years, sublease is for 98 years; and any case less than unexpired period of head lease.

Lease for Life : Under this type of lease, period of lease is fixed as the remaining life span of the Lessee. The lease period will mature on the date of death of the Lessee. This type of lease creating Life Interest is not common in India.

RENT :

Words Landlord and Tenant are normally used instead of lessor and lessee to distinguish building tenant (premises occupant) from land tenant. There are several types of rent as detailed below :-

Ground Rent : It is the rent charged by the land owner (Lessor) to the tenant (Lessee) for use of land under specified and mutually agreed lease terms and conditions. It can be monthly rent or annual rent. The ground rent may be fixed for entire period or may be increasing at fixed intervals of years or may be reviewed at the time of renewal.

Rack Rent : It is the actual full rental value (Gross Rent) receivable from the property in a year. It may be rent for land or for land and buildings.

Head Rent : Many a times the main Lessee called Head Lessee sub-leases the property to another person called sub-lessee. To distinguish between lease rent paid by sub-lessee to head lessee and rent paid by head Lessee to freeholder Lessor, the term Head Rent is used for lease rent paid by the Head Lessee to Head Lessor, the freeholder.

Profit Rent : This is the full rental value (fair market rent/rack rent) less the rent paid by an occupying lessee or a sub-lessee. When a profit rent exists, the occupier has a saving on the annual expenses because the rent payment is less than the full rental value. This situation occurs because the lessee or sub-lessee has been in the occupation for a period of time and the rent has not been reviewed recently, or a premium may have been paid at the commencement or during the period of lease.

Contractual Rent : It is the rent mutually agreed between the landlord and the tenant under the tenancy contract, which may be written or verbal. The rent may be for use of land alone or for land and buildings together. This rent may or may not include property taxes and other outgoings. Tenancy contract would fix the agreed terms and conditions.

Standard Rent : The concept of Rent is established under Transfer of Property Act which governs and regulate relationship between landlord and tenant. However since independence of India and due to post world war situations in our country, most of the states thought fit to bring out Rent Restriction Act for protection to tenants against exploitation and ejection. This freezing of rent and protection against ejection were contrary to provisions of Transfer of Property Act. Hence these Rent Control Acts were treated as special legislation superior to Transfer of Property Act.

Under these Rent Control Acts, the norms for rent payable by the tenant to the landlord were fixed. This was called as Standard Rent. It can be defined as the rent fixed by the Court for land or land with building (premises) in accordance with the provisions of Rent Control Act. Most of these Rent Acts, defines the term "Standard Rent" and also clarifies what it includes and what it excludes under different situations. The landlord cannot charge or receive from the tenant, any amount in excess of this legal rent i.e. Standard Rent; except permissible increases of tax, etc.

Virtual Rent : It is the virtual gross rental value to a lessor receivable from a lessee for leased out property. In some cases lessor receives some fixed lump sum amount called premium from the lessee in advance, in the beginning of the lease. This premium amount is nothing but an advance capitalised partial rental for the property. Thus returns to the lessor is divided in two or more parts. Gross Rent reserved under lease which is actually received from lessee during the lease period and the annual equivalent of the lump sum amount (premium) received from the lessee, constitutes total rental or the virtual rent.

Sometimes improvements are carried out on the property by lessee which would ultimately belong to the lessor as per lease agreement. In such a case annual equivalent of such capital improvement works also becomes the part of the virtual rent. Thus virtual rent is sum of the total of actual rent received from lessee during lease period, annual equivalent of premium amount paid and annual equivalent of capital sum invested by lessee on improvements.

Market Rent : It is the highest rent that is receivable for the property, by the landlord, in the open market, after considering all advantages and disadvantages of the property as well as market conditions, in the prudent manner. It can be more than Standard Rent and in some cases may be even lower than Standard Rent.

Concessional Rent : When landlord gives premises on rent to some relatives or friends at a token or nominal rent which is much below ruling rent in the locality it is called concessional rent. It is always lower than market rent of the premises.

Monopoly Rent : A property may have unique location in a locality. This locational advantage can be exploited by charging monopoly rent to the occupant. This rent is normally higher than market rent prevailing in the locality. The only hotel in front of a railway station with restriction of similar development in the area is the example of monopoly situations.

Estimation of Fair Market Rent : Fair market rent of a property to be valued is estimated by comparison of the property with the similar property in the locality and rents fetched by them. Such comparison of properties can be made by directly comparing their advantages and disadvantages.

OUTGOINGS :

Having learnt different types of rental income, we can study types of expenses or outgoings that the owner of property is required to incur to maintain rental income. The outgoings for immovable property differ to great extent from outgoings for movable assets like plant and machinery. However in both cases, contract agreement with tenant (actual user of asset) and terms and conditions of renting out, decide liabilities for actual outgoings from rental income received by the asset owner. Some of the outgoings that are required to be incurred by the owner of the house property are as under :

Property Taxes : Every local body or municipality levy house tax on the buildings and in return provide civic amenities including, road network, water supply, drainage facility, conservancy services, street lights and garbage disposal services. These property taxes are normally based on actual rents received or receivable for the premises. Taxes cannot be fixed on the basis of actual rent which

is higher than the Standard Rent of the premises. In such case taxes are based on standard rent of the premises.

It is now the new trend of many municipal corporations in India to delink taxes from rental base and instead assess taxes on the basis of built-up area of the premises and user of the premises. In the year 2003 Delhi Municipal Corporation Act was amended to introduce new system of rating called "UNIT AREA SYSTEM" of rating/taxation. Similar system of area based taxation are already operating in cities like Amdavad, Patna, Bangalore and Hyderabad. Kolkata Municipal Corporation has also decided to introduce this area based rating laws with some modifications.

While allowing outgoings for property taxes, a valuer should deduct only legally payable taxes and should ignore actual taxes if found unreasonably high and excessive. Special levy of tax like "Repair Cess" if levied on the property should also be deducted as an outgoing.

Land Revenue : For every property in urban areas, Government tax on land is payable by the landlord for non agricultural use of the land. This N.A. Assessment which is tax on land only and same is fixed depending upon its user viz. Residential, Commercial or Industrial. Till land is unbuilt upon even in city area N.A. tax is not payable as said land is considered as agricultural land. However, if land is duly converted to non-agricultural use and laying vacant, N. A. Assessment for permitted use is levied.

Ground Rent : If the property is not freehold but of leasehold tenure, landlord has to pay lease rent or ground rent for the use of land (if open land is leased) till the date of expiry of lease. The ground rent forms the part of outgoing.

General Repairs : Every human being requires upkeep and regular health care for long and healthy life. Like wise buildings also require regular upkeep and maintenance and also occasional repairs for long service life. For continuity of rent and for maintaining the level of rent, premises have to be in tenantable and in the up to date condition.

It is however seen that we do not believe in timely maintenance and repairs. Landlords repair the building very reluctantly. Even house owners who have not rented out the premises but occupy the premises themselves, also give last priority to repairs and maintenance of a building and utility services. It is a matter of last resort and not a matter of routine. Rent Control Act has aggravated this situation further as landlords now have excuse for not repairing premises in view of low, uneconomic frozen rents. This is the reason why we see in every part of our country, several buildings in disrepair and dilapidated conditions.

However, in spite of all such factual position, it is for a valuer to allow appropriate amount towards annual repairs and maintenance of a building. This outgoing is essential for ensuring estimated future life of the building and also for maintaining present level of rent fetching capacity of the building. If building is in a bad condition, rent receivable would fall. It is customary to link outgoings on account of maintenance and repairs with gross rental income from the property. Some valuers prefer to link repair allowance with cost of construction of the building.

It is natural that entirely new building does not need heavy repairs but as it becomes old, higher repair outgoings are needed. Repair and maintenance outgoings can be considered in the range of 3% to 12% of gross rent depending upon age of building, amount of rent received and type of wear and tear to which the building is subjected. For new residential building of say 5 years age with fairly good rental income, 3% of gross rent may be sufficient. On the other hand for building having 40 years age yielding controlled rent even 10% of G.R. may be inadequate.

A valuer can rely on the actual average cost of general repairs and maintenance of the property, if available, for the last 5 or 10 years period. It would be a better guide for making proper allowance for the repairs as outgoings. However, in absence of such data, a valuer may estimate repair cost, based on physical condition, age of building and certain percentage of the annual rental from the property.

The repairs and maintenance expenses do not include cost of upkeep and services like regular sweepings and security services which should be separately allowed as outgoings. These repair expenses do not also include accrued structural repairs like leakages through terrace slab waterproofing, cracked pillars and beams etc. which should be separately allowed as accrued repairs. A Valuer who relate repairs with cost of construction, adopt repairs at 1% to 3% of cost, depending upon permanent or semi-permanent type of building.

House Insurance : Many landlords do not insure a house against the risk of fire, flood, earthquake etc. Even an owner who insures his house against these perils, under insure the house, not intentionally but mainly out of ignorance and carelessness.. However, a valuer should estimate and allow appropriate and adequate insurance premium in every case, as an outgoing, in the interest of safety and continuity of rental income in future, from the house.

Even if house is not insured, outgoing for the insurance premium should be allowed assuming that the owner himself takes up the insurer's burden. The insurance premium rates go on changing. It is linked with insured amount. For residential building it may be about Rs.1.25 to Rs.2.00/1000 of sum insured.

Upkeep and Services : This is also one of the regular outgoings required to be incurred by a landlord of tenanted building. Landlord will have to employ services of sweeper for day to day sweeping within a compound and common areas of building. He may have to employ pump man for regular water supply. If lift is provided in building, liftman in shifts are required to be employed. If security staff is provided, watchman's salary has to be allowed.

In some offices central A.C. facility is provided to each and every tenant. These expenses are normally allowed on the basis of actual expenditure. Sometimes tenants pay separately for all these services. In such a case, rental income should be correspondingly increased or expenses for services should not be allowed as outgoings.

Collection and Management Charges : The landlord will require services of Rent Collector if number of tenants in a building are many. Actual salary paid to the rent collector can be considered as Rent Collection charges. Collecting rents from tenants in slums or chawls is more difficult. Rentals are low and paying capacity of tenants is also low. Regular flow of the rental income in such cases is rare. Rent collector may have to visit tenants more than once for payment. In some cases legal notice and litigation in Court may be necessary. Hence rent collection charges in such case may be higher. Large rentals may also become irregular if there are disputes between landlord and tenants.

Considering factual position in each case, these expenses can be allowed. Normally 3% to 6% of Gross Rental Income may be sufficient towards collection charges. In case where landlord himself collects rents from the tenants, yet this outgoings should be allowed.

RETURN ON INVESTMENTS

Having studied income and expenses, we must now learn basis of rate of interest on investment. Following terminology must be thoroughly understood for said purpose.

Annuity : It is defined as the Net Annual payment (Return on investment) for the capital invested in an immovable property or any other form of investment. Rent from land or house, interest on Bank fixed deposit or yield on Government security are the examples of Annuity.

Capitalisation : It is a concept (Mode/style) indicating the amount required to be invested by a person desiring to acquire right for future benefit (income) or profit. Here future benefit means net income or net profit expected to be received in future. Future benefit is in context of time or number of years and not with

reference to increased or decreased gross or net income at a later period. A person desiring income in the form of interest may invest his funds in Bank fixed deposits or he may invest fund in a property to derive future benefits in the form of Rental Income. Such fund is called capital investment. Word “Capitalised Amount” by accountants means expenditure in land and building.

Rate of Capitalisation : It is a rate of interest/return at which an investor is willing to invest his capital/funds to get future benefits (income). If a person deposits Rs.1,00,000 in Bank fixed deposit, and Bank offers interest of 8% on F.D., rate of 8% which is rate of interest yielded is called rate of capitalisation.

Sinking Fund : It can be defined as an annual recurring fund (amount) required to be set aside every year, for a given period of time, at the given rate of interest, to recoup capital invested in a property, interest or return from which would cease after a given period of time.

Thus, a valuer is sometimes required to find out the amount required to be set apart every year for a certain number of years to recoup capital income from which is terminable after sometime. In case when income (lease rent) from leasehold properties (land), ceases with the expiry of the lease (If there is no renewal clause), it is necessary to allow for recoupment of initial capital invested in the form of premium and improvements, if any. Similarly in case of capital investment in building which is a depreciable asset, it is necessary to provide for recoupment of capital invested in construction of a building, so that a new building can be constructed, if required.

The rate of interest adopted for return on capital investment is called remunerative rate of interest. The rate of interest adopted for working out Sinking Fund i.e. recoupment fund or accumulation of capital is called Accumulative rate (Recoupment rate) of interest.

Remunerative rate of interest (For perpetual income) is always higher than Accumulative rate of interest (Interest rate for recoupment of capital invested in property having terminable income).

Remunerative rate of interest is decided by comparing market yield rates from similar other sound securities available in the market. Whereas accumulative rate of interest is decided at lowest possible maintainable interest rate at which rate interest income is guaranteed and it must accumulate to capital invested. The said income should not also fall even in a very long period of time for the investment, say 40 to 60 years time period. Hence this rate is generally very low and is normally less than the interest rates offered by Banks on amounts deposited in Saving Bank account.

Capital Appreciation: It is very essential for a Valuer to be in know of trends in various investment markets including real estate market. A Valuer must be aware of returns expected by the investors in real estate market at different period of time. A Valuer must also understand effects of excess money supply in Money market as well as effects of money crunch in money market. It is common knowledge that funds normally flow from one investment market to the other market depending upon possibilities of better short term and long term returns as well as security.

In the case of investment in the form of Govt. bonds, saving certificates, fixed deposits, etc. the investor either gets interest regularly with return of capital at the end of the term or gets back original capital together with interest payments accumulated at the compound rate of interest over the fixed period/term. In both the cases what an investor gets back is essentially the original capital invested by him and capital invested does not increase or appreciate.

In the case of investment in the real estate market with the development of urban areas both in densification and spread over the area, a property which was once on the periphery becomes almost centrally located or improves in locational aspects. Further with growth of an urban area development and improvement of infrastructure, amenities and facilities may take place. Further due to increase in population demand for properties also increases. All these factors consequently result in increase in prices or exchange values/market values of properties without owner doing anything for or contributing in any way to such increase in values and hence such increase is termed as 'Unearned' increase. Such increase in capital value of a property is known as 'Capital Appreciation'. In view of possibility of Capital Appreciation owners/investors usually accept interest at lower rates than those offered by Govt. Securities.

Capital Erosion : As against the aspect of 'Capital Appreciation' a valuer also needs to understand and appreciate another aspect or eventuality wherein capital invested loses value in real terms. One of the main causes of such reduction is 'Inflation' i.e. Rupee Value going down. As the rate of inflation increases with time, purchasing power of a rupee or rupee value goes down. When money is invested in Govt. bonds, fixed deposits, etc. i.e. in monetary form for certain term and inflation rate increases during that term, though investor will get back the same amount he has invested, the purchasing power of that capital amount will get reduced. In other words value of the capital amount will reduce in real terms and thus will get eroded i.e. wear away or gets reduced. Such reduction in value of capital is known as 'Capital Erosion'.

In the case of investment in real estate/property, as inflation increases rent levels and capital values of properties also correspondingly increases. Capital

invested in a property does not get eroded or reduced in value. In view of this, the investor often determines his willingness to accept interest at rates lower than those yielded by Govt. Securities.

This phenomenon is explained by an example.

In Mumbai, in Vile Parle (E) area on Nariman Road in a good building 1BHK apartments were available at Rs.5,000/- per sq.ft. of carpet area on out right purchase in the first quarter of the year 2003. These premises were fetching the gross rent at Rs.25/- per sq.ft. of the carpet area per month (the tenant is not protected under Rent Control Act). The same premises now in May 2008 is available at Rs.10,000/- per sq.ft. of carpet area and current gross rent is Rs.40/- per sq.ft. of the carpet area per month. All the outgoings are borne by landlord. The net rent roughly works out to 25% of gross rent. The above figures are tabulated as under :

Year	Rate at which premises were available per	Gross rent per sq.ft. of carpet	Net rent per sq. ft. of	Rate of Return per annum	Bank deposit rate on long	Return from Gilt edged
2003	5,000/-	300	225	4.5	6 – 7	7.5
2008	10,000/-	480	360	3.6	7 – 8	7-8

But in case of real estate in urban areas covered by rent control laws, the problem arises in a peculiar manner; as invested capital in real estate appreciates, without any efforts of the investor, some times capital invested in real estates gets eroded, without any actions on the part of the investor. Rent controlled rented properties, are the classic example of Capital erosion of the invested capital sum in the rented properties. This capital erosion is due to frozen rents coupled with inflation in the country over a period of several years. As the inflation grows, the rate of return expected by the investors in the real estate market also increases. As rents are frozen, investor tied up with tenanted property, gets lesser return than that is expected by other investors in the market and thus he suffers erosion of capital originally invested in the property. Some valuers therefore call rent act affected tenanted properties as “Depreciating asset”.

Years Purchase : Years purchase is defined as capitalised value required to be paid once and for all, in order to receive annual income of Re.1/- for specified period of Time at specified rate of return.

$$Y.P. = \frac{\text{Capital Value} \times \text{Re.1}}{\text{Rate of Capitalization}}$$

Having learnt basics of yield method of valuation, we can now study how it is applied to evaluate value of tenanted properties.

Example – 1 :

What is the years purchase (Capital Investment) to receive annuity of Re.1/- at 8% rate of return ?

Solution :

For getting annuity of Rs.8/-, capital sum required to be invested is Rs.100/- and hence for getting annuity of Re.1/-, fund required to be invested, could be found out by rule of three.

$$\text{Y.P.} = \frac{\text{Re.1}}{0.08} = \frac{1}{\frac{8}{100}} = \frac{1}{8} \times 100 = 12.50$$

In other words, if a person invests Rs.12.50 today at 8% rate of interest, he would earn (Get back) Re.1/- at the end of the year.

Example – 2 :

A Lessor leased his 1500 sq.mts. land to Lessee in 1965 for 99 years period on monthly lease rent of Rs.1,000/-. Lease is renewable for further 99 years period on same terms. Lessee constructed a residential building on plot and rented out flats in 1966 on total rental of Rs.5,000/month. Repairs and other outgoings of the property are 40% of house rent income. Calculate value of Lessor's interest in land and also calculate value of Lessee's interest in the property. Prevalent rate of return in the market is 8%.

Solution :

- (a) Gross Annual Income of ground rent to Lessor :
- $$= \text{Rs.1,000} \times 12$$
- $$= \text{Rs.12,000/- per year.}$$

As rate of return is 8%,

Note: Ground rent of Rs.1000/-per annum is secured in view of higher gross rent of Rs.5000/-per month

$$\begin{aligned} \text{Value of Lessor's interest} &= \text{Rs.12,000} \times 100/8 \\ &= \text{Rs.150,000/-} \end{aligned}$$

(b) Gross Annual House rent income
 = Rs.5,000 x 12 = Rs.60,000

Less : Outgoings :

Ground Rent Rs.1,000 x 12	=	Rs.12,000
Property tax & Repairs 40% of 60000	=	<u>Rs.24,000</u>
Net Annual Return	=	Rs.24,000/ yr.

Subsistence of lease is subjected to compliance of various terms, conditions and covenants of lease. Hence investment in purchasing Lessee's interest is little risky. We should therefore capitalise net yield at 1% higher return say at 9%.

Notes

- 1) Gross Rent of Rs.5000/- per month is less secured than Ground Rent of Rs.1,000/- per month.
- 2) Unexpired period of lease, with renewal, is 156 years, hence in perpetuity.

Value of Lessee's interest in property	=	Rs.24,000 x 100/9
	=	Rs.2,66,666/-
	Say	Rs.2,67,000/-

Example – 3 :

The Lessor leased the plot with building in year 1994 for total 20 years period. Lease rent (rack rent) was fixed at Rs.20,000/year in 1994 for full period of 20 years. Lessee who occupied the house was required to bear taxes and repair expenses of Rs.6,000/year. Market rental of house in year 2004 is Rs.36,000/year. Calculate value of Lessor's interest in the property in year 2004. Also calculate value of Lessee's interest in the property in 2004 if he subleases premises at market rental of Rs.36,000/year. Rent Control Act is not applicable to the property. No premium paid and no improvements made by the lessee.

Solution :

Lessor's interest is two fold.

- (i) To receive rent of Rs.20,000/Year till 2014.
- (ii) To receive rent of Rs.36,000/Year after 2014 till perpetuity.

Net yield receivable for 10 years period is capitalised at 7% which gives Y.P. = 7.024 (Lease rent of Rs.20,000/- per year is secured against market rent of Rs.36,000/- per year)

Value of Lessor's interest (i)	=	Rs. 20,000 x 7.024	
	=	Rs.1,40,480/-	
			... (A-1)
Value of Lessor's interest (ii)			
Annual yield	=	Rs. 36,000/year.	
Less expenses	=	<u>Rs. 6,000/year</u>	
Net yield till perpetuity	=	Rs. 30,000/year	

As this return is likely to increase or decrease in future as per market conditions, rate of capitalisation is adopted at 8% instead of 7% to account for risk of rent variation.

$$\begin{aligned} \text{Capitalised value in 2004} &= \text{Rs.30,000} \times 100/8 \\ &= \text{Rs.3,75,000/-} \end{aligned}$$

This value is deferred for 10 years period at 8% to find out net present value (NPV) of this future income in year 2004.

$$\begin{aligned} \text{N.P.V. of lessor's interest (ii)} &= \text{Rs.3,75,000} \times 0.4632 \\ &= \text{Rs.1,73,700/-} \end{aligned} \quad \dots \text{(A-2)}$$

Total value of lessor's interest in year 2004 :

$$\begin{aligned} &= \text{(A-1)} + \text{(A-2)} \\ &= \text{Rs.1,40,480} + \text{Rs.1,73,700} \\ &= \text{Rs.3,14,180/-} \\ \text{Say} &\text{ Rs.3,14,000/-} \quad \dots \text{(A-3)} \end{aligned}$$

Lessee had subsisting lease contract with unexpired period of 10 years in 2004. He could very well assign his rights at market rental of Rs.36,000/year for 10 years period. Lessee will be required to pay Rs.20,000/year to Lessor and bear outgoings of Rs.6,000/year.

$$\begin{aligned} \text{Net profit rental to Lessee} &= \text{Rs.36,000} - \text{Rs.20,000} - \text{Rs.6,000} \\ &= \text{Rs.10,000/- Per Year.} \end{aligned}$$

This income of profit rental will cease after 10 years. Capitalising net rental at 8½ % for 10 years period, we get value of Lessee's interest in 2004.

Y.P. for 10 years at 8½ % yield = 6.561

Value of Lessee's interest = Rs.10,000 x 6.561
 = Rs.65,610/-
 Say Rs.66,000/- ...(B)

Example – 4 :

A fully rented, fully developed building yields Gross Rent (Standard Rent) of Rs.48,000/- per year. Adopt total outgoings at Rs.28,000/Year and expected rate of return at 8%. Find out sale value of the property if Rent Act is applicable.

Solution :

Gross Annual Receivable Rent = Rs.48,000
Less : Annual outgoings = Rs.28,000
 Net Receivable Rent = Rs.20,000

As Rent Act is applicable, yield is capitalised in perpetuity –
 Value of property = Rs.20,000 x 100/8
 = Rs.2,50,000/-

Fair sale value of the property is Rs.250,000/-

Example-5 :

A fully rented fully developed building has G + 3 upper floors. There are 6 tenants per floor. Ground floor tenants pay rent of Rs.500/month for each flat. Upper first floor, second floor and third floor tenants, pay rent of Rs.525/month per flat, Rs.550/month per flat and Rs.550/month per flat respectively. Property taxes are Rs.28,000 per 6 month. N.A. tax is Rs.500/year. Building Insurance premium is Rs.850/year. Sweeper salary is Rs.150/month. Common light bill is Rs.80/month. Calculate market value of the property if building is 30 years old and future life is more than 60 years. expected rate of return on investment is 7%. There are no accrued major repairs to building and Rent Act is applicable.

Solution :

Gross Annual Rent (Standard Rent):
 (Rs.500 + Rs.525 + Rs.550 + Rs.550) 6 x 12 = Rs.1,53,000

Less : Outgoings :

Property taxes Rs.28,000 x 2	Rs.56,000		
N.A. Tax per year.	Rs. 500		
Insurance premium	Rs. 850		
General Repairs 8% of G.R.	Rs.12,240		
Sweeper salary Rs.150 x 12	Rs. 1,800		
Common light Rs.80 x 12	Rs. 960		
Collection & Management 3% GR	<u>Rs. 4,590</u>	=	<u>Rs. 76,940</u>
Net Annual Rent		=	Rs. 76,060

Capitalising yield at 10% in perpetuity :

$$\begin{aligned}
 \text{Value of property} &= \text{Rs.76,060} \times 100/10 \\
 &= \text{Rs.760,600/-} \\
 &\text{Say Rs.7,61,000/-}
 \end{aligned}$$

8.4 ELEMENTS OF MARKET APPROACH.

Introduction

Market Approach to value the property is important and widely used approach to value any type of asset. It may be consumer goods, shares and stocks, plant and machinery or Real Estate viz. open land or land with building. All these assets can be valued by this approach, provided the asset is marketable.

Each one of us is fairly familiar with market place. It may be market for consumer goods. It may be vegetable market, Gold market, Iron market or Cloth market or Stock Market where trading (Buying & selling operation) of specific goods are carried out. We are also aware of higgles and haggles and bargaining system prevalent at such market place and manner in which deal is finalised. Real Estate Market also has most of these phenomena except that it does not have a common market place as we have in case of consumer goods.

However, principles operating in market of consumer goods are also effective in Real Estate Market. Demand and supply factor and quality of product are equally important aspects in determining exchange value of asset in both the markets. Similarly for both markets, the concept "Market is Supreme" is applicable, as all appurtenant factors are considered by buyers as well as by sellers in both the markets, while settling final price of the asset.

In this unit we shall learn various factors for consideration of the valuer while estimating value of the property by this Market Approach. Only elements of Market Approach are discussed here.

Market Approach to value the property is the important and favoured approach of valuation by Valuers and Courts. This approach is less subjective and more analytical because valuer has to rely on market instances.

Basically there are two methods under market approach of valuation:

- (i) Sales Comparison Method.
- (ii) Development Method.

Sales Comparison Method is based on principle of comparison and substitution.

It is human tendency to compare and select. A customer intending to buy consumer product will compare quality and price of such a product available in one shop with quality and price of substitute similar product, may be of other brand, available in same shop or other shop in the market. He would finally select the product only after comparison of both the products from all angles including price. It is said that 'to err' is human. Likewise we can also say that "to compare" is human.

While on the subject of necessity of considering similarity and comparison before determining final price, we may also study an old story on the subject, which is very educative.

The story is like this. Once a tradesman (Saudagar) came to the Court (Darbar) of king Akbar and produced three exactly similar looking beautiful dolls. He then demanded that wise persons of the Court may estimate fair value of each of these 3 dolls. Akbar asked Birbal to do valuation. Birbal collected 3 dolls and asked for one day time for valuation. Next day Birbal came to the Court and declared value of first doll at Nil value. He said that value of second doll is 1000 gold mohars (Gold coins) and further added that the third doll is invaluable but he put its value at 1 lac gold-mohars. Saudagar agreed with valuation.

However, Akbar asked for reasons for different valuation of similar looking dolls. Birbal gave practical demonstration. He put up a thin wire in ear of first doll it came out of the mouth of the doll. Birbal said that this doll symbolises a person who listens to the secret of his friend and tells every one about it and hence such person has no value in the society. Wire put in ear of second doll came out of second ear. Birbal said such persons are less harmful as they neither help the friend nor cause any harm to the friend. Hence he valued second doll more than first doll. When

he put wire in third doll's ear it did not come out but remained inside the doll. Birbal explained that such persons are invaluable because they not only keep the secret with themselves but they also try to solve problems of friend.

There are three important lessons to be learnt from this story.

- (i) The similarity of property may be deceptive. We must thoroughly investigate to find differences of attributes between even similar looking properties.
- (ii) Valuer should not immediately jump to conclusion. Case must be thoroughly studied by asking for time for valuation and then only considered opinion about valuation should be given.
- (iii) End User of report (Client or Court), should ask for reasons for giving such a valuation and valuer should support and prove his valuation by giving reasoning and supporting evidence.

In case of property valuation, subject property has to be compared with other available sale instances, having similar attributes and situated falling in the same locality. Appropriate positive or negative weightages are considered for variations and magnitude of attributes, to arrive at final adjusted value of the subject property. Thus valuation by comparing sale instances is based on the principle of substitution which operates not only in consumer goods market but also operates in Real Estate Market with equal force.

Like commodity market, there are three types of market conditions in Real Estate Market also:

- (i) Buyers Market.
- (ii) Sellers Market.
- (iii) Stable Market.

Buyers Market : When number of units available to the purchasers are far in excess of demand, it is Buyers Market. Prices tend to decrease because of greater bargaining power of purchasers and availability of plenty of alternative and substitute properties. Sellers compete with each other to sale their units at lesser price.

Sellers Market : When supply of units are less than demand for such units, prices tend to go up due to competition amongst buyers to purchase these units even at higher price. Bargaining power of purchaser reduces. Moreover Real Estate Units are such that like consumer products it cannot be brought into market in short span of few days or few months. It takes long time to increase the supply to meet with market demand.

Stable Market : Sometimes in market demand exists, supply also exists but due to various reasons, purchasers stop purchasing or defer the purchase of premises. Artificial stoppage of demand in the market prevails. The reasons could be likely changes in Government policies or lack of paying capacity of people at large in the locality, to pay high or prohibitive price of properties.

Expectations of people about likely fall in price of real estate in near future also results in Stable Market conditions. Prices do not fall nor rise but remain stable year after year. No material transaction takes place in the market. Stray sale transactions in market do not change stable market situations.

There are two types of property so far as Market Approach is concerned.

- (i) Marketable properties like flats, shops, offices, factories etc.
- (ii) Non marketable properties like Schools, Temples, Museum, Public or Government buildings, Municipal Public utility buildings like Fire station, Hospitals, Monumental building. etc.

When we are considering Market Approach, we should keep in mind two other basic aspects also in addition to the principle of substitution operating in the real estate market. First aspect to be considered is highest and best use of the property. Though the property is put to inferior use or has under utilised

F.S.I. area, price it would fetch in open market would be for superior use and for full utilisation of land. Another aspect operating in most of the market is the concept of supremacy of the market. Strong market forces which are operating in the real estate market will force everyone to believe that "MARKET IS SUPREME". Market conditions take into account all types of factors operating at a relevant period of time. No one can control market for long period of time. Temporarily for short duration market may be controlled but then strong market forces would start operating and person or authority trying to control or over power market would be neutralized and mitigated.

Even Government cannot control market by law, for a long period. Government's policy to control the market forces artificially, often fail because "Market is supreme". Classic example of this attempt to control the market artificially is the enforcement of Rent Control Legislation by various State Governments. Though on paper Rent Control Act appears to be successful and effective but in actual reality, market has found out its own ways to over power and defeat the legislation by establishing new trends and practices in market by taking premium, pugree, salami or key money. Even system of giving premises on leave and license basis is also to circumvent provisions of Rent Act. Of course this

concept of supremacy of the market is applicable only to marketable properties and not to non-marketable properties.

When we are considering market, whether it is commodity market or real estate market, we always consider supply and demand which is the most important and powerful factor affecting price level in the market.

The principle of supply and demand states that the price of a commodity or a service, varies inversely with the supply of the item, but it varies directly with the demand for the item in the market. If the supply increases, demand remaining constant, the price falls and if supply decreases supply remaining constant the price of the commodity rises. On the other hand, if demand increases, supply remaining constant, the price also increases and if the demand decreases, the price also decreases. This principal can be better explained by Supply and Demand Curve shown below.

In the demand and supply curve shown below, Price is plotted vertically as ordinate (Y Axis), indicating price of the commodity against different quantity of the product available in the market. Quantity of the goods available in the market is plotted horizontally as abscissa (X Axis), indicating Number of units.

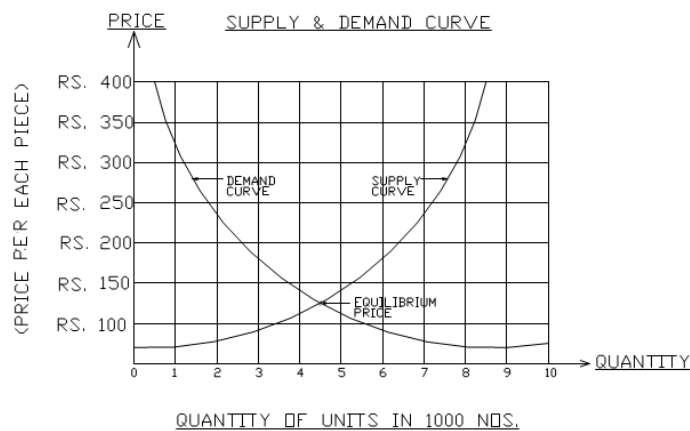


FIGURE NO. - 1

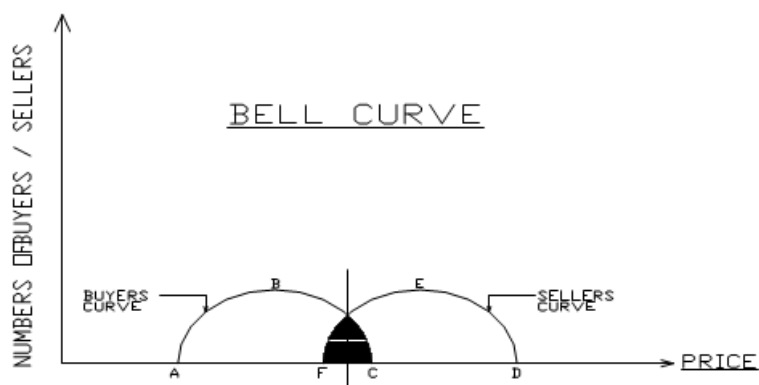
In the above figure, Demand Curve indicates that at the price of Rs.400/No., demand for product is hardly for 500 pieces. As price reduces to Rs.200, demand in market increases to 2500 pieces. When price falls down to Rs.50/piece, demand curve indicates that the demand in market, for this product rises to 9000 pieces.

On the other hand supply curve indicates that at the price of Rs.50/No. The supply of product is negligible. When price rises to Rs.200/No. Supply of commodity increases to 6500 Nos. and when price in market rises to Rs.400/No. Supply also

increases to 9000 Nos. The point of intersection of the two curves, however gives us equilibrium price of the product or the fair price of the product. Hence price of Rs.125/piece would be an ideal price for the said product with supply of 4500 Nos.

Apart from demand and supply aspect, it is interesting to study how price of a commodity is determined in common market place between a buyer and a seller. There are group of buyers in the market who compete with each other to acquire the commodity. Each buyer determines highest price he is prepared to pay, on the basis of his individual capacity to pay (wealth). He also at the same time estimates fair cost of product and his need and urgency to acquire the said commodity, etc. In fact his attempt is to get the product on payment of minimum price.

On the other hand, there are group of sellers in the market who compete with each other to sell their product. Each seller determines lowest possible price for sale on the basis of same parameters viz. cost of products, profit margin, capacity to withhold sale of product, need and urgency for sale, etc. In fact expectation of seller is to get highest possible price for his product but he has to succumb to the market forces. If offered price is higher than highest price determined by the buyer or it is lower than lowest price determined by seller, the transaction or sale of commodity does not take place. But in all other cases transaction takes place after higggle haggle (Bargaining) for the price. This process can be easily explained by the Bell Curve shown below:



Buyers curve A-B-C shows number of buyers at different price levels. 'A' price is offered by the minimum number of buyers in the market. Said price being unviable price, transaction does not take place. At 'B' price, maximum number of buyers are willing to buy. Transaction may take place or may not take place. At 'C' price again there are minimum number of buyers because said price is considered very high by buyers.

Sellers curve D-E-F shows number of sellers at different price levels. At 'D' price

there are hardly any sellers able to sale their product because buyers will consider said price too high. At 'E' price there are maximum number of sellers. Transaction may or may not take place at this price. Again at 'F' price there are minimum sellers because said price is considered by sellers as it is too low.

Thus most of the transactions take place in the market in the price range of 'F' to 'C'. Price 'G' can be said to be ideal price as it is average price or highest price that would be offered by a willing buyer and lowest price that would be acceptable to any willing seller. It is said that in perfect competition market, transaction takes place at ideal price 'G'.

In real estate market, there is no such common market place, as we have for commodity market. However these concepts do operate in Real Estate Market also. There is a range of prices for any specific property depending upon individual buyers needs, their paying capacity and estimation of cost of said property by each individual buyer. Demand and supply factor and factor of availability of substitute property in the market operate in this market also with equal force.

In order to arrive at fair price of a commodity in the market, buyer as well as seller consider various characteristics of the product viz. its use, its physical benefit, service life etc. Similarly for Real Estate viz. land or land with building also buyers and sellers consider various characteristics of properties viz. its usage, its service life (in case of building) its resale value, benefit of infrastructure amenity and civic amenities etc., etc.

Various characteristics of the property and various market forces influencing determination of price in the Real Estate Market can be broadly classified into following four groups.

- (i) Economic Factors.
- (ii) Physical and Technical Factors.
- (iii) Social Factors.
- (iv) Legal Factors.

These are detailed in following paras :

Economic Factors :

- * Growth of population and employment – trends and projection.
- * Demand for and supply of properties.
- * State and Central Govt. policies for land development.
- * Economic and Taxation policies of Government.
- * Income and wage level of residents, trends for saving and paying

capacities of people in the locality.

- * Money market situation.
- * Cyclical boom and recession periods in real estate market.
- * Expected rental yields and returns on investment in real estate.
- * Inflation or deflation in nations economy.
- * Availability of money on credit from Banks and other institutions and rate offered for such advances.
- * Burden of property tax and other maintenance outgoings.
- * Better alternative use against current inferior use.
- * Employment opportunities and development potential in area.
- * Availability of alternative or substitute asset in the market.

Physical (Technical) Factors :

- * Land characteristics : Size, shape, plot area, frontage and depth, vista, orientation, soil type, topography etc.
- * Infrastructure facility : Good network of roads, water supply, drainage, sewerage system, power supply and telecommunication links.
- * Prominence and placement : Arterial road, Access road, Main road, by- lane, remote area location.
- * Building characteristics :
 - R.C.C. framed or load bearing structure.
 - Expected future life and age of structure.
 - Deterioration and present condition.
 - Specification of building, (Civil, electrification and plumbing items).
 - Aesthetics and workmanship quality.
 - Obsolescence due to change in technology or change in life style.
 - Maintenance and repair liability.
- * Functional aspect : Optimum use of space, good planning, design and arrangement of rooms with no wastage, high utility value, modern habitation style.
- * Amenities : Swimming pool, garden, lift, security system, car parking facility, Health club, Children's play area.
- * Environmental aspect : Noise and smoke pollution level, sea or lake frontage, nuisance due to railway track, industries or airport, climatic condition.
- * Natural calamity : Earthquake prone areas, flooding and cyclone hazards, Tsunami prone areas.

Social Factors :

- * Locality : Poor class, middle class, posh areas (Life style and living standards of residents of the locality).
- * Neighbourhood : Well developed, less developed, slum like, cremation ground,

dumping ground, nuisance due to community hall, cinema, school on adjoining plot.

- * Civic amenities : Proximity of shops, Mall, market, school, cinema, community hall, hospital, railway station, bus stand, garden.
- * Population : Density in area and population growth, congestion.
- * Means of communication : Railway, road way or water ways.
- * Prestige aspect : Prestigious building, prominent location, renowned personality like film star or industrialist or politician as neighbour.
- * Political factor : Linguistic or Religious communal unrest.
- * Racial habitation : Parsi colony, Mohmedan locality, Hindu colony, Catholic colony. Brahmanwada and Maharwada.
- * Religious factor : Proximity of Temple, Church, Mosque, Place of worship.
- * Personal factors : Sentimental considerations, beliefs in 'Vastu' principles or Feng Sui norms, Liking for specific neighbourhood, Speculative intent.
- * Stigma aspects : Haunted house, Dislike for Vyagramukhi or Tee junction plots, fear due to past history of cyclone, Tsunami, flood or earthquake, case history of murder or suicide on property, previous use of land as Kabrastan or Cremation ground.

Legal Factors :

- * Social legislation like - The Rent Control Act 1948.
- * Land Reform Legislation like : The Urban Land (Ceiling and Regulation) Act 1976.
- * Ecological Restriction like : Coastal Regulations.
- * Transfer of Property Act with lease provisions.
- * Covenants under lease or conveyance deed.
- * Land Acquisition Act.
- * Laws Governing Building Construction like Development Control Rules/ Building Bylaws/ Town planning and Zoning Regulations.
- * Laws Governing Land : Town Planning Act/Municipal Corporation Act
- * Wealth Tax Act/Income Tax Act.
- * Law on earthquake resistant building.
- * Reservations under different Acts.

In Sale Comparison method, most popular comparison technique is Adhoc Comparison Technique which is also known as Hedonic Method

In this method, price is expressed by the formula: $P = f(\text{STLA})$

Where,

- P = price of property in the market.
- f = It stands for "function of"

- S = Size or covered area of premises.
- T = Time factor at which asset is traded in the market.
- L = Locational aspects of the property.
- A = Age or physical condition of the property.

In this method, sale instances of comparable properties in the locality are compared with subject property generally from four important aspects viz. Size factor, Time factor, Locational factor and Age factor.

There are many other factors affecting value of the property in the market. However, under this hedonic method, only four major factors are considered to arrive at overall weightage difference.

Following examples would explain how these factors are considered and how appropriate weightages are adopted to arrive at final value of the subject property from rates of comparable sale instances.

Example – 1 :

A residential flat having an area of 100 Sq. Mts, is required to be valued in March 2005. Sale instance of flat (A) is available for same locality. It is for February 2004 for flat having an area of 150 Sq. Mts. for a price of Rs.12,00,000/-. Another flat (B) is sold on October 2004 for an amount of Rs.5,40,000/- for 60 Sq. Mts. area.

Solution :

Flat (A) Rate Rs.8,000/Sq.Mt. on February 2004.

Flat (B) Rate Rs.9,000/Sq.Mt. on October 2004.

If these rates are modified for time and area factors, equivalent rate for March 2005 would be as under. (10%/year is considered as price rise factor and 3% variation for size factor)

$$\text{Flat (A)} = \text{Rs.8,000} + 13\% (T = +10\% , S = + 3\%) = \text{Rs.9,040/- Per Sq.Mt.}$$

$$\text{Flat (B)} = \text{Rs.9,000} + 8\% (T = + 5\%, S = + 3\%) = \text{Rs.9,180/- Per Sq.Mt.}$$

We can value subject flat with 100 Sq. Mts. area at rate of Rs.9,100/- Per Sq.Mt.

$$\begin{aligned} \text{Value of the subject flat} &= 100 \times 9,100 \\ &= \text{Rs.9,10,000/-} \end{aligned}$$

Example – 2 :

A plot having an area of 1200 Sq.Mts. abutting main road is required to be valued on January 2005. Plot 'A' having an area of 600 Sq.Mts. and which is located in by lane was sold at rate of Rs.800/- per Sq.Mt. in December 2004. Plot 'B' having an area of 1050 Sq.Mts. was sold at rate of Rs.750/- per Sq.Mt. but it is about one kilometer away from subject plot along same road. Sale of plot 'B' was of June 2004.

Solution – 2 :

- (i) We have to apply appropriate weightages for Time and Locational aspect for plot 'A'. Say 15% extra for main road location and 5% deduction for size factor.
- (ii) For plot 'B' we may consider 5% extra for 6 months time gap and 5% for locational aspect.

Equated values as in June 2005 would be as under :-

$$\begin{aligned} \text{Plot 'A'} &= 800 + 10\% (L = + 15\%, S = - 5\%) &&= \text{Rs.880/- Per Sq.Mt.} \\ \text{Plot 'B'} &= 750 + 10\% (T = + 5\%, L = + 5\%) &&= \text{Rs.825/- Per Sq.Mt.} \end{aligned}$$

We can adopt a rate of Rs.850/- per Sq. Mt. for subject plot. Value of subject plot in January 2005 :

$$\begin{aligned} &= 1200 \times 850 \\ &= \text{Rs.10,20,000/-} \end{aligned}$$

This being elementary study of Market Approach, Development Method of valuation is not discussed in this section.

8.5 ELEMENTS OF COST APPROACH

Introduction

Cost approach is useful in evaluating non-marketable properties in Real Estate. It is also useful in estimating values of specialized assets with limited market for financial statements of an enterprise. This method is invariably adopted in determining cost of construction of a building, viz investments done by the assessee in the real estate, for the purposes of Income Tax Act. This method is also used for estimating fair insured sum (Insurable amount), for building Insurance purpose.

In order to find out true investment made by an assessee, in the immovable property, this method is frequently resorted to by the valuers. Under Income Tax

Act, it is necessary for the assessee, to establish and prove that the cost of investment in an immovable property, shown in books of account, is not more than the sources of income of the assessee. If the cost of investment as worked out by this method is less than the cost shown in books of account, then, it would prove that there is no concealment of income by the assessee. This is the reason why this method is popular amongst valuers.

Cost approach is also adopted by the valuers while estimating cost of construction of the building under construction, and for which the bank/financial institution has advanced loan. Even for valuation of the owner occupied bungalows and for valuation of industrial properties by break up method (Land, Buildings & Plant and machinery), this method is used.

In this unit, we shall learn various methods of cost estimation, as well as various methods of depreciation, to arrive at net present worth (Depreciated Replacement Cost) of the asset, by cost approach. Only elements of Cost Approach are discussed here.

It is considered necessary at this point to draw attention to the definition of 'value' and the 'Subject matter of Valuation.' Value of a thing or property arises out of its utility i.e. benefits, existing or anticipated, derived by its possession and use. Further what is being valued is 'Interest' in a property i.e. legal right to derive benefit by lawful use of a property.

In valuation of a property by cost approach i.e. land and building method neither legal right, with or without limitations, nor benefits arising from possession and use of property are taken into consideration. Again the Cost approach to valuation takes only supply side into consideration while ignores the fact that market value is decided by interaction of supply and demand. The cost approach, therefore, does not indicate market value of a property.

It is, therefore, suggested that cost approach may be adopted only where data and information regarding rental income and sale price both are not available, like in case of specialized industrial buildings, non-income fetching non- marketable properties, e.g. religious and public properties.

Cost approach is the third basic approach of valuation, with the help of which we can work out 'cost' as well as 'value' of certain types of assets.

There are mainly two methods under this approach:

- (i) Book Value Method.
- (ii) Land and Building Method (Depreciated Replacement Cost method)

In Book Value Method, historical cost of the asset in the year of acquisition is taken as basis and with the help of cost index figures (Multiplying factors for different years, indicating price rise in the market due to inflation and other factors like variation in cost of materials and labour), replacement costs and value of the asset are determined for the relevant year of valuation. **(Note : International Valuation Standard Committee discourage this approach as it is not objective.)**

Land and Building Method is also known as Contractors method, Physical method or Depreciated cost method. This method is useful to estimate cost of the structures like Temple, Church, Museum, School and College buildings. This Depreciated Replacement / Reproduction Cost method of valuation is also used to estimate present day value of the plant and machineries.

This method basically consists of estimating value of land by comparison and cost of building separately and then adding these two values to arrive at fair market value of the property in relevant year of valuation.

Present day value of land is determined by comparison (market approach) with similar lands in the vicinity sold in the recent past till the date of valuation. Such lands should be having comparable characteristics as that of subject land. In case of variations, adjustment in value of land should be made to arrive at final value of the land.

Depreciated Reproduction/Replacement Cost (DRC) of the building is determined by first finding out present day reproduction/replacement cost of the building as the case may be (Reproduction cost in case of identical/replica building and Replacement cost of similar building with similar utility).

Reproduction/Replacement cost of the building is the cost of construction on the date of valuation. After having determined reproduction/replacement cost of the building, depreciation is allowed for the age of the building, to finally arrive at the DRC of the building. DRC in common parlance is known as present day value.

Thus formula to work out DRC of the building :

DRC = Replacement Cost as if new today less Depreciation for age.

Replacement cost of building can be worked out by any of the following methods:

- (i) Book Value Method.
- (ii) Flat Rate Method.
- (iii) Building Cost Index Method.
- (iv) Quantity Survey Method.

In Book Value Method, reproduction cost is estimated based on historical cost from books of accounts and cost index factors data maintained by the valuer, as shown in the examples below.

Following examples will explain how reproduction cost (present day cost) of the asset can be worked out with the help of Book value cost and Cost Index figures.

Example – 1 :

A machine was purchased in year 1993 at the cost of Rs.1,20,000/-. Cost Index factor for year 1993 is 37.50 with base year 1960 as 1.00. Calculate reproduction cost of machine in year 2003 if Cost Index Factor for year 2003 is 87.50 with same base year.

Solution :

$$\begin{aligned}
 \text{Reproduction cost} &= \text{Book Value} \times \text{Cost Index Factor} \\
 &= 1,20,000 \times 87.50/37.50 \\
 &= \text{Rs.2,80,000/-}
 \end{aligned}$$

It should be noted that this method of cost estimation, as if new, with the help of Book value and indexation, should be adopted only if price of identical new machine is not readily available from the market. Some times when particular model of machine is no more manufactured or imported machine is not available in the market, this method is very much useful. This method, however, cannot replace current price obtainable from the market for finding out Reproduction Cost.

Example – 2 :

A factory building was constructed in the year 1985 at the total cost of Rs.25,50,000/-. Work out reproduction cost of said factory building in year 2005 if Building Cost Index in year 1985 and 2005 were 14.16 and 96.25 respectively with base year 1960 at 1.00.

Solution :

$$\begin{aligned}
 &\text{Reproduction cost of factory in year 2005} \\
 &= \text{Book Value Cost} \times \text{Cost Index Factor} \\
 &= 25,50,000 \times 96.25/14.16 \\
 &= \text{Rs.1,73,33,156/-} \\
 &\text{Say Rs.1,73,00,000/-}
 \end{aligned}$$

Sometimes some factories have special design criteria with heavy design load consideration with long spans and excessive height. In such cases, working out reproduction cost from quantity survey method is difficult due to want of actual structural design drawings. In such case this method is very useful. This method is also useful to cross check reproduction cost arrived at by other cost estimation methods.

Example – 3 :

Boeing Aircraft hanger was constructed at Mumbai in year 1998 at total cost of Rs.68 crores. Dimensions of hanger were 121 M. x 88 M. Hanger height was 22 meters. Government now intends to build similar hanger today in 2005. Estimate reproduction cost for proposed hanger by book value method if Building Cost Index for year 1998 was 62.50 and for year 2005 it was 96.25 with 1960 base year at 1.00.

Solution :

$$\begin{aligned}
 &\text{Reproduction Cost of Hanger in the year 2005} \\
 &= \text{Book Value Cost} \times \text{Cost Index Factor} \\
 &= 68,00,00,000 \times 96.25/62.50 \\
 &= \text{Rs.1,04,72,00,000/-}
 \end{aligned}$$

$$\begin{aligned}
 &\text{Cost of construction rate for Hanger} \\
 &= 1,04,72,00,000 / (121 \times 88) \\
 &= \text{Rs.98,347/- per Sq.Mt.}
 \end{aligned}$$

In flat rate method, replacement cost of the old building is estimated on the basis of current cost of construction of similar building. This cost is considered on unit area rate basis, Say Rs.8,500/Sq.Mt. of total built up floor area of the building. This rate varies for different types of the buildings like residential, factory and office buildings and far different geographical areas in the same year. It also depends on specifications of the building.

Local market inquiry would indicate the unit area rate of the cost of construction, prevalent in the locality, for a new construction with standard specifications.

Necessary adjustments in the rate will be necessary for variations in the specifications and amenities.

This is also explained further. Let us consider a case of a building under valuation having jack arch type construction. This type of construction is not in vogue now a days. The RCC frame construction is widely used. Therefore, the cost of construction of RCC frame building need to be adopted as replacement cost; because RCC frame building is not replica of the building under valuation.

In building cost index method, Reproduction Cost is worked out from some fixed base year as determined by C.P.W.D. At present, C.P.W.D. has adopted 1-9-1999 as base year with Building Cost Index at 100 for city of Delhi. By this method, cost index of any place in India can be worked out for any year by comparing cost of building materials and labour in subject town with rates of building materials and labour in Delhi in year 1999. This difference with appropriate weightages for the different materials, could give cost index for relevant year subsequent to year 1999. Previous base years norms adopted by C.P.W.D. were 1-10-1976 and 1-1-1992 with cost index at Delhi in the said years as 100.

Building cost was Rs. 2,810/- per Sq. M. for the residential building in Delhi as on 1-1-1992 when cost index for Delhi was 100. Now if Cost Index worked out for Mumbai in 2005 is 250. Building cost for residential building in Mumbai, in year 2005 = $2,810 \times 2.50 = \text{Rs.}7,025/\text{Sq.Mt.}$

Quantity survey method is more precise and accurate. It involves working out of detailed quantities of the building and applying current scheduled rates for each building items for the year of valuation. This gives very accurate Replacement Cost of an existing building.

As stated before, it is necessary to allow depreciation from the reproduction/replacement cost of the building to arrive at DRC of the asset. It is therefore necessary to first learn the meaning of word depreciation and also learn various methods of depreciation as discussed below.

Depreciation is an important concept which enables a person to find out wearing out of the capital value of an asset whether it is a movable asset like machineries, vehicles or an immovable asset like buildings. Land is considered to be an undepreciable asset, though some lands do depreciate in value because of erosion or damage to land due to natural forces like earthquake and Tsunami. All businessmen, industrial entrepreneurs, tax experts and financial institutions are seriously concerned about this vital factor which erodes the value of capital invested in immovable or movable asset (Buildings/Plant & Machinery).

It is common experience that physical objects are subject to wear and tear and deterioration whether in use or not. Depreciation can be therefore defined as “loss in service value due to usage of an asset and passage of time”. This loss in value cannot be restored back by current maintenance.

In case of Workmen N.G. Bank V/s. N.G. Bank (A.I.R. 1976 S.C. 611), Supreme Court of India defined “Depreciation” as “Decrease in value of the property through wear, deterioration and obsolescence”.

Types of depreciations.

- (i) Depreciation due to wear and tear (Physical depreciation).
- (ii) Depreciation due to economic obsolescence.
- (iii) Depreciation due to functional obsolescence.
- (iv) Depreciation due to technological obsolescence.

Physical depreciation : This is very common. The physical depreciation occurs due to usage of the asset. It is the normal wear and tear of the asset. All similar objects do not observe similar depreciation. Quantum of this depreciation depends on several factors.

Manner of usage : If the property is properly used it will observe normal depreciation but if property is roughly used ignoring basic principles for its usage, higher depreciation will be observed. We find that well maintained building has longer life span than the building which is subjected to negligence in repairs and maintenance for years. Similarly machine used for 1 shift/day lasts longer than machine used for 3 shifts/day.

Environmental aspect : A building along sea shore may deteriorate faster than the building away from sea shore. Similarly a factory building in chemical zone would wear out faster than the factory in engineering zone.

Natural Force Aspects : Buildings which are located in areas, which are frequently subjected to natural calamities like earthquakes, cyclone, Tsunami or monsoon flooding, are subject to sudden damage to property due to such forces. Even otherwise these forces contribute to higher depreciation and higher wear and tear to the buildings.

Accidental Aspects : Sometimes due to fire, building is partly or wholly damaged. Similarly, due to structural design defects in the building frame or foundations or bad quality of construction, serious damage to the building is caused and sometimes even collapse of the structure also takes place. Some times due to War or Riot or Bombing on the structures, serious damage to buildings is caused.

Economic obsolescence : A decrease in desirability or value resulting from economic forces **off** the property, such as a change in zoning, in traffic patterns, or in supply/demand relationships. Loss in value from economic obsolescence is to be distinguished from functional obsolescence and physical deterioration, which are caused by thing on the property.

A residential building existing on a plot in commercial zone is glaring example of economic obsolescence. Highest and Best use of land and building is not made. The asset is put to inferior usage of residence instead of commercial user resulting in an economic loss. Higher depreciation in such case may not be unreasonable.

Similarly due to legislative enactment and policies, property may remain under utilised. The policy of government to protect slums and not to permit removal of unauthorized hutments in a plot without providing free alternate accommodation to dwellers is an example of economic obsolescence.

Policy of government to permit 100% T.D.R. over and above permissible F.S.I. on certain types of lands, resulted in severe economic obsolescence of the buildings. Several developers demolished even 20 years old building in good and sound condition for optimum use of the plot.

Dilapidation of a building or heavy structural repair cost for a building is also example of economic obsolescence. The structure becomes uneconomic to maintain. Due to dilapidation, repair cost becomes prohibitive. Similar situation arises when rental value of premises in a particular locality falls severely either due to bad neighbourhood or due to migration of population to buildings in newly developed towns having better amenities.

Functional obsolescence : Assets which have become out-dated mainly due to their planning and designing being unsuitable for present day requirements are examples of functional obsolescence. An old palace becomes obsolete for usage as there is no demand for such palaces in the market though they are in good structural condition. Due to this functional obsolescence many palaces are converted to hotel use for which there is high demand and usage in the market.

Old chawl buildings with common toilet blocks is yet another example of functional obsolescence. No one prefers such building with out-dated planning and design. Many people now requires self contained tenements and flats. Today's trend of constructing new shopping Malls and Multiplexes is likely to make present shopping centers and single screen theaters obsolete in a few years time.

A brand new machine or a computer may suffer from functional obsolescence hardly

within two or three years period with more advanced technologies introducing superior product at much lesser cost. A new machine may become functionally obsolete; if product manufactured by the said machine does not have any demand in the market.

Technological Obsolescence : Old load bearing structures/ Jack arch structure with thick walls are now usually not preferred in urban areas. Many people now prefer to live in high rise R.C.C. framed structures having thin partition and external walls. This is now possible due to technological advancements. Timber structures are also now replaced by R.C.C. framed or steel framed constructions. Wooden windows are replaced by aluminium windows. Now modern technologies, new building materials and planning concepts have made it possible to design and erect even intelligent buildings.

There are several methods of working out depreciation of an asset.

Depending upon the purpose and requirement, the depreciation is worked out/estimated either on historic cost or on reproduction or on replacement cost. Selection of the method is also based on the purpose and requirement of the user.

The question of selecting the appropriate method arises subsequent to the inspection and survey of the property. While carrying out the survey following points are recorded by a valuer :

- Environment
- Usage
- Maintenance
- Utility
- Category of the building in anyone of the following:
 - Brand New (N)
 - Excellent - Just like brand new (E)
 - Very Good with no repairs required in foreseeable future. Longer time than average before any maintenance required (VG)
 - Good Condition requiring standard routine maintenance (G)
 - Fair condition, below average but can be used by continuous repairs and maintenance (F)
 - Poor condition may or may not work, needs immediate repairs and may or may not work (P)
 - Scrap condition and cannot be used for intended purpose (S)

After taking into consideration all relevant aspects a valuer according to his best judgement and experience has to select appropriate method.

Observed deterioration is one of the methods which can be used for types of buildings N to S as mentioned below.

<u>Condition of building</u>	<u>%age depreciation</u>
New (N)	0
Excellent (E)	5
Very Good (VG)	10
Good	11 – 25
Fair	26 – 50
Poor	51 – 75
Scrap (S)	90

An accountant may adopt written down value (actually it is written down cost; because original cost at which asset is acquired is depreciated in the books of accounts.) in books of account of a company by adopting method of depreciation for buildings and machinery to prepare financial statement or balance sheet of a company. A valuer estimating market value of the asset of the company comprising factory building and machinery may adopt straight- line method of depreciation or Sinking Fund Method or Y.P. method of depreciation.

Some of the important methods of depreciations are as under :

- (i) Direct Appraisal Method (Lump sum depreciation).
- (ii) Written down Value Method, (Accountant's Method).
- (iii) Straight Line Method. (More preferred for machineries or assets with short life span)
- (iv) Constant Percentage Method. (This linear method is preferred by P.W.D. Engineers).
- (v) Sinking Fund Method (This interest based method is used for buildings)/ Y.P. Method
- (vi) Sum of the digit method.
- (vii) Declining Balance Method. (Accounts method).
- (viii) Statutory Depreciation Method. (Taxation purpose)
- (ix) Other modern methods of depreciation.

An asset suffering from severe economic or functional obsolescence may have very high depreciation. Perhaps such an asset may be worth as scrap (Say 90% depreciation), even if it is not very old. e.g. Computers.

Direct Appraisal Method : (Lump sum method) :

In this method of estimating depreciation, the valuer decides and adopts lump

sum depreciation for the asset by physical inspection of actual deterioration of the asset. An experienced valuer could arrive at an ad hoc % of depreciation based on his own experience. There is no process or reasoning but it is absolutely arbitrary method based on experience. It may be useful in case of machines and for small structures like compound wall, wells, roads where wear and tear are unpredictable and even repairs and restoration costs are beyond precise calculations.

Example-4 :

If replacement cost of the compound wall for a plot is Rs.1,20,000/- and wall is built 30 years ago, find out DRC by adopting observed depreciation.

Solution :

40% depreciation is adopted by visual inspection.

$$\begin{aligned} \text{DRC} &= (1,20,000) - (0.40 \times 1,20,000) \\ &= \text{Rs.72,000/-} \end{aligned}$$

Example-5 :

If replacement cost of 5 years old machine is Rs.2,80,000/-, find out its DRC by observed depreciation.

Solution :

Lump sum depreciation of Rs.1,20,000 is considered by visual inspection.

$$\begin{aligned} \text{DRC} &= \text{Rs.2,80,000} - \text{Rs.1,20,000} \\ &= \text{Rs.1,60,000/-} \end{aligned}$$

Written down Value Method :

This is generally adopted by Chartered Accountants for preparation of balance sheet of a company or firms for use of the company or for taxation purposes or for use of financial institutions.

Depreciation is allowed at uniform and fixed percentage. But it is not on original actual capital cost (Historical cost) but on reduced depreciated values of the previous year. However, for the first year, depreciation is worked out on actual cost.

Written down value (Vn) is denoted by formula :-

$$V_n = C (1 - p)^n$$

Where,

- V_n = Value in n^{th} year.
 C = Original Capital Cost (Historical cost).
 p = % of rate of depreciation.
 n = No. of year in which value is required.

Example-6 :

What would be the W.D.Value of a machine purchased at the cost of Rs.30,000/- after 3 years of service at 5% rate of depreciation.

Solution :

$$\begin{aligned}
 V_n &= 30,000 (1 - 0.05)^3 \\
 &= 30,000 \times 0.8573 \\
 &= \text{Rs.}25,721/-
 \end{aligned}$$

This working can also be done in 3 stages as under :

Purchase price	Rs. 30,000
- 5%	<u>Rs. 1,500</u>
W.D.V. after 1 st year	Rs. 28,500
	Rs. 28,500
- 5%	<u>Rs. 1,425</u>
W.D.V. after 2 nd year	Rs.27,025
	Rs. 27,025
- 5%	<u>Rs. 1,354</u>
W.D.V. after 3 rd year	Rs. 25,721

On W.D.V. method, final depreciated value of the asset, after several years of its useful life, is not shown at zero but it is shown at token value of Re.1/- till it is sold or transferred.

Straight Line Method :

This method of working out depreciation, is used for the machines as well as for the buildings. In this method, equal % of depreciation is allowed on its original capital cost for each year of life. This is more common for assets like plants and

machineries. Depreciation amount for each year is exactly same till full cost is written off.

$$\text{The formula is } D = \frac{C - F}{N}$$

Where,

- D = Annual depreciation.
 C = Original capital cost.
 F = Final value or salvage value at the end of the life.
 N = Total number of year of asset i.e. total life.

Example-7 :

A machine is purchased 2 years before at cost of Rs.4,00,000/-. Total life of machine is 20 years. Work out DRC after 2 years age if salvage value of machine is 10% of original cost.

Solution :

$$\begin{aligned} \text{Depreciation amount/year} &= \{(4,00,000) - (40,000)\}/20 \\ &= \text{Rs.18,000/year} \end{aligned}$$

$$\begin{aligned} \text{DRC after 2 years} &= (4,00,000) - (2 \times 18,000) \\ &= \text{Rs.3,64,000/-} \end{aligned}$$

You will find that under this method, full original capital cost of machine is recouped back in 20 years period as under :

$$\begin{aligned} \text{Annual depreciation} \times \text{years of total life} + \text{salvage value of machine,} \\ \text{i.e. } & \text{Rs.18,000} \times 20 + \text{Rs.40,000} \\ &= \text{Rs.3,60,000} + 40,000 \\ &= \text{Rs.4,00,000/-} \end{aligned}$$

Example-8 :

Work out DRC of a building having 20 years age and 60 years total life. Its replacement cost as on today is Rs.4,30,000/-. Adopt straight line method of depreciation and assume 10% as salvage value of the structure.

Solution :

$$\begin{aligned} D &= (C - F)/n \\ &= (4,30,000 - 43,000)/60 \\ &= \text{Rs.6,450/Year.} \end{aligned}$$

Total depreciation for 20 years	=	6,450 x 20
	=	Rs.1,29,000/-
DRC	=	Rs.4,30,000 - Rs.1,29,000
	=	Rs.3,01,000/-

- (v) Drawback of this method is that it gives higher depreciations in initial years of the asset when actual wear and tear or deterioration is minimum. It gives exactly same depreciation amount for each year, even for the later period of life of the asset, when physical or actual deterioration per year is very high.
- (vi) In this method, interest amount that would be available on the set aside fund (Depreciation Fund) for recoupment of capital is not considered.
- (vii) This method is therefore good for asset having short life span like machines and semi-permanent structure.

Constant Percentage Method :

In this method, rate of depreciation is first assumed and instead of working out depreciation separately, the formula straight away gives the DRC. The formula for working of depreciation in this method is:

$$D = P \frac{\{100 - r.d\}^n}{\{100\}}$$

Where, D = DRC.
 P = Replacement Cost.New
 r.d = Rate of depreciation.

It is 1% for 100 years life and ½ % for 50 years life.

r.d is determined by dividing 100 by total estimated life 100/50 = 0.50%,

100/60 = 1.66 % and so on.

50

n = Number of years since construction (Age of building).

Example-9 :

Work out DRC of a building by use of constant percentage method of depreciation, if Replacement Cost of the building is Rs.3,50,000/-, total life of building is 75 years and age of the building is 15 years as on today.

Solution :

$$\begin{aligned} r.d &= 100/75 = 1.33 \%, & n &= 15 \text{ years.} \\ p &= 3,50,000 \end{aligned}$$

$$\begin{aligned} \text{DRC} &= \text{Rs.}3,50,000 \times (100 - 1.33)^{15}/100 \\ &= \text{Rs.}3,50,000 \times (98.67)^{15}/100 \\ &= \text{Rs.}3,50,000 \times (0.9867)^{15} \\ &= \text{Rs.}3,50,000 \times 0.818 \\ &= \text{Rs.}2,86,300/- \end{aligned}$$

In this case Rs.63,700/- depreciation is considered which is about 18% of the replacement cost. This method is commonly used by P.W.D. Engineers and other Government Agencies. In this method scrap price of the asset and interest aspect are not considered.

Sinking Fund Method :

This method of depreciation is widely used for estimating DRC of the buildings. It is more preferred by valuers because it gives more correct depreciation per year in initial years or life span of the asset and higher depreciation per year in later period of life of the asset or building. This is more in concurrence with the actual physical deterioration pattern of most of the buildings. Again it takes into account interest income available on set aside fund (Sinking Fund). It is therefore considered more appropriate method and more scientific for working out depreciation of the permanent type of buildings which has pretty long life span.

There are 4 stages of finding out % depreciation and DRC by this method.

- (i) To first work out Annual Sinking Fund by formula :

$$S = \frac{R}{(1+R)^n - 1}$$

Where,

n = Total life span in number of years.

R = Rate of interest

- (ii) Next step is to find out accrued sum 'A' for Re.1/- in number of years age by use of formula :

$$A = \frac{(1+R)^m - 1}{R}$$

Where,

m = Age of building

R = Rate of interest.

(iii) Then total depreciation is found out by formula :

$$\% \text{ Depreciation} = 100 \times S \times A$$

(iv) Finally DRC is found out by the use of formula :

$$\text{DRC} = \text{Replacement Cost} - \% \text{ Depreciation for age.}$$

It should be remembered that the rate of interest should be so selected that below said rate, interest rate is not likely to fall in next 60 years. Interest rate is thus minimum because life span of the buildings is 60 to 80 years. 3% could be fair rate for redemption of the capital sum if on Savings Bank A/c. similar 3% yield is available.

Example-10 :

Work out DRC of building if total life is 60 years.

Replacement Cost is Rs.2,50,000/-, Age of the building is 10 years and rate of interest is 4½ %.

Solution :

$$\begin{aligned}
 S &= \frac{0.045}{(1-0.045)^{60} - 1} \\
 &= 0.0034 \\
 A &= \frac{(1 + 0.045)^{10} - 1}{0.045} \\
 &= (1.55 - 1.00) / 0.045 \\
 &= 12.288
 \end{aligned}$$

$$\% \text{ Depreciation} : 100 \times 0.0034 \times 12.288 = 4.178 \%$$

$$\text{Total Depreciation} = 4.178 \% \text{ of R.C.} = 4.178/100 \times 2,50,000$$

$$\begin{aligned}
 \therefore \text{DRC} &= \text{Rs.2,50,000} - \text{Rs.10,445} \\
 &= \text{Rs.2,39,555/-}
 \end{aligned}$$

Example-11 :

Work out DRC of the building with same data as in Example 10 but by considering scrap value of the building at 10% of replacement cost.

Solution :

$$\begin{aligned} \text{Annual Sinking Fund Factor, } S &= 0.0034 \\ \text{Value of amount of Re.1 (10 Yrs) } A &= 12.288 \\ \\ \% \text{ Depreciation for 10 years period} &= 100 \times 0.0034 \times 12.288 \\ &= 4.178 \% \text{ of R.C.} \end{aligned}$$

$$\begin{aligned} \text{Depreciation with 10\% salvage} &= 0.9 \times 4.178/100 \times 2,50,000 \\ &= \text{Rs.9,400/-} \\ \text{DRC} = \text{Rs.2,50,000} - \text{Rs.9,400} &= \text{Rs.2,40,600/-} \end{aligned}$$

Sum of the Digit Method :

This method is not much in use. It is based on “Digit” derived by summation of years of total life span of the asset. Then depreciation is worked out for age of the asset.

Digit of asset is found by formula :

$$\text{Digit} = \{(1 + L)/2\} \times L$$

Where,

$$L = \text{Total life span in years} \quad \Sigma = \text{Sigma (Summation)}$$

$$\text{If total life of building is 60 years. Digit } \Sigma 60 = \{(1 + 60)/2\} \times 60 = 1,830$$

Total depreciation is divided for these 60 years by using the digit as under. If age of the asset is 5 years, depreciation is worked out by formula :

$$\text{Depreciation} = (1/\text{Digit}) \times \Sigma n$$

$$\begin{aligned} n &= \text{number years of age of asset.} \\ \Sigma n &= \text{Summation of all years.} \end{aligned}$$

$$\begin{aligned} \text{Depreciation :} &= (1/1830) \times \Sigma 5 \\ &= (1/1830) \times 15 \\ &= 0.0082\% \end{aligned}$$

Detailed breakup is as under :

$$\begin{aligned}
 \Sigma 5 &= 1/1830 + 2/1830 + 3/1830 + 4/1830 + 5/1830 \\
 &= 0.00054 + 0.0011 + 0.0016 + 0.0022 + 0.0027 \\
 &= 0.00814 \\
 &\text{Say } 0.0082\%
 \end{aligned}$$

This method also gives lower rate of depreciation in earlier years and more rate of depreciation in later period of years.

Declining Balance Method :

This is modified form of W.D.V. method used by accountants. It is more acceptable under modern methods of accounting system.

Formula for rate of annual depreciation "D"

$$D = 1 - \left(\frac{VS}{B} \right)^{1/n}$$

Where,

$$\begin{aligned}
 D &= \text{Rate of Depreciation per year} \\
 VS &= \text{Salvage Value} \\
 B &= \text{Original Cost of Asset} \\
 N &= \text{Total Life Span of Asset}
 \end{aligned}$$

Example-12 :

If the original cost of machine is Rs.15,000/- and salvage value is 20%, work out DRC after 8 years by Declining Balance Method.

Solution :

$$\begin{aligned}
 D &= 1 - \left(\frac{3000}{15000} \right)^{1/8} & VS &= \frac{20}{100} \times 15,000 \\
 D &= 1 - 0.8166 & & \\
 &= 0.1834 \text{ per year and } VS & &= 3,000 \\
 \text{If } D &= 0.1834 \text{ per year i.e. } 18.34\%
 \end{aligned}$$

$$\begin{aligned}
 \text{DRC after 1}^{\text{st}} \text{ year} &= 15,000 - 15,000 \times \frac{18.34}{100} \\
 &= 15,000 - 2,751 \\
 &= \text{Rs. } 12,249/-
 \end{aligned}$$

$$\begin{aligned}
 \text{DRC after 2}^{\text{nd}} \text{ year} &= 12,249 - 12,249 \times \frac{18.34}{100} \\
 &= 12,249 - 2,246 \\
 &= \text{Rs. } 10,003/-
 \end{aligned}$$

$$\begin{aligned}
 \text{And DRC after 8}^{\text{th}} \text{ year} &= \text{Rs. } 3,632 - \text{Rs. } 666 \\
 &= \text{Rs. } 2,966/-
 \end{aligned}$$

Statutory Depreciation Method :

In this method rate of depreciation is adopted as prescribed in Income Tax Act. This is also W.D.V. method and for accounting and tax purposes only. However in this method there is no scope to fix rate of depreciation as per condition of the asset but it is a fixed rate of depreciation as per statute. Under Indian Income Tax Act, rate of depreciation for different types of assets are fixed. As per sec.32 of I.T. Act , following rates of depreciation are permissible. This however goes on changing from time to time as per budget proposals of finance minister.

(i)	Residential building	-	5 % per year.
(ii)	Non residential building	-	10 % per year.
(iii)	Hotel building	-	20 % per year.
(iv)	Temporary erections.	-	100 % per year.
(v)	Motor Car	-	20 % per year
(vi)	Plant and machineries	-	25 % per year.
(vii)	Computer	-	60 % per year.
(viii)	Furniture	-	15 % per year.

It should be noted that under the budget for year 2005 / 2006, rate of depreciation for the general plant and machineries is reduced from 25% to 15%.

After allowing for depreciation for the building or any asset it may be necessary to separately provide for different types of obsolescence.

Obsolescence are of two types:

- (i) Curable obsolescence.
- (ii) Incurable obsolescence.

In case of curable obsolescence the valuer must try to find out “Cost to Cure”.

If there is functional obsolescence of say chawl type building with common toilets. The valuer can work out cost of providing toilet blocks inside each tenement. Total cost of providing such amenity can be then deducted to account for obsolescence aspect of the building.

Similarly if a building suffers from economic obsolescence due to dilapidation, the valuer can find out cost to cure i.e. structural repair cost of the building. Cost of such heavy repair can be deducted from value to account for economic obsolescence.

It is very likely that obsolescence may be incurable. Let us say technological obsolescence of an old building with load bearing walls and jack arch type construction and with very high ceiling for all rooms. The building may be good for another 30–40 years. In such a case, separate allowance or deduction can be made in form of overall percentage rebate to account for incurable technological obsolescence.

Sometimes valuer may have to first work out depreciation by two methods in order to select correct method which would give fair amount of depreciation corresponding to actual depreciation found on site. This is discussed in following example. The use of this depreciation working is more useful in land and building method as can be seen from following example.

Example-13 :

Find out DRC of the building by Sinking Fund Method and also by Straight Line Method if replacement cost of the building is 1,00,000/-. Age is 55 years and total life of building is 65 years. Adopt 4½ % rate of interest.

Solution :

(A) By Sinking Fund method.

$$\begin{aligned}
 \text{Depreciation} &= 0.9 \times 1,00,000 \times 0.0027 \times 227.918 \\
 &= \text{Rs.}55,384/- \\
 \text{DRC} &= \text{Rs.}1,00,000 - \text{Rs.}55,384 \\
 &= \text{Rs.}44,616/-
 \end{aligned}$$

(B) By Straight Line Method.

$$\begin{aligned}
 \text{Depreciation} &= (C - F) / N \\
 &= (1,00,000 - 10,000) / 65 \\
 &= \text{Rs.}1,384.61 \text{ per year} \\
 \text{depreciation for 55 years} &= 1,384.61 \times 55 \\
 &= \text{Rs.}76,153/- \\
 &\text{Say Rs.}76,000/- \\
 \text{DRC} &= \text{Rs.}1,00,000 - \text{Rs.}76,000 \\
 &= \text{Rs.}24,000/-
 \end{aligned}$$

It will be seen that straight line method gives higher depreciation. For a structure with only 10 years future life, higher depreciation is more

appropriate. The value of structure at scrap at 10% of Replacement Cost, i.e. $0.10 \times 1,00,000 = \text{Rs.}10,000/-$ could also be considered fair for such an old building. However actual physical condition of the building will be deciding factor.

Example-14 :

Work out value of property by cost approach as on 1-4-1981 from following data.

Building area	=	120 Sq.Mts.
Plot area	=	500 Sq.Mts.
Replacement cost rate in 1981	=	Rs.900/Sq.Mt.
Land rate in 1981	=	Rs.1000/Sq.Mt.

Age of building in 1981 : 25 years and total life of building : 70 years.

Adopt $4\frac{1}{2}$ % rate of interest and adopt Sinking Fund Method of depreciation.

Solution:-

Replacement cost in 1981	=	120×900
	=	Rs.1,08,000/-
Depreciation for 25 years age	=	$0.9 \times 108,000 \times 0.0022 \times 44.565$
	=	Rs.9529.77
DRC of building	=	Rs.1,08,000 - Rs.9,530
	=	Rs.98,470/- ... (A)
Land value in 1981	=	500 Sq.Mts. @ Rs.1000/Sq.Mt
	=	Rs.5,00,000/- ... (B)
Total value of property (by Cost Approach)	=	Rs.98,470 + Rs.5,00,000
	=	Rs.5,98,470/-
		Say Rs.5,98,000/-

Example-15 :

Estimate fair market value of the property by cost approach as on 31-3-97 from following data :

Building area : Ground floor	=	200 Sq.Mts.
First floor	=	100 Sq.Mts.
Plot area	=	600 Sq.Mts.
Replacement cost rate in 1997	=	Rs.7,000/- Per Sq.Mt.
Land rate in 1997	=	Rs.2,000/- Per Sq.Mt.

Age of building = 20 years.
 Assume total life of building 60 years and interest rate 4½ %.

Solution:

Land	=	600 sq.mts. @ Rs.2000/S.M.	
	=	Rs.12,00,000/-	... (A)
Building Replacement Cost	=	300 sq.mts. @ Rs.7000/sq.mt.	
	=	Rs.21,00,000/-	
Depreciation for 20 years	=	0.9 x 21,00,000 x 0.0034 x 31.371	
	=	Rs.2,01,590/-	
DRC	=	Rs.21,00,000 - Rs.2,01,590	
	=	Rs.18,98,410/-...	(B)
Total value	=	Rs.12,00,000 + Rs.18,98,410	
	=	Rs.30,98,410/-	
	Say	Rs.30,98,000/-	... (C)

In building value estimation, we have to study four basic aspects of the building.

- (i) Specifications and Amenities.
- (ii) Life of building (Age and future life).
- (iii) Depreciation Methods.
- (iv) Obsolescence.

We have already studied depreciation methods but its application depends on total life of building i.e. age of building plus future life of building.

There are four types of life of the building.

- (i) Economic Life.
- (ii) Physical Life.
- (iii) Life due to obsolescence.
- (iv) Life due to legal constrains.

Economic life is the actual service life of the building or a machine. Well maintained building or a machine has more or less same years of economic life as planned life for such an asset. It is therefore called planned life or income yielding life of the asset. However bad or neglected maintenance and excessive wear and tear reduces economic life of the asset. In rental method of valuation economic life of the building is considered. Economic life of an R.C.C. framed building is normally considered at 60 years.

Physical life of the building is the actual survival life of the building before collapse. It may be more or in some cases even less than the planned life of the building. In cost approach, some times physical life of building is adopted.

In case of old buildings which are in good structural condition and which have already outlived their planned life (Say 60 years), yet, total physical life is adopted for the purpose of depreciation. If the building is 80 years old, its total physical life is adopted at 100 years, estimating 20 years as future life of such good building.

Bad workmanship, use of inferior materials, careless alterations and over loading of structures reduces physical life. In some cases accidents like fire, explosion, earthquake, flood damage causes total collapse of the structure much before its planned life. On the other hand it is not uncommon to see palaces having 200 years and temples made of stone having 400 years or even more physical life.

Obsolescence life is the life of building by which building becomes obsolete due to changes in life style in the society. Chawl with common toilet are best example of obsolescence. In modern time people like self contained tenements and not premises with common toilet. Individual small shops design may become obsolete in Metropolitan towns having shopping malls. Residential buildings in Industrial Zone and factory building in Residential Zone becomes obsolete due to user restrictions though its economic life as well as physical life may be more.

Life of building in some case depends on legal constrains. The building may be erected on leasehold land which has only 30 years lease period. Income from building would cease after 30 years. Valuer in such a case has to adopt total life of building as 30 years only even though its economic and physical life may be more.

In determining total life of the building valuer should consider following aspects viz. Materials used in construction, Workmanship, Usage of Bldg., Soil strata foundation depth, Weather conditions etc. as detailed hereinafter.

Materials used in building may increase or decrease total life of the building. Building made of stone lasts longer than building with steel or timber. Steel corrodes and reduces life. Wood is damaged by white ants. However in earthquake prone zones,

earthquake resistant R.C.C. framed structure has longer life than stone built structure.

Good workmanship enhances life of the structure. Poor workmanship and out of plumb structure reduces life of the building.

Proper maintenance and upkeep of the building and timely structural repairs of the building enhances life of building.

Excessive usage of building increases wear and tear. Excessive wear and tear reduces the life of the building as well as life of plant and machinery.

Heavy vibrations within factory building reduces its life. Vibrations close to structure on account of heavy railway traffic or trucks traffic also reduces life of the building.

Design and foundation criteria of building also would increase or decrease life. Building foundations at shallow depth and in poor soil strata may cause settlement of structure and reduce life of the building. High rise R.C.C. framed buildings which are not designed with earthquake resistant features like shear walls and special footings, may have reduced life in earthquake prone areas.

Weather conditions also affect life of the building. Building along seashore has high corrosion effect due to salty air and high humidity. Region having high rain fall also have reduced life of the building.

Poor soil like muddy or creek land or black cotton soil calls for special design foundation. If such foundations are not provided, building develops structural cracks due to uneven settlement and life of building is reduced.

As stated above, if lease period expires say after 10 years, future life of building cannot be taken more than 10 years though its actual future life could be 30 years or more.

9.0 Income Approach

9.1 The term 'Income Approach to Valuation' itself suggests that the income from a property forms the basis for estimating value of the property. To explain the income approach to valuation in a very simplistic manner, it can be stated that the net income from a property is considered as interest yielded (at a certain rate of interest) by the amount or capital invested in purchasing that property, i.e. value or price paid for purchasing that property. In mathematical form, it is stated as under:

Capital Value of a Property (C.V.)	=	Net Income from Property (N.I.)	x	Multiplier which depends on the rate of interest expected to be yielded by the investment in the property (Year's Purchase -Y.P.)
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$$\mathbf{C.V. = N.I. \times Y.P.}$$

The multiplier of Y.P. is the summation of the present worth of series of income of ₹ 1/- receivable every year, at the end of 1st year, 2nd year, 3rd year up to ...nth year, for a period of 'n' years at a compound interest at a certain rate of interest and the same is given in Valuation Tables. It is however not intended to deal with mathematics of valuation here. It is an attempt to explain the basic logical thinking behind estimation of value of a property by income approach.

The real problems arising in such a simplistic solution to estimation of value are:

- (i) Proper estimate of the net income, which is due to tangible as well as intangible aspects,
- (ii) Estimation of the appropriate rate of interest, which can reasonably be expected to be yielded by a particular type of property. Income from a property and appropriate rate of interest depend respectively on the concepts of benefits and security, both of which are basic human instincts.

9.2 Estimation of income

Once it is accepted that the rents actually paid by tenants to landlords are true and correct indicators of fair rents, then the income from the property can be estimated by collecting data regarding instances of rentals in respect of other comparable properties in the vicinity by comparing the accommodations of properties let out with the accommodation of property to be valued.

While relying on any rental instances it is to be assured that they are genuine one.

The fair rent in respect of the property can thus be estimated by comparing property under valuation with the properties involved in instances of rentals.

Illustration on estimation of gross rent:

The following three rental instances of premises on ground floor on the eastern side of Vile-Parle occupied by the banks for their banking operation have been taken into consideration.

- ABC Bank has taken a premises admeasuring carpet area of 1400 sq. ft. by an agreement dated 17th August, 2001 at a monthly gross rent of ₹ 150/- per sq. ft. of carpet area.
- DEF Bank has taken a premises admeasuring carpet area of 3000 sq. ft by an agreement dated 10th September, 2002 at a monthly gross rent of ₹ 120/- per sq. ft. of carpet area.
- GHI Bank has taken a premises admeasuring carpet area of 1300 sq. ft. by an agreement dated 17th July, 2002 at a monthly gross rent of ₹ 90/- per sq. ft. of carpet area.

The comparison of above rental instances with property in question had been made with regards to following factors:

- Location
- Size
- Age
- Type of construction
- Time factor
- Special factor

and the result is tabulated below:

	Property in Question	ABC Bank (R1)	DEF Bank (R2)	GHI Bank (R3)
Floor	Ground Floor (G.F.)	Ground Floor (G.F.)	Ground Floor (G.F.)	Ground Floor (G.F.)
Carpet area in sq. ft.	1200	1400	3000	1300
Month of transaction		August 2001	September 2002	July 2002
Gross ret per sq. ft. per carpet area per month		150	120	90
Factors of comparison (%)				

Location		-10	-20	+25
Size		Nil	+05	Nil
Age		-05	-15	-10
Type of construction		-10	+10	-10
Time factor		+05	Nil	Nil
Special factor		-15	Nil	Nil
Total		-35	-20	+05
Net rent (₹) per sq. ft. of carpet area per month		97.5	96.0	94.5
Therefore, gross rent per sq. ft. of carpet area per month for premises in question at ₹ 95/- is considered to be fair and reasonable.				

It is observed from the computation table that the above factors like location etc. have been assigned plus and minus weightages and same have been explained below.

Let us consider the rental instance of ABC Bank. This rental instance is assigned weightages as under:

Location	-10
Size	Nil
Age	-05
Type of construction	-10
Time factor	+05
Special factor	-15

Overall effect = (-10 -5 -10 -15 +5) = (-40 +5) = -35%

When comparison of property in question is made with rental premises of ABC Bank with regard to the above factors leads us to following conclusion:

Location of rental instance is better than the property in question to the tune of 10%.

Size of rental instance is almost same as the property in question and hence no adjustment is required for this factor.

Age of rental instance is less than the property in question and therefore property in question is considered to be inferior by 10%.

Type of construction of rental instance is better than property in question and therefore the property in question is considered to be inferior to the tune of 10%.

Time Factor the rental instance is for the year August 2001 whereas market rent is to be estimated for the year October 2002, the increase in the rent in the intervening period is considered to be 5%.

Special Factor ABC Bank was already in the occupation of adjoining premises at the time of taking the premises referred in the rental instance, they were in need of the other premises, and hence paid a special rent, and in view of this 15% decrease is considered for this special factor.

The factors considered above are relevant for the case under consideration. These factors vary from case to case depending upon facts of each case. Now, let us consider a case of a rental instance having type of construction poor than the referred above, then instead of (-10) there would have been plus factor depending up on the type of construction and condition.

The gross rent paid by ABC Bank is at ₹ 150/-. Overall reduction factor computed for deriving the gross rent for property in question from rental instance of ABC Bank is minus 35%.

The gross rent per sq. ft. of carpet area per month for property in question from rental instance of ABC Bank works out to

$$150 \times 0.65 = ₹ 97.5/-$$

Similarly, from other two properties it works out to 96 and 94.5 respectively per sq. ft. per month of carpet area.

The gross rent for premises in question per sq. ft. per month at ₹ 95/- is considered to be fair and reasonable.

Carpet area of premises	=	1,200 sq. ft.
Therefore the gross rent	=	1,200 x 95
	=	₹ 1,14,000/-

9.3 Analysis of sales

The process of analyzing a sale transaction is a simple one and involves finding out the rate of interest (or degree of security) yielded by the capital invested or price paid for purchasing a property. The ratio of net income from the property purchased and price paid for purchasing that property multiplied by 100 gives the rate of interest yielded by that property (yield rate). This is true only in cases where income is receivable in perpetuity.

$$\text{Rate of Interest for perpetual income} = \frac{\text{Net Income}}{\text{Capital Value or Price}} \times 100$$

In order to estimate appropriate rate of interest expected to be yielded by the

property under valuation, it is necessary, in the first instance, to analyze number of sale transactions, which have taken place in the vicinity, preferably recent transactions. For this purpose, firstly data regarding sufficient number of sale transactions which have recently taken place in respect of comparable properties in the surrounding areas is required to be collected along with the data regarding the recent instances of rentals. The properties involved in the instances of sales and rentals are then required to be inspected carefully. The rates of gross rent for the properties involved in sale instances are then estimated by comparison with properties let out on rent and gross annual income and net annual income from each of the properties involved in sales is then estimated. In case of perpetual income, e.g. where future life of building is more than 60 years, the rate of interest yielded by properties sold can be worked out by finding out ratio of net income to purchase price and multiplying it by 100 as stated above.

It is essential to prepare a separate list of sale instances of property sold under following categories:

- (a) Property sold with vacant possession/owner's occupation.
- (b) Property sold with tenants protected under the applicable Rent Control Laws.
- (c) Property sold with tenants not protected under the applicable Rent Control Laws.

9.4 Terminable income

The real estate properties can be very broadly divided into two categories viz.-

- (1) Properties yielding income in perpetuity.
- (2) Properties yielding income only for a limited period of time i.e. yielding income which terminates after certain period.

Freehold properties with buildings having estimated future life of 60 years or more are considered as properties yielding income in perpetuity, while leasehold properties with shorter unexpired period of lease are properties yielding income only for unexpired period of lease. In case of leasehold properties, income terminates on expiry of lease period.

The value of property varies with not only the quantity or amount of rupees but also with income quality and its duration. The quality of income generally is dependent on the kind and character of tenants, the type of long or short term leases, the degree and extent of space competition (both current and anticipated) over the economic life of the property and the stability of economic conditions in the subject market territory. Quality differentials should be a matter of analytical considerations in the

selection of the applicable interest rate at which the net income flow is to be capitalized.

The income approach requires the preparation of income statements and thereafter deductions are required to be made towards operating expenditures, repairs, vacancy, insurance, bad debt/rent arrears, property tax and other outgoings, if any, thereby to get estimated net future income from the property. The most important phase of property valuation revolves around the procedure for the determination of the market rate of capitalization through which estimated net future income can be converted into a sum of present value. It is necessary for the valuer to recognize and differentiate between the interest rate and rate of capitalization.

The interest rate is in effect a major cost of money and represents 'wages' paid for the use of capital. It is a return on investment and must be high enough to attract an investor to a particular kind of investment. The rate of capitalization in percentage forms the relationship between the net income of a property and the value or price at which the property can be sold.

9.5 Years Purchase

The 'Years Purchase' can be defined as Capitalised Value paid at one time in order to receive annual income (annuity) of Re.1/- for a certain period at a certain rate of return. In other words 'Years Purchase' is the **Capital Value invested to purchase the 'Annuity' of Re.1/-** for a certain period at a certain rate of interest.

This multiplier or 'Years Purchase' is in fact, the summation of the present value of Re.1/- receivable every year at the end of 1st year, 2nd year, 3rd year nth year for a period of 'n' years at compound interest at a certain rate of interest.

Where the income is receivable in **perpetuity** Years Purchase is equal to $100 \div$ the rate of interest

$$\text{i.e. } Y.P. = \frac{100}{i} \text{ where 'i' is the rate of interest}$$

$$\therefore i = 100 \div Y.P.$$

When the annual income is terminable i.e. receivable for a certain fixed period (term) then it becomes necessary that the Capital invested **must** (obligatory) accumulate (be recouped) at the end of that period or term by setting aside, from the net income, such a sum-sinking fund which, at a compound rate of interest (accumulative rate), will be accumulate to the capital invested at the end of the term. In the case of terminable income, knowing the period (number of years) and knowing the Y.P., the accumulative

rate being 2½% to 3½%, the remunerative rate of interest required can be found out with the help of valuation tables.

9.6 Application of Income Approach

The Income Approach is adopted for estimating market values of 'income fetching, marketable' properties. Income fetching properties is many a times interpreted as properties **actually** fetching rent and owner occupied properties are wrongly excluded from application of income approach. The term 'Income fetching' in fact includes properties '**Capable**' of fetching income. In the case of owner occupied properties, the owner is saving the fair market rent which he would have to pay for occupying similar accommodation/property and is thereby virtually earning rental income (money saved is money gained/learned). Similarly properties lying vacant or locked and neither occupied nor let out are also capable of fetching fair market rent. In both these and similar cases fair market rent, which otherwise would have been fetched by such properties, can reasonably be estimated by market approach.

Similarly in case of properties occupied by tenants protected by Rent Control Acts fair market value subject to encumbrance of being occupied by protected tenants can be fairly estimated by income approach by capitalizing net income at the rate of interest estimated on the basis of market studies and analyzing sale transactions of similar properties occupied by protected tenants.

9.7 STEPS IN THE INCOME APPROACH

In estimating fair market value of a property by Income Approach following steps are taken:

1. Collection of data regarding transactions of sale and rentals which have recently taken place in the locality.
2.
 - (a) Inspection of site, local inquiries and collecting information regarding recent instances.
 - (b) Inspection of properties involved in genuine instances of sale and rentals and the property to be valued and collecting/noting all the information in respect of factors of comparison.
3. Estimating fair rate of rent, gross and net income be the benefit from the property to be valued, preferably by Weightage Score system which is elaborate and more objective.

4. Estimate appropriate remunerative rate of interest (i.e. security) by analysis of instances of sale and by comparison with the economic indices.
5. Estimating fair market value of the property to be valued by capitalizing net income by single or actual rate of interest depending on whether the income is perpetual or terminable.
6. Deduct cost of immediate repairs, unpaid taxes and other liabilities (e.g. mortgaged dues) from capitalized market value.

9.8 BENEFITS – ESTIMATION OF INCOME

Estimation of net income from the property to be valued and the properties sold is the next important step after collection of necessary data and inspection of properties concerned.

It has been discussed in the Unit – 1 that the structure of valuation stands on the four fundamental concepts of value, interest in a property which is valued, benefit and security. **Value** of an object/thing **depends on** utility or usefulness i.e. actual or anticipated **benefits accruing** or expected to accrue by virtue of ownership, occupation and use of that object or thing. The **'interest'** in a property, value of which is estimated by a valuer is defined as **'right to derive benefits by putting a property to use'**. Thus both these basic concepts refer to **'benefits'**. In the case of real properties **benefits** accruing by virtue of ownership, possession (occupation) and use of a property are in terms of the **Net Annual Income**, which remains after deducting annual outgoings from the gross annual income.

Fair Market Rent

Fair market rents of the property to be valued and properties involved in the instances of sale can reasonably be estimated by adopting weightage score system.

Net Annual Income

The estimated rate per unit area of fair market rent in respect of a property multiplied by the area of a property gives monthly rent of a property from which gross annual rent, which can be fetched by a property, can be worked out.

The net annual income of the property to be valued and the properties involved in the instances of sale is estimated by deducting annual outgoings from the gross annual rent.

9.10 SECURITY

General

The security of investment is universal, irrespective of place (i.e. town/city and country or nation) amount of income and time. It however slightly varies, within certain range, according to location of an asset and according to national economic conditions.

Criteria of Security

The criteria of security of investment have been already discussed in details earlier.

Further the remunerative rate of interest which represents or is the indicator of security of investment is in inverse proportion to security. Higher the security of investment (i.e. lower the risk) higher is the rate of interest expected. This can also be expressed in other words viz. “higher the security of investments higher will be the Year’s Purchase and lower the security lower will be the Y.P.” In the case of investment which is most secured or almost risk free the investor is satisfied and accepts lower rate of interest (higher Y.P.) and where investment involves risk and is less secured, the investor requires higher rate of interest (lower Y.P.).

Market studies conducted by the students of Master of Valuation (Real Estate), Sardar Patel University, Vallabh Vidyanagar, Anand, Gujarat during their dissertations have revealed that the rates of interest expected from investment in freehold real estate are **generally** as under:

Residential Properties –	around 4% to 5%
Commercial Properties	
Shops of daily necessities and banks	about 6% to 7%
Shops of quarterly/biannual requirement e.g. cloth, footwear etc.	about 7% to 8%
Shops catering electronic or luxury goods	about 8% to 9%
Shops providing for occasional requirements e.g. jewellery	about 10% plus
Cinema Theatres, Petrol Pumps	around 11% to 14% or more

Note: The above rates should NOT be followed blindly. A valuer should always carry out the study of similar type of properties by analyzing sale instances of properties similar to the properties to be valued and adopt the rates of interest yielded by such market studies. e.g. while comparing sale instances of rented properties a care has to

be taken that sale instance of a property sold with protected tenant is compared with the sale instance of a property sold with protected tenant and sale instance of rented property sold with non protected tenant is to be compared with the sale instance of a property sold with non protected tenant.

The rates of interest yielded by residential properties and some commercial properties are less than the rates of interest yielded by Gilt-edged securities (i.e. long-term Government bonds which are 8½% to 9½%. This is mainly because of the fact that unlike investments in monetary forms, investments in real estate are guarded against 'Capital Erosion' and are usually subject to the benefit of 'Capital Erosion'. This, of course will not apply to premises having frozen/controlled rent under Rent Control Act.

9.11 STUDY OF REAL ESTATE MARKET

Need for Market Study

The study of the real estate market at present, it seems, is limited to the collection of data regarding the rates, per unit area, of sale prices and rents yielded by properties and the time of transactions in different localities. Such unit rates of prices and rents vary vastly from locality to locality in the same town and from town to town etc. Such unit rates neither provide any basis for comparison between heterogeneous properties nor provide any basis for comparison with other alternative forms of investment.

Rate of Interest

The lands and properties being too heterogeneous, are very difficult, though not impossible, to be compared among themselves. Taking into consideration the fact that what a common man needs from any form of interest is the return on his investment, suggests that the remunerative rate of interest yielded by properties can provide sound basis for comparison, not only among heterogeneous properties but also with the other forms of investments available. It can be said that rate of interest yielded by properties is similar to calories or nutrition values used to compare varieties of food items from fruits and vegetables to grains and variety of cooked food. The rate of interest yielded by properties which varies but is almost universal and changes according to the type of properties (e.g. residential) only slightly according to location and national economic conditions, forms ideal unit for comparison. It is therefore necessary for a valuer to find out the rates of interest yielded by investments in properties by analyzing each and every genuine instance of sale collected.

Analysis of A Sale Transaction

The process of analyzing an instance of sale is a simple process and aims at finding out the remunerative rate of interest yielded by the capital invested i.e. the price actually

paid for purchasing a property. The process of analyzing a sale transaction is just reverse of the process of valuation. In the process of valuation the net income from the property to be valued is known, the expected rate of interest for capitalization (and hence the Y.P.) is known and the capital value or the price for purchasing the property is to be found out by **multiplying** net income by Y.P. In the analysis of a sale transaction the actual price (capital value) paid for purchasing a property including unaccounted or black money paid is known (by skillful enquiry by a valuer), the net income from the property is known and the Years' Purchase (Y.P.) and the rate of interest is to be worked out by dividing the capital value by the net income. In the valuation process, the equation is *Capital Value = Net Income x Y.P.* ($C.V. = N.I. \times Y.P.$) while the equation for analysis of sale transaction is $Y.P. = Capital Value \div Net Income$ ($Y.P. = C.V. \div N.I.$)

It has already been stated in paragraph 4.1.2 above that (a) in case of perpetual income, the rate of interest, 'i', is $100 \div Y.P.$ and (b) in the case of terminable income, knowing (i) the Y.P., (ii) the remaining term for which net income is receivable and (iii) the accumulative rate of interest (around 3%), the remunerative rate of interest can be found out with dual rate valuation table.

Rate of Interest Prevailing

The objective of the market study is mainly to find out the remunerative rate of interest prevailing in the local real estate market and then to estimate the appropriate rate of interest for capitalizing net income from the property to be value, as on the date of valuation by comparison with the economic indices prevailing as on the date of respective transactions of sale.

The steps in the process of finding out the prevailing rate of interest (or a fair range of the rate of interest) are as under:

- (1) To estimate fair market rents of the properties involved in the instances of sale as on the date of sale. This has been explained in paragraph 4.3.3. above of this Unit.

In the case of property actually let out it should be checked if the actual rent paid is the fair market rent as on the date of sale transaction. If actual rent paid defers from the estimated fair market rent then estimated fair market rent should be considered for estimating the rate of interest yielded. Some times, if not often, the actual rent paid is fixed or decided some time in the past and hence may not tally with the estimated fair rent of that property as on the date of sale.

- (2) To estimate Net Income from the properties involved in the instances of sale as on the date of sale.
- (3) To find out the rate of interest yielded by each of the properties involved in the instances of sale, as on the date of sale transaction, as discussed in paragraph 4.4.3.
- (4) To prepare a statement showing genuine instances of sale and showing therein, among other details of sale transactions –
 - (a) the rate of fair market rent per unit area per month,
 - (b) Gross Annual Rent
 - (c) Annual Outgoings
 - (d) Net Annual Income
 - (e) Actual Consideration or Price Paid including Unaccounted/Black Money
 - (f) Y.P.
 - (g) Rate of Interest
 - (h) Date of Transaction and
 - (i) Remarks, especially regarding remaining term in cases of terminable income.

9.12 APPROPRIATE RATE OF INTEREST – RATE OF CAPITALIZATION

Investment in the real estate market cannot be considered in isolation and needs to be considered as one of the alternative forms of investment like investments in the Capital Market (shares and debentures), Government bonds including N.S. Certificates, fixed deposits, gold etc. The rates of interest yielded by investment in Real properties, as well as in other forms of investment, are influenced or affected by overall national and international economic conditions. The remunerative rates of interest yielded by properties therefore need to be compared with various economic indices and the returns from other alternative forms of investment. This can be done by comparing rates of interest yielded with various economic indices like B.S.E. and N.S.E. or Nifty (stock exchange) indices, interest on Government securities, fixed deposit interest rates, Foreign Exchange especially Dollar Exchange rates, economic growth rate, inflation rate, Wholesale & Consumer Price Indices etc.

9.13 ESTIMATION OF MARKET VALUE

Having estimated net annual income (gross annual income less annual outgoings) and having estimated appropriate rate of interest the next steps in estimating fair market value of a property are -

- (1) Estimate period for which net annual income can reasonably expected to be received i.e. period for capitalization of net annual income.
- (2) To find out Y.P. depending on the period for capitalization and the estimated remunerative rate of interest.
- (3) To estimate fair market value by (a) multiplying net annual income by Years Purchase and (b) deducting, cost of immediate repairs, if any, and any other liabilities.

Estimating Period for Capitalization

In the case of valuation of freehold interest the period for capitalizing net annual income depends on the future or remaining economic life of a building in the property to be valued. In valuation of lease-hold interests it depends on the unexpired period of lease which is known.

The future life span of the building on date of valuation becomes important. The building has three types of life.

Economic Life

This is the life span of a building during which it will continue yielding rental income, without needing heavy and uneconomic repairs. It can also be called service life or the building which may be less than physical life of a building.

Physical Life

This is the actual survival life span of the building before its collapse or demolition. Old Palaces even after 150 years of age are in good condition. Some of the stone made temples are believed to be more than 500 years old. Life of a building can come to an end even by fire, flood, storm or earthquake. In Gujarat earthquake, some high rise buildings with hardly 15 years age had collapsed. For redevelopment and for highest and best use of land, premature demolition of sound buildings is also sometimes undertaken.

Life due to Obsolescence

When a building becomes out of date or it is not useful for the purpose for which it is designed, it becomes obsolete and of no further use, unless alterations are made. The residential building may become absolute due to change in living conditions of life style. A chawl type building having tenements with common toilet has become obsolete and out of date when demand is for self contained flats. Old load bearing

structures with very thick walls becomes obsolete in the towns where internal working space is very valuable and hence R.C.C. framed structure with thin screen walls are preferred.

In rental method of valuation, the valuer is normally concerned with economic life of the building. Building may exist for 100 years (Physical life) and even continue yielding rent, but repair expenses will be so prohibitive after long period that entire property becomes uneconomic to the owner. The life of a building is dependent upon following factors:

(1) Materials used in building construction:

Use of cheap and second hand materials will reduce life of the building. Good quality materials will enhance life of structure.

(2) Quality and workmanship of construction:

Even good materials may not give good result, if workmanship is very poor. Bad quality work results in faster deterioration of building. A building erected using very good material, but without observing plumb line has collapsed within 15 years of its construction.

(3) Repairs, maintenance and upkeep of building:

This is most important but most neglected factor for life of building. Timely repairs and regular maintenance and upkeep considerably increase economic and physical life of the building.

(4) Usage of building and vibration:

The more number of persons using building increases wear and tear and reduces life. Industrial building would have lesser life than residential building due to more vibration and heavy wear and tear. Building very close to railway track and heavy traffic may also have lesser life due to severe and constant vibration.

(5) Weather condition and environment:

The life of building close to seashore may be less due to salty air and heavy corrosion. Building life in areas having excessive monsoon also may be less as compared to areas having less monsoon. Buildings proximate to chemical factories also wear out faster and have lesser life span.

(6) Subsoil condition:

Earthquake prone areas have less life span. Muddy soil and creek land have more effect on foundation. Some times uneven settlement takes place due to poor soil and defective foundation.

It is difficult to estimate total life of any building. There are temples and palaces which have age of more than 200 years and yet they are in good structural conditions. On the other hand recently constructed buildings have collapsed in 15 to 20 years age. In valuation, we are more concerned with economic life of a building rather than its physical life. Trends and life style in the society goes on changing within a decade or a few. Building construction types also continuously go on changing with the advancement of the technology and availability of new building materials. Total life span of a building can be estimated keeping in view these changes.

Total life span of the building based on its economic usefulness and assuming regular repairs and maintenance, could generally be adopted as under:-

(i) R.C.C. framed or steel framed building	60 to 80 years
(ii) Load bearing structure with slab and timber frame structure with roof	50 to 55 years
(iii) Semi-permanent structure not more than two storeys (brick walls with foundation and having A.C. sheet or Mangalore tiled roof)	30 to 35 years
(iv) Temporary type structure not more than single storey (C.G.I. wall and C.G.. roof)	10 to 15 years

The total actual economic life of the building may be more in many cases. If a load bearing structure has already out-lived 55 years period, and today it is still in excellent condition, and can safely yield stable rental income for another 20 years, total life has to be adopted considering its present condition.

Past age of a building can be found out from year plate on a building or ascertained from owners or occupants. Municipal approved plans of building, municipal assessment record about the 1st date of assessment of a building and such other records also help in assessing correct age of a building. Apart from the age of a building, the present structural condition of a building also enables a valuer to judge future economic life span of a building.

Environment, user and other factors stated above also help in assessing future economic life of a building. Generally economic life of a building less than its physical life, yet in some cases it is just the reverse. In rent controlled buildings total economic life may be 100 years and physical life may be only 60 years.

Years Purchase

In the cases where future economic life of a building is estimated to be 60 years or more, net income from it, can be practically and reasonably considered as perpetual, in which case, Y.P. is $100 \div$ remunerative rate of interest.

If the estimated future economic life of a building is less than 60 years or so or unexpired period of lease is less than 60 years or so, income from the property is considered to be terminable, in which case Y.P. is required to be found using dual rate valuation tables considering accumulative rate to be 2½% to 3½%, remunerative rate as that shown by sale-analysis and the number of years as per future economic life of the building or unexpired period of lease.

Fair market Value

Fair market value of a freehold interest in a property is estimated by multiplying net annual income by the Years Purchase [M.V. = N.I. x Y.P.].

In cases where a property needs immediate repairs the estimated cost is deducted from the market value estimated as above [i.e. M.V. = N.I. x Y.P.].

Similarly outstanding dues like unpaid municipal taxes including water and other rates and cess, land revenue, mortgage charges including outstanding loan amount with interest due etc., any other charges and liabilities are required to be deducted from market value as estimated above.

Partly Developed Properties

Partially developed properties can be valued in two ways:

(1) The market value of building and land appurtenant to it (considering marginal open spaces and permissible F.S.I.) by capitalizing net income plus market value of remaining land by market approach.

OR

(2) Capitalizing net income considering the property as fully developed/built-up and deducting the cost of additional construction/development.

9.14 Examples

Example

A fully rented and fully developed house is sold for Rs.3,50,000/-. On inquiry it is learnt that total rent income from house is Rs.42,000/- per year. Property taxes are Rs.10,000 per six months. Other expenses are 20% of Gross Rent. Calculate **rate of return** available to the purchaser landlord.

Solution

Gross annual rent			Rs.42,000
Less : Outgoings			
Property tax Rs.10,000 x 2		Rs.20,000	
Other outgoings 20% of Rs.42,000		Rs. 8,400	
		-----	Rs.28,400
Net rent per year			----- Rs.13,600

$$\begin{aligned}
 \text{Rate of return} &= \frac{\text{Net Rent} \times 100}{\text{Investment amount}} \\
 &= \frac{13,600 \times 100}{3,50,000} \\
 &= 3.88\%
 \end{aligned}$$

In residential buildings 4% to 6% yield is considered common due to high maintenance expenses and high property taxes and hedge against inflation.

Example

An ownership flat of 560 sq. ft. area is sold in March 2006 for a sum of Rs.22,40,000/-. Society outgoings are fixed at Rs.4,200/- per three months. Market inquiry shows that flat could be licensed for Rs.12,000/- per month. Calculate **yield rate on investment** to the purchaser of the flat.

Solution

Receivable income : Rs.12,000 x 12			Rs.1,44,000
Less: Outgoings			
Society charges Rs.4,200 x 4		Rs.16,800	
Other expenses 4% of G.R.		Rs. 5,760	
		-----	Rs. 22,560
Net income per year			----- Rs.1,21,440

$$\begin{aligned}
 \text{Rate of return} &= \frac{1,21,440 \times 100}{22,40,000} \\
 &= 5.42\%
 \end{aligned}$$

Example

An investor purchased five bed room flat in Mumbai at the cost of Rs.5 crores. He licensed the premises to multi-national company for total licence fee of Rs.1,20,000/-

per month. Rs.1 crore was taken as security deposit. Society maintenance charges including taxes were Rs.65,000/- per 3 months. If 8% interest is receivable in the market on refundable security deposit, calculate **rate of return on investment**. Rent Act is not applicable.

Solution

Gross Rental Income = Rs.1,20,000 x 12	Rs.14,40,000
Add: Interest income at 8% on Rs.1,00,00,000	Rs. 8,00,000

Total amount of yield	Rs.22,40,000
Less: Society outgoings Rs.65,000 x 4	Rs. 2,60,000

Net amount yield	Rs.19,80,000

$$\begin{aligned}
 \text{Yield rate on investment} &= \frac{19,80,000 \times 100}{5,00,00,000} \\
 &= 3.96\% \\
 &\text{Say } 4\%
 \end{aligned}$$

Note: It should be noted that investor is satisfied with only 4% revenue yield on investment, when financial market offers yield at 8%. The reason for this is the fact that the owner can get benefit due to capital appreciation if he sells the flat sometime in future after evicting the licensee.

Example

A residential building of Ground + 2 upper floors have 12 tenants. Rental income from ground, 1st and 2nd floors are Rs.3,600/- per month, Rs.4,000/- per month and Rs.4,500/- per month respectively. Property taxes are Rs.20,000/- per 6 months. N.A. tax is Rs.800/- per year. Building is 40 years old and is not in very good condition. Area of plot is 800 sq. mtrs. and prevalent rate of land in the locality is Rs.4,000/- per sq. mt. Value the property for sale, if Rent Act is not applicable. Expected rate of return is 5%.

Solution

Gross Annual Yield = (3,600 + 4,000 + 4,500) 12	Rs.1,45,200
Less: Outgoings	
Property taxes Rs.20,000 x 2	Rs.40,000
N.A. tax per year	Rs. 800

Repairs 10% of G.R.	Rs.14,520	
Insurance 1% of G.R.	Rs. 1,452	
Collection and management 4% of G.R.	Rs. 5,808	
	-----	Rs. 62,580

	Net yield	Rs. 82,620
		=====

Capitalizing rental yield at 5% for 20 years (**future flow of rental income** would be for only 20 years period, which is future economic life of building, total life 60 years less age 40 years) and allowing for redemption of capital 3% we get, Y.P. at 11.466.

$$\begin{aligned}
 \text{Value of structure} &= 82,620 \times 11.466 \\
 &= \text{Rs.9,47,320/-} \qquad \qquad \qquad (a)
 \end{aligned}$$

As Rent Act is not applicable, land with vacant building would revert back to the landlord after future life of the building is over i.e. after 20 years. Hence add to the capitalized value of rental yield, reversionary value of land (Present worth of land receivable after 20 years)

$$\begin{aligned}
 \text{Present value of land} &= 800 \text{ sq. mts. @ Rs.4,000/- per sq. mt.} \\
 &= \text{Rs.32,00,000/-}
 \end{aligned}$$

The capital value is receivable after 20 years. Hence deferring the value at 5% for future life of 20 years we get, **Reversionary value of land:**

$$\begin{aligned}
 &= 32,00,000 \times 0.3769 \\
 &= \text{Rs.12,06,080/-} \qquad \qquad \qquad (b)
 \end{aligned}$$

$$\begin{aligned}
 \text{Total value of the property} &= (a) + (b) \\
 &= \text{Rs.9,47,320} + \text{Rs.12,06,080} \\
 &= \text{Rs.21,53,400/-} \\
 &\text{Say Rs.21,53,000/-}
 \end{aligned}$$

Note: Here, the land value is deferred at 5% since investment in land is safe and secured.

9.15 ASPECTS INFLUENCING MARKET VALUES OF PROPERTIES

In General

The primary function of a valuer is to ascertain or estimate the present market value i.e. the price at which an interest in a property can be expected to sell as between a willing, able and prudent vendor and a willing, able and prudent purchaser, who are

neither forced to sell nor to buy. In estimating market value of an interest in a property a valuer must consider all the evidence available.

A property may have been let out at rent, in which case the reasonableness or otherwise, of the rent as on the date of valuation must be considered in comparison with the rents of similar properties in the vicinity, recently let out. It is also essential to clearly understand that the word 'future' appearing in the phrase 'future flow of income' (capitalized for estimating market value) relates to time i.e. term or number of years during which income at present level is expected to be received and it (the word 'future') does not relate to the amount of income which may increase or decrease in future.

The rate per cent of interest at which the net income is to be capitalized shall be determined by reference to the rates of interest shown by analysis of sale prices of similar properties in the locality, recently sold. Keeping accurate records of rents and sale prices and also of the results of analysis of instances of sale showing yield from investment is of much help in the work of a valuer.

Although most of the valuers work involves estimation of present market value, there are often other aspects which need his attention. It is often necessary to have regard to trends of value and to consider whether the prices at which interests in properties are being sold are reasonable and likely to be maintained or whether there are any possibilities of changes in rents or market values of properties.

In cases where properties are purchased for investment, the valuer may be required to advise on policy matters such as (a) to suggest what reserves or sinking fund should be set aside either for future repairs or for redemption capital in case of terminable income or (b) whether interests in properties should be sold or purchased today or some time in future etc. and to advise generally on problems involved in good estate management.

The knowledge required to deal with such matters, especially those concerned with future trends in rents and market values can reasonably be acquired by experience and constant careful study of the real estate market and other investment markets. A valuer will find it advantageous to keep himself updated with current, local, national and international happenings or events and in the light of them, to make careful study of rents and sale prices, particularly in areas with which he is acquainted i.e. where he is practising and where he is able to inspect the properties involved in the sale transactions recorded.

While carrying out studies regarding fluctuations of property values in different cities and towns experienced during 1994 to 1999, it was revealed that the aspects or happenings with which a valuer should keep updated knowledge can be grouped in

four categories viz. (i) Physical aspects (ii) Legal aspects (iii) Govt. policies and (iv) Economic factors. These aspects are briefly discussed hereunder. It may be pointed out at the outset that these aspects have influence on either supply or demand or both of in the real estate market and should be viewed from that point of view.

Physical Aspects

The physical aspects mainly include population size, infrastructure development and spread of urban area. A valuer should keep himself updated about all these aspects.

1. Population size

Increase or decrease in population result into corresponding increase or decrease, in demand for residential and commercial properties which causes increase or decrease in market values of properties. The size of population of a town or locality is dependent on movement of population i.e. immigration or out migration from rural areas to urban areas, from small and medium towns to cities and also from one locality/ward of a city to other localities/wards of the same city. For example in Bombay since last two decades resident population from Island City (Southern Wards) has moved and is moving to the Western and Eastern suburbs.

The changes in economic and social status due to employment generation and changes in the types of employment also result into corresponding changes in the demand of accommodation, and its type and quality leading to increase or decrease in market values of properties.

With increase in population size the requirements of social facilities and amenities also increase. Where such increased requirements are met, the market values increase to higher levels and where such requirements are not provided or are only partly provided, there will be same deterioration of environment and the rise in market values may be lower in proportion to the additional demand created in view of increase in population size.

The information about size of population and occupational pattern according to economic sectors is available in the Census books, not only for town or city but also ward wise i.e. for each of the wards of a city or a town. The municipal authorities also maintain record of population size ward wise for every year. Ward wise figures about number of shops and establishment and employment therein every year may also be available from municipal records.

2. Infrastructure development

Infrastructure development newly undertaken for improvement or augmentation of road networks and transport facilities and utility services like water supply, sewerage,

drainage, electricity etc. will improve living condition in a town or its part which may result into increase in demand and also in market values of properties. In adequacy of infrastructure development may, on the contrary, result into deterioration of environment and consequent lowering of market values of properties.

Similar would be the effect of provision of additional social facilities and amenities in a locality on market values of properties in that locality.

3. Spread of development

Provision of infrastructure like roads and utility services in so far underdeveloped or undeveloped areas result into spread of development and movement of population to newly developed areas. The localities or areas developed earlier tend to become central areas. Properties in such earlier areas therefore experience appreciation in their market values – Capital Appreciation – in proportion to the spread of urban areas.

Legal Aspectsc

Fair market value of a property is related to legal rights or interests in real properties. Any legislation providing for restrictions on transfer or use of properties will have effect on the fair market values of properties. Any change or amendment to the provisions of such legislation will have consequent effect on market values of properties. The Urban Land (Ceiling & Regulation) Act, 1976, Rent Control Acts, Town Planning Legislations & Municipal Acts, especially Development Control Rules and Municipal Building Byelaws are some of such legislations which have effect on market values of properties. Such legislations basically contemplated/intend to control market forces and thereby affect the balance or equation of demand and supply in the real estate market.

1. The Urban Land (Ceiling and Regulation) Act, 1976

The main and primary objectives of the Urban Land (Ceiling and Regulation) Act, 1976 were to ensure equitable distribution of urban land amongst various sections of the society especially for the economically weaker sections of the society and to prevent concentration of wealth in the hands of a few. It was intended that the vacant (open) lands in excess of the ceiling limits would be acquired by Govt. at a prices fixed at lower level of Rs.5/- per sq. meter and would be made available or distributed to the weaker sections of the society. The provisions of granting exemptions under sections 20 and 21 of the Act for schemes providing housing for the weaker sections virtually restricted the supply of housing in the hands of a few who were able to get such exemptions and sold flats to any purchaser at higher prices except for the 10% quota for Govt. allotment under which Govt. allotted flats at the prices limited to cost of

construction, to Govt. nominees irrespective of their income level. The supply of housing being limited, the market values of flats soared high ensuring concentration of wealth in the hands of a few in contradiction of one of the main objectives of the Act. Now with virtual abolition of the Act, supply of land is almost free from restrictions with market forces operating in normal manner. This discussion, it is hoped, would enable the student / learner to understand how and in what way the provisions of a legislation can affect market values of properties.

2. The Rent Control Acts

The Rent Control Acts, which originally were temporary Acts for coping with the circumstances of emergency during the Second World War (1939 – 1944), have been extended from time to time and have almost become permanent. Various expert committees appointed from time to time, have recommended either abolition or major amendments to the provisions of the Control Acts mainly in view of their ill-effects on supply of housing and on municipal finance, the Rent Control Acts are yet in operation due to some reason or the other. The discussion hereunder is however limited to effects of R.C. Acts on market values of properties.

The Rent Control Acts mainly provide for (a) pegging down the rents to the 1940 levels or at the rents at which accommodation was first let on rent, though permitted increases have been allowed and (b) protection to tenants from being evicted (Protected Tenants). Both these provisions discouraged new housing supply and consequently increased market rents of accommodations which are outside the purview of the R.C. Acts. Any change in the provisions of R.C. Acts may have its effect on supply of properties and thereby on market values.

In view of the provisions of the R.C. Acts market values of properties occupied by protected tenants are at considerably low level as compared to fair market values in open market. This subject will be further discussed in the next Unit – 5.

The combined effect of the Urban land (Ceiling & Regulation) Act, 1976 and the Rent Control Act is the introduction of the concept of “Flat Ownership” which is a welcome effect.

3. Town Planning Acts & Development Control Rules

The Development Plans / Master Plans and Town Planning Schemes prepared under the provisions of Town & Regional Planning Acts have effect on market values of properties in three ways.

(a) **Planning proposals**

Mainly provide for Land Use Zoning, improvement in road network and transportation systems, provision of adequate and necessary utility services, social facilities and amenities required for future projected population in next 20 years ensuring orderly and planned balanced, development of all the areas of a town/city or region ensuring improved living conditions and environment in general Market Values of properties are normally expected to improve in proportion to provision of additional infrastructure, utility services, social facilities and amenities and improvement in environmental conditions.

(b) **Land Use Zoning**

It has been already pointed out that the residential, commercial or industrial land values floating all over the town/city settle down to respective zones as soon as land use zoning is finalized. If use (quality) of land is changed to more lucrative use market value of land will increase and vice-versa (though reverse case may be very rare).

(c) **Development Control Rules**

- (i) Control the quality of use, through layout and zoning regulations and also by prescribing rules like those regarding room sizes, provisions of light and ventilation, safety of structure, fire fighting provisions etc. which ensure safety and convenience of occupants – which result in increase in rents and hence market values of properties; and
- (ii) Control intensity of use by prescribing F.S.I./F.A.R. and density regulation. Increase in F.S.I. or density will increase intensity of use which results in increase in rent/income and increase in market values of properties and vice-versa.

The effect of municipal building bye-laws on market values of properties will be similar to that of D.C. Rules.

Government Policies

Government policies having effect on real estate market can be grouped in the categories viz. (i) Fiscal Policies and (ii) Development Policies.

Fiscal policies

Fiscal policies having effect on real estate market are mainly regarding interest rates on loans and Repo Rate (Inter Bank interest rates) and C.R.R. (Cash Reserve Ratio). With decrease or increase in interest rates on domestic loans Repo Rate and C.R.R. result in increase or decrease respectively in the capital available for investment thereby boosting up or reduction in the demand for properties along with demand for

other consumer goods. On the other hand increased capital available can be invested, among other sectors of economy and other investments, in construction sector which will increase in supply of properties and vice versa. There **can** thus be balance in supply and demand in the real estate market. A valuer has to ascertain how the increase or decrease in capital available has in effect affected supply and demand for real estate.

The development policies regarding infrastructure development in roads, transportation, energy sector etc. will on one hand result in increase in values due to improvements and on the other hand increase in the supply of properties. Policies for promoting housing will result in increase in supply of housing thereby lowering market values of properties.

A valuer has to carefully study Government fiscal and development policies, changes in these policies and how and in what way such changes in Government policies will affect market values of properties.

Economic Factors

The statistics regarding national economic condition which may be helpful in indicating general trends in market values of properties can be considered in three stages.

The statistics broadly indicating national economic conditions may be considered in the first stage. These are Gross Domestic Product (G.D.P.) and economic Growth rate (G.R.) per capita income (P.C.I.), and Gross Domestic Savings. This statistic in respect of these indicators is available at the national and state levels and is also available at district level except, perhaps that in respect of gross domestic savings. This and other required economic information can be collected from Government publications and economic journals listed in references at the end.

The economic growth rate indicates the condition of national economy while per capita income indicates average annual income and hence purchasing or spending capacity of a citizen/person at the national, state or district levels. More important however is the information about Gross Domestic savings which comes from three sectors viz. Household Sector, Corporate Sector and Public Sector and is available for investment and contributes to investment in various economic sectors. Graphs showing annual information (figures) in respect of these indices over a period of time will enable one to fairly understand changes in general economic conditions of the three levels.

The information regarding investment of domestic savings in various alternative forms of investment can be considered in the second stage. The various alternative forms of investment are investments in (i) Physical assets mainly in properties, machinery and

equipments etc. (ii) Life insurance (iii) Provident funds (iv) Shares and debentures (v) Government bonds (vi) Fixed deposits in banks and financial investments and (vii) Cash in hand and Savings or Current accounts in Banks. The annual figures of domestic investment in these seven forms over a period of time of their graphs will indicate variations in preferences among these forms and more important is the changes in investment in physical assets which broadly indicates changes in demand for properties.

It would be also interesting to study the percentage of domestic savings invested (a) in Physical assets and (b) in Financial savings i.e. items at (ii) to (vii) above and study the changes therein and graphs thereof.

In the third stage can be considered the data regarding Gross Capital Formation in various sectors of economy and especially in Construction Sector (which includes construction of buildings, roads and bridges, railways etc.) and Real Estate Sector. Gross Capital Formation however includes along with value of assets, value of stocks, which may be subjected to manipulations. It is therefore advisable to consider the data regarding the Net Fixed Capital Formation (N.F.C.F.) especially in the sectors of Construction and Real Estate. Though the construction sector includes capital formation (i.e. investment) in roads, bridges, railways etc. considerable portion thereof would account for construction of buildings and can therefore be considered as indicating percentage investment in supply of Real Estate. The Net Fixed Capital Formation in the Real Estate sector would indicate demand for Real Estate. Value of properties being resultant of supply and demand of real estate, graphs of net Fixed Capital Formation in Construction and Real Estate Sectors over a period of time will throw light on the circumstances and reasons leading to fluctuations in values of properties during that period of time. It was observed that the Net Fixed Capital Formation in the Construction sector reduced considerably during 1995-96 as compared to earlier years, while that in the Real Estate sector increased considerably during 1995-96 resulting in shooting up of property values. During 1997-98, Net Fixed Capital Formation in Construction sector increased and that in Real Estate sector decreased considerably resulting in fall in property values by about 40% to 50% or so. Keeping constant watch on the data regarding Net Fixed Capital Formation in Construction & Real Estate sectors by collecting information about it and presenting it in the form of graphs along with the graphs showing variations in Per Capita Income (at national, state and district levels) and graphs showing variations in Domestic Savings and in its investment in various alternative forms of investment (as is the practice of consultants in Capital Market) will help valuers in having fair idea about the trends in real estate market of changes or fluctuations of market values of properties and also about the reasons behind such fluctuations.

Further detail research in this regard is required to be carried out to know the relationship between domestic savings and its investment along with foreign direct

investment in various economic sectors so as to enable a valuer to have better idea about likely future trends in real estate market.

Effects of Globalization

Further in view of globalization a valuer has to keep himself informed about latest developments especially affecting the economic field, all over the world which may have effect on economic conditions in India. Though economy of India is not so dependant on economy of U.S.A., the recent credit crunch and recession in U.S.A., economy in India is also going through the phase of recession, and shortage of capital for investment resulting into locking up or even closing of industrial and I.T. units, with increasing unemployment. Such conditions further result into reduction in per capita income, domestic savings etc. and slowing down the economic growth rate. Government of India has therefore resorted to fiscal measures of reducing interest rates, Repo rates and C.R.R. so as to make more and more capital available for investment and simultaneously taking measures to maintain economic growth rate at certain desirable rates. All these events are affecting demand and supply in the real estate market with consequent effect on property values. A valuer has therefore to keep himself abreast of such current economic developments.

Sources of Information

The information about economic indices, economic growth rate, G.D.P. and per capita income, Gross Domestic savings and its investment in various alternative investments, Gross and Net Fixed Capital / Formation etc. is available in large number of economic journals. Reserve Bank of India Bulletin monthly journals published by the Centre for Monitoring Indian Economy (C.M.I.E.), publication of Bureau of Statistics & Economics of State Governments, National Account Statistics published by the Central Statistical Organization (C.S.O.), Department of Statistics, Ministry of Planning, government of India, Financial Times etc. are to name a few.

9.16 Special Care to be Taken While Using Rental Method

Rental Method greatly depends on selection of proper and accurate rate of capitalisation. Even 1% variation in the selected rate of return, may change values by 8 to 10%. Again there are two sets of rate of return operating in the actual real estate market, based on legal aspects. There is one rate of expected return by the landlords of the rent controlled properties. There is also another rate of return that simultaneously operates in the market, and this rate is as per expectations of the landlords whose properties are falling outside the purview of Rent Control Act. This situation makes the task of the valuer, in selecting proper rate of capitalisation, very difficult.

In case of rent controlled premises, rental method gives too low market value as compared to the intrinsic value of the land and buildings. **In some cases outgoing expenses are so high that they outweigh the actual income derived from the property.**

In case of owner occupied or vacant premises applicability of rental method is questionable. Rental method may or may not give its true market worth. It could be lower or may be higher than the price at which such premises are likely to be exchanged in the open market. In such cases sales comparison method would be a more appropriate method of valuation.

When the land is underutilised (full permissible F.S.I. not consumed), rental method alone cannot give market value of the whole property. Help of other methods is required to value the balance development potential available in the plot.

Assessment of maintainable rent requires verification from point of view of Standard Rent, for the properties falling in areas where Rent Control Act is applicable. If actual rent is higher than Standard Rent, its adoption under rental method will not give true market value of the rented property because actual rent may not be maintainable and future flow of income may drop. **Moreover, willing buyer will certainly take into consideration the risk involved in buying the property where rent charged is in excess of standard rent, and in the event of tenant moving the court for fixation of standard rent, the contractual rent would be reduced to the level of standard rent.**

When the property is purchased by sitting tenants in Rent-Controlled areas, value worked out by rental method may give much lower value than the actual purchase price paid by the sitting tenants. **This is because it is the tendency of sitting tenant while buying the property to compare the price to be paid with property which are sold without tenants.** Due to Rent Control Act, a trend was developed in the market, where many landlords started fixing rental value of the premises at much lower rate than the standard rent of such premises.

To compensate for the loss in rental income, such landlords started charging a very high amount in the form of non-refundable one-time premium (*Pugree* or *salami*) while creating tenancy. This resulted in artificially low market rentals and value of such properties under rental method also came down substantially. This evil of premium suppresses market trend of true rentals and it also artificially reduces the value under rental method vis-à-vis intrinsic value of the property.

In rent - controlled areas where tenants are protected under the Rent Act, reversionary value of land (value of right of reversion of property) is taken at nil value as it is negligible and land/property never reverts back to the landlord due to protection granted to tenants under the Rent Act. However, for the properties not

affected by Rent Act, rental method does give fair value because reversion of land/property has to be considered in such cases as there is a reversion of property.

9.17 Limitation of Rental Method

Every method of valuation has got its own limitation. No single method of valuation is perfect or complete having universal application for all types of the properties. Rental Method has a limitation that- it is not suitable for non-investment type of properties like public schools, temples, museum and such other public buildings.

10.0 Application : Income Approach

10.1 Introduction

We have learnt in details about various important aspects of income approach, including importance of data bank and about the study of changes in investment pattern to get some fair idea about possible future trends in the property market. Now, let's study about the application of income approach in practice to valuation of -

- Properties with variable income; rising rents
- Virtual rent
- Lease-hold interests
- Renewals and surrenders of lease
- Properties subjected to Rent Control Acts

Almost all the properties excluding those which are non-income fetching, non-marketable like religious properties, public buildings etc., can be valued by income approach. The crux of the problem lies (i) in estimating net income especially in valuations of agricultural lands, orchards, quarries etc. and (ii) estimating rate of interest for capitalization especially in respect of properties subjected to the provisions of Rent Control Act.

10.2 VARIABLE INCOME: RISING RENTS

General

In valuation by income approach the main questions to be considered is (i) What is the **Right** of the person interested (ii) to receive what Benefits or how much **Net Income** and (iii) for what Period (or how long in time) i.e. term during which net income is to be received. The remunerative rate of interest will depend on the security of investment which depends on the type of income or type of property from which income will be received and the type of interest (freehold, lease-hold etc.) to be valued.

Freehold Interest

The process of valuation of freehold interest receiving variable income can be explained by following example:

Example

A freehold residential property yields net income of Rs.1,000/- per month for the first 3 years and thereafter the net income will be Rs.2,000/- per month for the next three years, Rs.3,000/- per month for the third term of three years after which it will yield net income of Rs.4,000/- per month in perpetuity. The rate of interest revealed by the market study is 6%. Estimate the fair market value of the property.

Solution

1.	First 3 years			
	Net income: Rs.1,000/- x 12		Rs.12,000	
	Y.P. 3 years at 6%		2.673	

			Rs.32,076	Rs. 32,076 (A)
2.	Next 3 years			
	Net income Rs.2,000/- x 12		Rs.24,000	
	Y.P. 3 years at 6%	2.673		
	Present value of Re.1/-			
	for 3 years at 6%	0.840		
		-----	2.245	
	Y.P. 3 years, deferred			
	3 years at 6%	2.245		

				Rs. 53,880 (B)
3.	Next 3 years (Years 7, 8 and 9)			
	Net income Rs.3,000/- x 12		Rs.36,000	
	Y.P. 3 years at 6%	2.673		
	P.V. of Re.1/- in 6 years			
	at 6%	0.705		
		-----	1.885	
	Y.P. 3 years deferred			
	for 6 years at 6%	1.885		

				Rs. 67,860 (C)
4.	10 th year onwards			
	Net income Rs.4,000/- x 12		Rs.48,000	
	Y.P. perpetuity at 6%	16.67		
	P.V. of Re.1/- in 9 years			
	at 6%	0.592		
		-----	9.869	

Y.P. perpetuity deferred		
9 years at 5% 9.869 -----		Rs.4,73,712 (D)

Total : (A) + (B) + (C) + (D)		Rs.6,27,528
		=====
		Say Rs.6,27,500/-

Market value of the property is estimated at **Rs. 6,27,500/-**

Example

The property in Example – 5.1 is leased at Rs.1,000/- per month for first 3 years, at Rs.2,000/- per month for the second term of 3 years, at Rs.3,000/- for the third term of 3 years after which the property reverts to the freeholder. Fair market rent is Rs.4,000/- per month. Estimate the fair market value of freehold's i.e. lessor's interest. The normal rate of interest shown by the market study is 6%.

Solution

1. First 3 years		
Net income: Rs.1,000/- x 12	Rs.12,000	
Y.P. 3 years at 5%	2.723	
(Lease Rent 4 times secured hence 5%)	-----	
	Rs.32,676	Rs. 32,676 (A)

Note: Fair market rent is Rs.4,000/- per month which is four times the lease rent of Rs.1,000/- per month. The lease rent is therefore said to be 4 times secured. Since the lease rent is secured 4 times, the lease rent is capitalized at 5% instead of at normal rate of 6%. This reasoning is given by saying "Lease rent 4 times secured".

2. Next 3 years		
Net income Rs.2,000/- x 12	Rs.24,000	
Y.P. 3 years at 5.25%	2.711	
(Lease rent 2 times secured hence rate of interest increased from 5% to 5.25%)		
Present value of Re.1/- for 3 years at 5.25%	0.858	
	-----	2.326

Y.P. 3 years, deferred 3 years at 5.25%	2.326	-----	Rs. 55,824 (B)
3. Next 3 years			
Net income Rs.3,000/- x 12	Rs.36,000		
Y.P. 3 years at 5.5%	2.711		
(Lease rent 1.33 times secured)			
P.V. of Re.1/- in 6 years at 5.5%	0.725	-----	
		1.956	
Y.P. 3 years deferred for 6 years at 5.5%	1.956	-----	Rs. 70,416 (C)
4. Reversion to market rent			
(Rs.4,000/- x 12)	Rs.48,000		
Y.P. perpetuity at 6%	16.67		
P.V. of Re.1/- in 9 years at 6%	0.592	-----	
		9.869	
Y.P. perpetuity deferred 9 years at 6%	9.869	-----	Rs.4,73,712 (D)

	Total : (A) + (B) + (C) + (D)		Rs.6,32,628
			=====

Say Rs.6,32,600/-

Fair market value of the lessors interest is estimated at **Rs.6,32,600/-**

In the above two examples the freeholder/lessor rights is to receive net income in 4 stages with net income increasing at each of the subsequent stages. The value of his interest has therefore to be estimated for each of the stages and then total market value is estimated by addition.

Example

An office premises having 2000 sq. ft. area is leased to multinational company for 10 years period. Rent for 1st 5 years is fixed at Rs.1,40,000/- per month and for subsequent 5 years, rent is fixed at Rs.1,60,000/- per month. Property taxes are borne by the Lessee, over and above the agreed lease rent. Building is 20 years old. Similar

commercial premises in locality are available at the ownership rate of Rs.10,000/- per sq. ft. Find out the market value of the property if expected rate of return is 8% and Rent Act is not applicable.

Solution

Part – A	<u>Gross Annual Yield for 1st Five Years</u>	
	Rs.1,40,000 x 12	Rs.16,80,000
	Less: Outgoings	
	Repairs 3% of G.R.	Rs.50,400
	Insurance 1/8 % of G.R.	Rs. 2,100
	Collection and management 2% of G.R.	Rs.33,600
		----- Rs. 86,100

	Net receivable yield	Rs.15,93,900

Capitalizing yield at 8% for 1st 5 years period,
(Y.P. for 5 years = 3.993)

Value of the property (Part – A)
= 15,93,900 x 3.993 **Rs.63,64,442 (a)**

Part – B	<u>Gross Annual Yield for next Five Years</u>	
	Rs.1,60,000 x 12	Rs.19,20,000
	Less: Outgoings at 5-1/8% of G.R.	Rs. 98,400

	Net yield	Rs.18,21,600

Capitalizing yield at 8% for balance 5 years period,
(Y.P. for 5 years = 3.993)

Value of the property (Part – B)
= 18,21,600 x 3.993 Rs.72,73,648

Y.P. at 8% for 5 years 3.993

P.V. of Re.1/- deferred
5 years at 8% 0.681
----- 2.729

----- **Rs.49,71,146 (b)**

Part – C **Reversionary Value of Office Premises**

The lease would expire after 10 years and premises would revert back to the Lessor i.e. Landlord, as Rent Act is not applicable.

Value of office premises, as if vacant
(2,000 x 10,000) Rs.2,00,00,000

Deferred 10 years at 8% 0.463

Reversionary value of the office premises
= 2,00,00,000 x 0.463 **Rs.92,60,000 (c)**

Market Value of the premises
= (a) + (b) + (c)
= 63,64,442 + 49,71,146 + 92,60,000
= 2,05,95,588

Say Rs.2,05,96,000/-

10.3 VIRTUAL RENT

The term “virtual rent” is also known or termed as “Sitting Rent.” The virtual or sitting rent is actually the true annual cost of occupying the premises to the occupant/lessee. It is the rent/lease rent paid plus annual equivalent of any capital sums be is **required to spend** or expenditure he is **required to incur**, in accordance with the agreement e.g. as per terms and conditions of lease etc., on the premises from time to time as also annual equivalent of the premium (capital amount) he has paid at the time of entering in a lease.

When a person spends some capital or incurs any capital expenditure (apart from that on annual repairs) on a property in which he has only a **terminable interest** it must be remembered that not only he would be losing **annual interest**, at a fair rate percent, on the capital amount (or premium) he has spent which he would have earned by investing it elsewhere, but he must also have to provided for or set aside an **annual sinking fund** to replace such capital by the time his interest in the property expires.

For example if a lessee whose remaining or unexpired term of lease is 30 years is required to incur expenditure of Rs.50,000/- on improvements to the property, as per terms and conditions of lease, not only he will loose interest on Rs.50,000/- say at 10% i.e. Rs.5,000/- every year throughout the unexpired period of lease (i.e. 30 years) but

he must also provide for the replacement of the capital sum of Rs.50,000/- by the time his lease term expires, 30 years hence.

The amount of annual interest together with the sinking fund to be set aside for recoument of the amount he is required to spend is known as “Annual Equivalent” of the amount spent or capital expenditure incurred. It is found out or worked out either (i) by multiplying the capital amount spent by “the **annuity** which Re.1/- will purchase” or (ii) by dividing it by the appropriate figure of Years Purchase i.e. Y.P. for the unexpired/remaining period of lease when the expenditure has been incurred. The effect of either of the two methods is to spread the expenditure over the unexpired term of lease and to show the true annual cost of lease to the lessee.

The rate per cent at which interest on capital sum so spent or invested is allowed will be the same as that which might reasonably be expected from a security of similar type as investment in the property in question.

Example

A commercial property has been let out on lease at annual rent of Rs.20,000/- The lessee has incurred expenditure of Rs.30,000/- on improvement of the property, as per terms of lease, when the unexpired period of lease is 30 years. What is the virtual rent of the property for the lessee.

Solution

$$\text{Annual equivalent} = \frac{\text{Capital Expenditure}}{\text{Y.P. 30 years at 7\% and 2\frac{1}{2}\%}} = \frac{\text{Rs.30,000}}{8.514}$$

(Commercial property and Terminable income \therefore 7% and 2½%)

$$\text{Annual Equivalent of Capital Expenditure} = \text{Rs.3,530/-}$$

$$\begin{aligned} \therefore \text{Virtual or Sitting Rent} &= \text{Rs.20,000/-} + \text{Rs.3,530/-} \\ &= \text{Rs.23,530/-} \end{aligned}$$

Thus the virtual rent is **Rs.23,530/-** per annum.

Capital expenditure by a lessee may be of two principal types viz. (i) a premium paid on taking up of a lease and (ii) alterations, improvements and other capital works to the property taken on lease. In either case the annual equivalent of the capital amount or amounts spent must be added to the rent reserved under lease and actually paid in order to find the lessee’s “virtual” or “sitting” rent. The premium paid when lease is

taken should be spread over the entire period of lease while cost of capital works should be spread over the unexpired period of lease at the time when the expenditure was incurred. If the future life of improvements etc. is less than unexpired period of lease, the expenditure should be spread over the shorter period.

10.4 VALUATION OF LEASE-HOLD INTERESTS

Lease-hold Interest

A lease-hold interest is usually subject to the payment of annual rent and to observe terms and conditions i.e. covenants contained in the lease agreement/deed. The person who grants lease is called “lessor” and the person who takes property on lease is called “Lessee”. The covenants of lease usually include two main conditions amongst other conditions, regarding payment of rent reserved under the lease and regarding regularly carrying out annual repairs and maintenance. A lease where lessee undertakes to carry out all the repairs and to bear all outgoings is known as “**Full repairing lease**”.

Types of Leases

There are four principal types of leases in practice.

1. Building Lease

These leases are in respect of **lands** ripe for construction of buildings. In such a lease lessee undertakes (i) to pay annual ground rent (ii) to construct building or buildings on the land (iii) to keep the buildings in good state of repairs and maintenance during the period/term of lease and pay all outgoings and (iv) on expiry of lease term either pull down buildings and revert the land to its original state – which is rear or to handover possession of land with buildings thereon to the lessor, which is normally the case. These leases are usually for long term **e.g.** 99 years.

2. Occupation Leases

These are leases where **land and buildings** are leased out for occupation by the lessee. The term of lease normally varies according to type of property and leases are usually for short-term or for medium term. In the case of medium or long term leases there is usually a condition regarding periodic revision or review of lease rent, usually upwards, during the lease period **e.g.** rising rents.

Where the rent reserved under this type of lease is the full rental value of land and buildings, it is known as ‘market rent’ or ‘rack rent’ and where it is less than the full rental value it is known as a ‘head rent’. The difference between the rack/full

rental value and the head rent (such difference is known as '**Profit rent**') when capitalized (at dual rate of interest) represents the value of lessees interest.

3. Subleases

Subject to the terms of conditions of his head lease, a lessee may sub-lease the property for any term less (at least by a day) than his own lease term. Sub-lease may be building sub-lease or occupation sub-lease.

4. Leases for life

It is lease granted for the duration of the life of the lessee or some other person. The period of such a lease is uncertain and can be considered as may be indicated by mortality tables or life expectancy tables.

State Government, local authorities and Semi Government agencies many a times gives land for development to individuals to entrepreneurs or to a company by creating long lease and by charging initial full premium representing full market value of land at a nominal lease rent of Re.1/- per year. Keeping in view long term public interest, and in view of desire for development of under developed area, such lands are sometimes given on long lease charging premium at less than the market value of land. Such leases invariably consist of a clause of payment of unearned increase, in case of sale or transfer or lease-hold interest in land. If Lessee earns profit on land value, by way of such sale, Lessor Government or Leasing Agency would charge share in profit (Say 50% of unearned increase in value of the property over initial premium payments, as per Government Policy). This charge by the lessor, in case of sale or assignment of the lease, is called payment for unearned increase. It is a charge on the property and is deducted from total value of the property as upheld by Supreme Court in case of P.N. Sikand. In such leases the premium charged represent market value of land with or without concession and the lease rent is only a nominal one. Such leases are **virtually** grant of land are leases for names sake for observing polity of disposal of land by Government or by Planning and Development authorities.

Lessee's Interest

In the case of lease-hold properties, the lessee has a right to enjoy the difference between the fair market rent and the rent reserved under the lease which is known as Profit Rent, for the unexpired period of lease. The market value of lessee's interest is therefore estimated by capitalizing profit rent at dual rate of interest for the unexpired period of lease. The accumulative rate of interest is usually taken at 2½% to 3%. The remunerative rate of interest for capitalizing lessees profit rent is usually taken at ½% to 1% higher than the remunerative rate considered appropriate for capitalizing freeholder's (lessor's) net income corresponding to security offered by the property

since the lessee's interest in a property is considered to be less secured than the lessors interest/right.

Lessor's Interest

- A. Lessor or freeholder has right (i) to receive lease rent fixed under the lease deed for the unexpired period of lease and (ii) to receive net income from the property **after** expiry of lease period when the property reverts back to lessor. The net income from the property is capitalized in perpetuity at the remunerative or single rate of interest appropriate to the security offered by the property. Since the net income from property is receivable after expiry of lease, the capitalized value of net income is differed for the unexpired period of lease.
- B. The lessor has right to receive rent reserved under lease deed for the unexpired period of lease. Where the rent reserved under the lease is well below the fair market rent, it is **most** secured and hence remunerative rate for capitalizing rent reserved is estimated at ½% to 1% lower than the normal rate of interest corresponding to security offered by property. If the difference between the market rent and rent reserved is less, still the rent reserved is **more** secured than the market rent and the remunerative rate for capitalizing such reserved rent is capitalized at about ½% lower than the normal rate of interest corresponding to security offered by the property.
- C. The value of the lessors interest will therefore be the sum of (i) Capitalized Value of rent reserved under the lease, at appropriate single rate of interest for unexpired period of lease and (ii) Capitalized Value of net income of market rent capitalized, in perpetuity at the appropriate remunerative rate differed for the lease period. This second component of lessors interest when the property reverts back to the lessor is known as **Reversionary Value** as the property reverts to lessor after the expiry of lease period.

The presumption is often made that the lessor's interest plus lessee's interest add to the fair market value of freehold property and that the fair market value of freehold property can be apportioned into lessor's and lessee's interest in some fixed proportion. This proposition is totally incorrect and wrong. The simple reason is that the value of lessee's interest is not only capitalized at dual rate but the remunerative rate for capitalizing is 1% more (say 7% and Y.P. 14.3) than the rate for capitalizing of lessor's interest (say at 6% Y.P. 16.67). If fair market rent is 2x and lease rent is x, lessee's profit rent will be x. Then full market value will be $2x \times 16.67 = 33.34x$ (at 6%). Value of lessors interest at 6% will be $16.67x$ and value of lessee's interest even at single rate of 7% will be $14.3x$. The total of lessor's interest and lessee's interest will be $(16.67 + 14.3)x$ Say $31x$ and will never be equal to full market value of $33.34x$ and it cannot be apportioned into lessor's and lessee's interests.

Value on Reversion: Reversionary Value

In the case of lease-hold properties held on building lease or occupancy lease, the lessees interest being limited to enjoy the benefits from the land/property only during the period fixed under the lease, ceases on expiry of the lease period and the property with or without improvements or buildings reverts back to the lessor. The lessor has thus right to enjoy benefits i.e. to receive net income from the property in perpetuity. The market value of this right of the lessor (to get back the property) is estimated by capitalizing the net annual income from the property (i.e. fair market rent less outgoings) at appropriate rate of interest. This capital value is receivable only after the termination of the lease period and it is therefore deferred for the unexpired period of lease. The value of such reversion of the property depends on the unexpired period of lease and in case the unexpired period is too long i.e. 50 years or more the capital value on reversion being deferred for longer period becomes almost negligible, but still it is **never** zero.

In the case of C.I.T. vs. Smt. Ashima Sinha (1979) (116 ITR 26), Calcutta High Court has held that “In the method adopted by the Valuation Officer, Value of land is taken twice viz. (i) the amount included in the yield method and (ii) Again under the reversionary method. This is novel approach but in our view is erroneous.” Thus the High Court has virtually held that there is no such thing as “Reversionary Value”. It is well known that the Courts consider only the evidence proved and the arguments submitted before them in the court room. It seems that lack of producing proper evidence and not presenting the case in proper and correct perspective has misled the High Court in holding such incorrect views. In the case of lease-hold properties the lessor’s right is considered in two parts, not considered twice. **The first part** is in respect of receiving rent reserved under the lease for the unexpired period of lease i.e. to receives interest on his investment in the property for **the limited period** only and not in perpetuity. Even such lease rent partly includes income from land, it is **capitalized not in perpetuity** (i.e. not capitalized fully to represent full market value of land) **but only** for the unexpired period i.e. **for limited period** and hence it represents only part of the market value of land. **The second part** is in respect of receiving the net income from the property after it reverts back (reversion to property) on expiry of the lease term. This part accounts for the remaining part of land value for the period **after** the lease period is over. The Kolkatta High Court in passing such judgement has in effect denied this legitimate right of the lessor to get back the property and enjoy full net income (not only lease rent) from the property, and to receive **after** the unexpired period of lease (and therefore deferred for such period) the value of net income capitalized in perpetuity duly deferred for the unexpired period of lease. This can be compared with investment in, say, fixed deposits where in the first part the investor receives interest on capital (and not any part of capital) for the term of fixed deposit and in the second part after the term of the fixed deposit, he gets back the Capital (like land and building reverting to lessor). As the unexpired period of lease increases (becomes longer and

longer) the capitalized value of the net income from the property after reversion (i.e. after expiry of lease term) is deferred for longer and longer period and hence goes on decreasing and ultimately **tends** to zero but is **never** zero. The decision of the Kolkatta High Court may be practically fair in the Smt. Ashima Sinha's case if the unexpired period of lease was more than 60 years; but the judgement, in principle, seems to be unfair and incorrect. Here, the student/learner may be advised or rather warned not to read the Judgements of the Courts out of context and to study the circumstances of the case, deposition of evidence and arguments submitted (pleadings) before accepting and following it especially because all these circumstances, evidences and arguments submitted usually differ from case to case.

Valuation of Lessor's Interest and Lessee's Interest

The simple case of valuation of the interests of lessor and lessee is where lease has been granted at certain lease rent without charging any premium and has some unexpired period of lease. It has been already stated earlier that the Lessor's interest comprises of two parts viz. (i) to receive the rent reserved under the lease for unexpired period of lease and (ii) reversion to land or land and building, as per terms and conditions of lease, after expiry of lease. The lessee's interest is to receive profit rent (i.e. market rent – lease rent) for the unexpired period of lease. The following examples will show how the values of lessor's and lessee's interests can be estimated.

Example

A Lessor leased 1,500 sq. mts. land in 1961 to Lessee for 99 years period by charging full repairing lease rent of rs.1,000/- per month. Lessee constructed the commercial building yielding total rent of Rs.5,500/- per month. Lease is renewable for further period of 99 years on same terms. Calculate value of the Lessee's interest in the property and also value the Lessor's interest in property, as on March, 2006. Property taxes and other outgoings are 40% of the Gross Rent. Adopt expected rate of return on the property at 7%.

Solution

(a) Value of Lessor's Interest

Net Ground Rent	Rs. 12,000
(Rs.1,000 x 12 = Rs.12,000/-)	
Y.P. perpetuity at 5%	20
(Ground Rent is 5.5 times secured)	
(Rs.5500 ÷ Rs.1,000/- = 5.5)	
(Market rent / Ground Rent)	-----
	Rs.2,40,000
	=====

(b) Value of Lessee's Interest

Gross Rent		Rs. 66,000
(Rs.5,500 x 12 = Rs.66,000/-)		
Less: Outgoings		
Lease Rent	Rs.12,000	
Other outgoings	Rs.26,400	
(at 40% of Rs.66,000) -----		Rs. 38,400

		Rs. 27,600
Y.P. perpetuity at 7%		14.3
(Market Rent not well secured)		
Unexpired period of existing lease is		
52 years and renewable for further		
99 years. Hence Net Income		
Capitalized in perpetuity		-----
		Rs.3,94,700

		Say Rs.3,95,000/-

In this example ground rent is Rs.1,000/- per month and rental income from building is Rs.5,500/- per month. Hence **ground rent** is said to be 5 ½ times secured. Rate for capitalization of **ground** rent could therefore be considered as 5% or even less than 5%.

Example

A freeholder (owner of property) leased his land with commercial building to Lessee for 15 years period, by charging net rent of Rs.15,000/- per year. Rental income from the building is Rs.70,000/- per year of which Rs.25,000/- per year are required to be spent for outgoings like property taxes, repairs etc. The unexpired period of lease is 10 years. An investor desires to purchase Lessee's right and expects 9% yield on investment. What price should he offer to acquire Lessee's right in the property?

Solution

The rental income from property received by the lessee would cease after 10 years unexpired period of lease. Hence recoupment of capital invested has also to be provided for, by adopting dual rate of interest.

Gross Annual Rental Income			Rs. 70,000
Less: Outgoings			
Lease rent	=	Rs.15,000	
Taxes, repairs	=	Rs.25,000	
		-----	Rs. 40,000

		Net annual income	Rs. 30,000

Capitalizing net income for 10 years at 9% and 3%			
i.e. Y.P. 10 years at 9% and 3%			5.642

		Value of Lessee's Interest	Rs.1,69,200

			Say Rs.1,69,000/-
			=====

Example

A Lessor leased his land (Area 2500 sq. mts.) for 40 years period for a rent of Rs.10,000/- per month. Lessee constructed house yielding rent of Rs.40,000/- per month. Lease condition states that on maturity of lease, Lessee shall **remove** the structure and return open land to Lessor. Unexpired period of lease as on today is 10 years. Expected yield on investment on building is 8%. Land rate prevalent in locality as on today is Rs.3,500/- per sq. mt. Rent Control Act is not applicable. Advice on fair price for purchasing Lessor's interest.

Solution

Lessors holds two rights.

- (i) To receive ground rent for 10 years
- (ii) Reversionary value of land receivable after 10 years

- (a) Ground Rent = $10,000 \times 12 = \text{Rs.}1,20,000/-$
 The ground rent is 4 times secured ($\text{Rs.}40,000 \div \text{Rs.}10,000$)
 \therefore Capitalized at 5%

Ground Rent	Rs. 1,20,000	
Y.P. 10 years at 5%	7.722	

Capitalized value of Ground Rent	Rs. 9,26,640	Rs. 9,26,640 (a)

(b)	Value of land as if freehold = 2,500 x 3,500		Rs.87,50,000	
	The value is not receivable after 10 years.			
	∴ Present value of Re.1/- deferred 10 years at 5%		0.614	

	∴ Reversionary value of land	Rs.53,72,500	Rs.53,72,500	(b)

	Total value of Lessors interest		Rs.62,99,140	(c)

			Say Rs.63,00,000/-	

A valuer can advice investor to offer a price of Rs.63 lakhs to acquire the Lessor's interest in the above property as on today.

It should be noted that while considering reversion, it is assumed that land value will remain unchanged i.e. at Rs.3,500/- per sq. m. even after 10 years period.

Example

A lease-hold property is acquired by Planning Authority in 2008. Estimate the market value of Lessor's and Lessee's interest for claiming compensation. The data regarding the property is as under: (Do not consider solatium at 30% and other claims).

Land area = 2100 sq. mts.

Area of commercial building = 750 sq. mts. ground floor and 750 sq. mts. 1st floor

Ground rent = Rs.5,000/- per month from 1978 for 60 years period.

Unexpired lease period = 30 years.

Rental income from building = Rs.50,000/- per month.

Outgoing including taxes = 30% of Gross Rent

Prevailing land rate = Rs.2,000/- per sq. mt.

Expected yield rate for commercial building is 8%. Lease provides that on maturity of lease, Lessee will handover open land back to Lessor.

Solution

(a)	Value of Lessor's Interest		
	Ground Rent (5,000 x 12)	Rs.	60,000
	Capitalized for 30 years (Y.P.)		18.929

	Rs.11,44,740	Rs.11,44,740
Reversionary value of land		
Land value = 2100 sq. mt. x		
Rs.2,000	Rs.42,00,000	
P.V. Re.1/- in 30 years at 5%	0.231	

	Rs. 9,70,200	Rs. 9,70,200

Value of Lessor's Interest		Rs.21,14,940
		=====
 (b) Value of Lessee's Interest		
Gross Annual Income (50,000 x 12)		Rs. 6,00,000
Less: Lease rent Rs.5,000 x 12	Rs. 60,000	
Taxes/Repairs 30%	Rs.1,80,000	
	-----	Rs. 2,40,000

Net annual income		Rs. 3,60,000
Y.P. 30 years at 8% and 3%		9.899

Value of Lessee's Interest		Rs.35,63,640

		Say Rs.35,64,000/-

Example

This example explains how value of lease-hold interest can be estimated when **Income** being received **at present is less than the Present Market Value**

'A' took a lease of shop premises in 1985 for 42 years (i.e. expiring on 2027) at a fixed net rent of Rs.1,00,000/- per annum. In 1991 he sublet the premises for 21 years (expiring on 2012) at a fixed net rent of Rs.1,60,000/- per annum. In 2008 similar shops in the vicinity have been let on 15 years lease at net rent of Rs.4,00,000/- per annum. Estimate market value of 'A's interest as in 2008.

Solution

Term : In 2008, 'A' will be receiving net rent of Rs.1,60,000/- per annum for 4 years till 2012.

Reversion: After 4 years he will be able to sub-let the shop at net rent of Rs.4,00,000/- per annum till 2027 i.e. for a period of 15 years.

Valuation of 'A's interest as in 2008 will be

1. Present Term

Rent received	Rs. 1,60,000/- p.a.	
Less: Rent payable	Rs. 1,00,000/- p.a.	

Profit Rent	Rs. 60,000/- p.a.	
Y.P. 4 years at 6% and 3%	3.344	
(Rent 2½ times secured)		
	-----	Rs. 2,00,640

2. Reversion

Present Fair Market Rent		Rs. 4,00,000/- p.a.
Less: Rent payable		Rs. 1,00,000/- p.a.

Profit Rent		Rs. 3,00,000/- p.a.
Y.P. 15 years at 7% and 3%	8.080	
(Less secured)		
P.V. of Re.1/- in 4 years at 7%	0.763	

Y.P. 15 years at 7% and 3%	6.165	6.165
deferred 4 years		

	Rs.18,49,500	Rs.18,49,500

Value of 'A's Interest as in 2008		Rs.20,50,140

Say Rs.20,50,000/-

10.4 RENEWALS AND SURRENDERS OF LEASE

Premium

Premium is usually the amount of money paid by a lessee to a lessor for grant or renewal of lease on favourable terms like reduced rent or some other benefit. Where

premium is paid at the commencement of lease it is generally in view of fixing the rent less than the true rental value of the premises.

From lessor's point of view this arrangement gives additional security to the rent reserved under the lease, because the lessee having paid a capital sum while entering into the lease, has a definite financial interest in the property, which ensures that he will ensure timely payment of rent reserved and strictly observe the covenants of the lease. Premium are usually paid where there is strong demand for the premises from the prospective tenants.

The parties may agree first on the proposed reduction in rent and then arrive at the figure of premium or first agree on the premium and then agree on the reduction in rent.

Calculations of rent or premium made from the point of view will be found to be different and parties need to agree on compromise figure since the lessor stands to gain more, calculations are often made from lessee's point of view which gives slightly lower figure.

Renewal of Lease

At the time when existing lease is about to expire, lessees especially of commercial properties frequently approach their lessors to secure extension or renewal of leases surrendering unexpired period of their leases, so as to continue to get benefit of the goodwill earned by them by carrying out their established business. Usually the lessee surrenders the unexpired period of the lease in exchange for grant of a new lease either on the same period as that of the original lease or for some other agreed period.

The fair market rent usually exceeds the lease rent agreed some time in the past in which case the lessee will obviously have to compensate the lessor for the proposed extension and the form of such compensation will be the matter of agreement between the parties. The fresh (renewed) lease may be agreed to be granted at the same rent and at the same terms and conditions as that of present lease, in which case the lessee will be required to pay premium to the lessor compensating him. Alternatively instead of paying premium the lessee may be required to pay increased rent throughout the new term or he may be required to pay both some amount of premium and increased lease rent though at lower level. In the case of the lessee surrendering the unexpired period of lease and thereby foregoing the benefit of enjoying profit rent i.e. the remainder of his interest in the property, he also needs to be compensated for the same.

The calculations may be made either from the lessee's point of view or the lessor's point of view or both. The principle involved however will be the same viz. (i) estimating

the value of the party's interest in the property as under the present lease and (ii) estimating value of the parties interest assuming that the proposed renewal or extension has been granted on new terms and conditions agreed upon. The difference between the two values will indicate the extent to which the lessee will gain or the lessor will lose by the proposed renewal or extension.

The premium to be paid will be suggested by the difference in two values. Instead of premium, if parties agree to pay increased rent, the same can be found out by adding to the present rent the annual equivalent of the difference between the two values/figures.

The terms for the proposed extension or renewal of the lease will never be a precise mathematical calculation or solution. The estimate of revised rent or premium from lessor's point of view usually differ from that estimated from lessee's point of view and the figures finally arrived at will be matter of negotiations. In practice valuer should make calculations of premium or revised rent from both points of view i.e. from lessor's point of view as well as from lessee's point of view.

The following examples will make these points very clear.

Example

Estimate the premium to be paid by the lessee for a 30 years lease of shop premises at a rent of Rs.24,000/- per annum. The fair market rent of the premises is Rs.30,000/- per annum. Value of Lessees interest shall be estimated at 7½% and 2½% and value of lessors freehold interest be estimated at 7% as per study of local property market.

Solution

A. Lessee's Point of View

Present fair market rent	Rs.30,000/- p.a.
Rent to be paid to lessor as per lease	Rs.24,000/- p.a.

Profit rent	Rs. 6,000/- p.a.
Y.P. 30 years at 7½% and 3%	10.415

Premium which can be paid	Rs.62,490/-

Say Rs.62,500/-

B. Lessor's Point of View

1. Present Position

Fair market rent	Rs. 30,000/- p.a.
Y.P. perpetuity at 7%	14.28

	Rs.4,28,000/-

Less:

2. Proposed Position

Rent as per lease	Rs. 24,000/-	
Y.P. 30 years at 7%	12.41	

	Rs.2,97,840/-	Rs.2,97,840/-
Reversion to fair rent	Rs. 30,000/- p.a.	
Y.P. perpetuity deferred		
30 years at 7%	1.88	

	Rs. 56,400/-	Rs. 56,400/-
	-----	Rs.3,54,240/-

Premium		Rs. 74,160/-

	Say Rs.74,000/-	

Hence from lessees point of view maximum premium to be paid will be Rs.62,500/- and from the lessor's point of view the premium would be Rs.74,000/-. A compromise would be required to arrive at the amount of the premium.

Example

A commercial accommodation worth Rs.60,000/- per annum is to be let on full repairing lease for 35 years. It is agreed between the parties that the lessee shall pay a premium of Rs.1,00,000/- on the grant of lease. What rent should be paid during the lease period?

Solution

Lessee's Point of View

Present fair rent		Rs. 60,000/- p.a.
Deduct: Annual equivalent of premium		
Premium	Rs.1,00,000/-	
Y.P. 35 years at 7½% and 3%	10.924	
	-----	Rs. 9,154/- p.a.

Rent to be reserved		Rs. 50,846/- p.a.

	Say Rs.51,000/- p.a.	

Lessor's Point of View

1. Present Position

Fair Rent		Rs. 60,000/- p.a.
Y.P. perpetuity at 7%	14.28	

	Rs.8,56,800/-	Rs.8,56,800/-

2. Proposed Position

(i) Rent to be reserved Y.P. 35 years at 7%	Rs.x p.a. 12.45 -----	
	Rs.12.95x -----	Rs.12.95x
(ii) Reversion to fair rent Y.P. in perpetuity deferred 35 years at 7%	Rs. 60,000/- p.a. 1.34 -----	
Add: Premium	Rs. 80,400/- Rs.1,00,000/- -----	
	Rs.1,80,400/- -----	Rs.1,80,400/- -----
		Rs.1,80,400+12.95x

$$\therefore \text{Rs.}8,56,800 = 1,80,400 + 12.95x$$

$$\begin{aligned} \therefore 12.95x &= \text{Rs.}8,56,800 - \text{Rs.}1,80,400 \\ &= \text{Rs.}6,76,400/- \end{aligned}$$

$$\therefore \text{Lease Rent } x = \text{Rs.}52,231/-$$

Say Rs.52,230/-

Example

A Lessee is holding a shop on full repairing lease for 40 years of which 6 years are remaining. He desires to surrender his lease and have a fresh lease for 40 years at the same rent. The rent reserved under the present lease is Rs.1,20,000/- per annum. The fair market rent is Rs.3,00,000/- per annum. What premium can be reasonably agreed between the parties.

Solution

A. Lessee's Point of View

(i) Proposed Interest Fair rent Rent to be reserved	Rs. 3,00,000/- p.a. Rs. 1,20,000/- p.a. -----
Profit rent	Rs. 1,80,000/- p.a.

Y.P. 40 years at 8% and 3%	10.722	

	Rs.19,29,960/-	Say Rs.19,30,000

(ii) Present Interest		
Fair rent	Rs. 3,00,000/- p.a.	
Rent reserved	Rs. 1,20,000/- p.a.	

Profit rent	Rs. 1,80,000/- p.a.	
Y.P. 6 years at 8% and 3%	5.196	

	Rs. 9,35,280/-	Say Rs. 9,35,000/-

	Gain to the lessee	Rs. 9,95,000/-

		Say Rs.10,00,000/-

B. Lessor's Point of View

(i) Present Interest		
Rent reserved	Rs. 1,20,000/- p.a.	
Y.P. 6 years at 7½%	4.694	

	Rs. 5,63,480/-	Rs. 5,63,480/-
Reversion to fair rent	Rs. 3,00,000/- p.a.	
Y.P. perpetuity deferred 6 years at 7½%	8.639	

	Rs.25,91,700/-	Rs.25,91,700/-

	Value of Present Interest	Rs.31,55,180/-
		=====

(ii) Proposed Interest		
Proposed rent	Rs. 1,20,000/- p.a.	
Y.P. 40 years at 7½%	12.594	

	Rs.15,11,480/-	Rs.15,11,480/-
Reversion to fair rent	Rs. 3,00,000/- p.a.	
Y.P. perpetuity deferred 40 years at 7½%	0.739	

	Rs. 2,21,700/-	Rs. 2,21,700/-

Value of proposed interest	Rs.17,33,180/-
∴ Loss to the Lessor	Rs.14,22,000/-

Premium can reasonably agreed	Rs.12,00,000/-
	=====

Example

A warehouse in a city centre is held on lease having unexpired period of 8 years, at Rs.3,00,000/- per annum. The present rental value is Rs.5,00,000/- per annum. The lessee is willing to spend Rs.10,00,000/- on improvement and alterations permissible, which will increase the fair rent by Rs.2,00,000/- per annum, provided the lessor will accept surrender of the present lease and grant a new lease for a period of 30 years. The lessee is willing to pay a reasonable rent under the new lease or a premium. The lessor is agreeable to grant the new lease at the rent of Rs.2,50,000/- per annum provided that a proper premium is paid and that the new lease contains a covenant that the lessee will carry out improvements what premium you would advise the lessee to offer, if the new rent is fixed at Rs.2,50,000/- per annum.

Solution

i. Lessee's Point of View

(a) Proposed Interest		
Market rent	Rs. 5,00,000/- p.a.	
Add: Increase in rent due to Improvements etc.	Rs. 2,00,000/- p.a.	

	Rs. 7,00,000/- p.a.	
Less: Rent under new lease	Rs. 2,50,000/- p.a.	

Profit rent	Rs. 4,50,000/- p.a.	
Y.P. 30 years at 11½% and 3%	7.352	

	Rs.32,08,400/-	
Deduct expenditure on Improvements etc.	Rs.10,00,000/-	

Value of proposed interest	Rs.22,08,400/-	Rs.22,08,400/-

(b) Present Interest		
Market rent	Rs. 5,00,000/- p.a.	
Rent paid	Rs. 3,00,000/- p.a.	

Profit rent	Rs. 2,00,000/- p.a.	
Y.P. 8 years at 11½% and 3%	4.396	

Value of present interest	Rs. 8,79,200/-	Rs. 8,79,200/-

	Gain to Lessee	Rs.13,29,200/-
		=====
	Say Rs.13,29,000/-	

ii. Lessor's Point of View

(a) Present Interest

Rent under present lease	Rs. 3,00,000/-	
Y.P. 8 years at 11% and 3%	5.146	

	Rs.15,43,800/-	Rs.15,43,800/-

Reversion

Estimated increase in rent due to improvements is 20% of the amount spent i.e. Rs.10,00,000/- which is more than the remunerative rate of interest expected from the property i.e. 11%. It is therefore advisable for the lessor to carry out improvements on expiry of the present lease. The value of reversion is therefore estimated on this basis.

Reversion to rent after

Improvements	Rs. 7,00,000/-	
Y.P. in perpetuity at 11%	9	

	Rs.63,00,000/-	
Deduct cost of improvements	Rs.10,00,000/-	

	Rs.53,00,000/-	
P.V. of Re.1/- in 8 years at 11%	0.434	

	Rs.23,00,200	Rs.23,00,200/-

Value of present interest		Rs.38,44,000/-

(b) Proposed Interest		
Rent under new lease	Rs. 2,50,000/- p.a.	
Y.P. 30 years at 10%	9.427	
(more secured since lessee is to spend Rs.10,00,000/- on improvements)		

	Rs.23,56,750/-	Rs.23,56,750/-

Reversion to market rent	Rs. 7,00,000/-	
Y.P. perpetuity deferred 30 years at 10%	0.570	

	Rs. 3,99,000	Rs. 3,99,000/-

		Rs.27,55,750/-

Loss to the Lessor		Rs.10,88,250/-

		Say Rs.10,88,000/-

Reasonable premium may be Rs.12,00,000/-

Example

In the above example if the parties decide the no premium should be paid but the rent under the new lease should be adjusted. What would be the reasonable rent?

Solution

I. Lessee's Point of View

Market rent after improvements	Rs. 7,00,000/- p.a.	Rs. 7,00,000/-
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Deduct **annual equivalent of**

(i) Cost of improvements and	Rs.10,00,000/-	
------------------------------	----------------	--

(ii) Value of present interest (being surrendered)	Rs. 8,79,000/-	
--	----------------	--

	Rs.18,79,000/-	

Divided by Y.P. 30 years at 11½% and 3%	7.352	

∴ Annual equivalent	Rs.2,55,577/-	Say Rs. 2,56,000/-

Rent under the new lease		Rs. 4,44,000/-
		=====

II. Lessor's Point of View

Value of present interest		Rs.38,44,000/-
<u>Deduct</u> value of proposed reversion to full market rent after improvements	Rs. 7,00,000/-	
Y.P. perpetuity deferred 30 years at 10%	0.570	

	Rs. 3,99,000/-	Rs. 3,99,000/-

Value of proposed new lease Divided by Y.P. 30 years at 10%		Rs.34,45,000/- 9.427

Rent for the new lease		Rs. 3,65,440/-

The reasonable rent can be agreed at Rs.4,00,000/-		

10.6 PROPERTIES SUBJECTED TO RENT CONTROL ACTS

Properties occupied by the tenants protected by the provisions of Rent Control Acts can also be valued by Income approach. The crux of the problem in such cases is to estimate the appropriate rate of interest by careful analysis of the recent transactions of scale of similar rent controlled properties nearby.

Properties occupied by protected tenants and subjected to Rent Control Acts are mostly situated in old parts which are nearer to the central part of a city/town. Due to almost central or nearer to the central locations land values are comparatively higher indicating need for redevelopment for best possible use, exploiting full potential of land. The transactions of sale in respect of such properties occupied by protected tenants are usually of three categories viz. (1) purchased by developers/builders (2) purchased by the society formed by tenants and (c) purchased by individuals, either by one of the tenants or by a third party.

Transaction by Developer/Builder

Developers and/or builders purchase tenanted properties which are otherwise ripe for redevelopment and which have considerable unutilized or balance F.S.I. After purchasing a property the purchaser developer pulls down the building(s) standing on the land and redevelops the property. Thus he virtually purchases an open land and pays price as that for an open land. The purchaser either buys out the protected tenants or accommodates them, charging concessional rent for the accommodation or flat, which is often the cost of construction or without i.e. free of any charge. The market value or price paid by the purchaser in such cases is the balance of market value of land remaining after deducting from the land value, the cost of buying out the tenants and/or cost of the concessions given to the tenants in the prices of new accommodation/flats. There is no hard and fast rule for such deductions which depend on the bargaining powers of the tenants, the developer/builder and the owner i.e. the vendor. The studies by a few students of Master of Valuation (R.E.), Sardar Patel University, Vallabh Vidyanagar, Gujarat for their dissertations indicated that the prices paid for such properties varied from 40% to 60% of the fair market value of open land.

Purchase by Society of Tenants or by Individual

In some cases the protected tenants have formed their own co-operative housing societies and have purchased the properties they occupied. In some other cases one of the tenants or third parties have purchased properties occupied by protected tenants. In the transactions of both the categories, unlike in the cases of the properties purchased by developers, buildings have been retained with or without carrying out improvements. In the cases where improvements have been carried out immediately on purchase, the cost of improvements were added to the purchase price thus arriving at the fair market value (i.e. the process just reverse of that adopted in the case of immediate repairs required to be carried out to the properties to be valued).

For the purpose of analyzing instances of sale of the above two categories, recent rentals of similar comparable properties, with and/or without such improvements, and **not** occupied by protected tenants, were collected and fair market rents of the properties occupied by protected tenants, involved in the sale transactions, were estimated. The Y.P. on the basis of the Standard rents worked out from about 200 to 300 (i.e. at the rate of interests varying from 0.5% to 0.3%) while the Y.P. on the basis of fair market rents, as estimated above, worked out from 12 to 14 (i.e. at the rate of interests varying from about 8% to 7%) as against the Y.P. of 20 to 25 (i.e. the rates of interests varying from 4% to 5%) in the case of properties not covered by the Rent Control Acts. It can therefore be said that the market values of properties within the

purview of the Rent Control Acts were found to be 50% to 70% of the fair market values of similar properties not covered by the Rent Control Acts.

Here it needs to be emphasized that **the above findings should not be followed blindly. What the above example of dissertations show is the method by which fair market value of the properties subjected to the Rent Control Acts can be estimated by the income approach** for which it is necessary that a valuer should study the market of such properties by analyzing instances of sale of rent controlled properties on the basis of standard rents as well as on the basis of estimated fair market rents.

Temporary Nature of Rent Control Acts

It is also considered necessary that the Rent Control Acts are essentially of temporary nature, being extended for further 5 years from time to time thereby as if acquiring the status of regular legislation. The Supreme Court of India has however observed that the circumstances have changed considerably since 1940s when the Rent Control Acts were first introduced and the present R.C. Acts have become outdated and that the R.C. Acts need to be amended to suit the present circumstances in the real estate market. The State Governments are either taking or have taken to suitable modify the present R.C. Acts. A valuer should study the market of rent controlled properties in view of such modifications.

11.0 Market Approach

11.1 There are several educative stories of Akbar and Birbal. One of the stories is related to 'Three Dolls'. An artisan produced three identical looking dolls in Akbar's Darbar and requested the King to get each doll valued. As usual, this difficult task of valuation was assigned to Birbal. Looking to the apparent paradox, Birbal asked for 24 hours' time for valuation. Next day he declared the result as under:

- First doll was declared worthless or having Nil value.
- Second doll valued at 1,000 gold coins, and
- Third doll valued at 1,00,000 gold coins. The King asked for justification.

Birbal gave a practical demonstration. He put a thin wire in the ear of the first doll. It came out of the mouth of the doll. Birbal said that this doll symbolises a person who listens to the secret of his friend and tells everyone about it and hence such person has no value in the society.

The wire was put in the ear of the second doll. It came out of the second ear. Birbal said such people are less harmful as they neither help the friend nor cause any harm to the friend. Hence he valued the second doll more than the first doll.

When he put the wire in the third doll's ear, it did not come out but remained inside the doll. Birbal explained that such persons are invaluable because they not only keep the secret with themselves but they also try to solve problems of their friends. For this reason, he valued the third doll more than the second doll.

There are three important lessons to be learnt from this story by valuers:

- (i) The similarity of property may be deceptive. We must thoroughly investigate to find out differences of attributes even between similar looking properties.
- (ii) The valuer should not immediately jump to conclusion. The case must be thoroughly studied by asking some time for valuation and then only a considered opinion about valuation should be given.
- (iii) End user of report (Client or Court) should ask for reasons for giving such a valuation and the valuer should support and prove his valuation by giving reasoning and supporting evidence.

11.2 For standardized goods and services, the prices paid at 'arms' length', after bargaining in an open and normal market provide a reliable evidence of value. As a rule, little difficulty is encountered in obtaining reasonably accurate estimates of market price quotations for commodities such as wheat, coffee, sugar, and corn or for bonds and stocks, which are freely traded. The greater the dissimilarity of the product and lesser the frequency of trading, greater is the required skill necessary to adjust for product differences in order to attain the price comparability and the greater the

chances for error in the final estimate of value through the market approach.

With properties such as land and buildings which are heterogeneous in character, exact comparability can never be obtained due to differences in the fixed geographical location of the property. Nevertheless, it is possible through study and analysis of market operations to adjust for price effects caused by differences in 'physical' characteristics in order to obtain 'economic' equality essential to an accurate estimate of market value.

The greater the number and more recent the sales of comparable properties, greater is the accuracy and, more convincing are the results obtained through the market approach to the value estimate. Ready access to market transaction source data is, therefore, of primary importance. Most active valuers maintain a market sales data / record in their file as part of their valuation plan at least for the geographic area in which the majority of their assignments originate.

Any market sale transaction should never be used as a value source data unless the valuer has personally or through a responsible assistant, taken steps to confirm the sale and to inquire into circumstances causing the sale or affecting the transaction price. Comparable sales selected for price analysis under a market approach to value must be adjusted if necessary to compensate for the effect of economic forces that influence the real estate market during the time interval elapsed between the date of the comparable sale and the date of valuation of subject property.

A detailed comparison and logical adjustments for building differences caused by size, age, quality, legal issues and quantity of construction should also be made to estimate the proper value.

11.3 Primary Considerations

In Real Estate Market, valuer first considers the four basic qualities of the property, while estimating its value. Valuer should ask following questions about the property to be valued.

- (i) What is the utility of the property? **Utility** means existing and anticipated **benefits** due to ownership, possession and use of property. In case of real estate such benefits are reflected in **rent**.
- (ii) Is it scarcely available or abundant in supply?
- (iii) How much is its 'demand' in the market?
- (iv) Is it 'transferable'?

Market approach is basically operating on the "**Principle of substitution**". Valuer has to find out from the market about the availability of identical property or nearly similar property to the property which is under valuation. He should also

find out actual sale price or asking price of such similar property. Then valuer has to compare both properties and estimate market value of subject property after making appropriate adjustments, based on available evidence.

This principle of substitute product and comparison with the required products is already operating in the consumer product market. Same principle with a little change is operating in Real Estate Market. This is true for sale or purchase of the open plot of land or land with buildings as well as for sale or purchase of flats, shops, offices and industrial galas (units), etc.

One may perhaps find two exactly similar consumer products in the market. But there are no two exactly identical properties in this world. They may differ in size, shape, area, location and situation (placement), improvements, ownership, usage, topography, legal or in many other respects. These variations or the differences call for adjustment in values while comparing properties.

The subject property is compared with similar/substitute properties recently sold in the market. Some factors which may be positive factors may tend to increase price of the property to be valued while other factors which may be negative factors may tend to reduce the price of the property.

To estimate fair and reasonable price for a real property in a real estate market and its condition, as defined under “market value” definition of real estate transaction as stated hereunder are required to be considered.

Instances of sale satisfying all the following criteria are considered as genuine sale transactions:

- (i) Buyer should be a willing buyer and he should not be compelled or forced buyer in urgent or immediate need of the premises. He should not be a forced purchaser as we find in case of purchase of undivided share of co-owner in a property jointly held with the other co-owners.
- (ii) Seller should also be a willing seller and not a seller forced to sale property by extraneous/external circumstances. Internal circumstances or circumstances under one’s control like daughter’s marriage or meeting medical expenses cannot be considered as compelling circumstances unless those are unavoidable emergency cases. Negotiated or auction sales by Banks for recovery of mortgage debt are forced sale by unwilling sellers (mortgagors). Sales by a person in distress are also examples of unwilling and forced seller.
- (iii) In order to find out whether such sales in reality are distress sale or not, personal enquiries during site inspection are necessary. Mere mention in sale deed may not be proof of a forced sale.

- (iv) Buyers as well as sellers are fully knowledgeable about prevalent market rates and market conditions. This is an ideal situation. Sometimes it is found that one or both transacting parties are unaware or ignorant about actual or true price of the property. They also do not know factors that affect the value of the property under sale. In number of cases it is found that the party who is stronger in bargaining succeeds in getting the price fixed in his favour.
- (v) Transaction has to be at arm's length. This is also not always possible. Many a time the transacting parties are related. Sometimes they are influenced due to political, social or financial powers of one of the transacting party.

In market approach, while comparing properties, generally "Highest and Best use" of the property potentials has to be considered to estimate Market Value on the relevant date. Many a time we come across property which is put to inferior use (e.g. property falling in commercial zone but being put to residential use). Such an inferior use is required to be valued considering the best permissible use, ignoring actual use or continued subsisting use of the property. Value of a property put to continued inferior use is bound to give lower value as compared to the market value on the basis of Highest and Best use.

There are no common market place for sale or purchase of real estate like market place for sale and purchase of other commodities and consumer goods. Open market for real estate can, therefore, be defined as a notional forum or platform, where group of buyers and group of sellers are competing with each other to buy or to sell and where substitute properties are also available for sale and purchase in perfect competition and monopoly conditions are absent. While understanding this open market concept, we must also keep in view that the "market is supreme" for all marketable properties. Market takes into account all market forces which may be economic, technical, legal, social, political, or any such other factor. Market considers them all and prevalent exchange values or prices in the market are obtained after considering impact of all these forces on supply and demand and interaction thereof.

Market does not care for any one including government. A person in distress and in urgent need to sell his property, may accept 20% to 30% lesser price in market because buyers in the market will come to know that a particular seller is in distress and they will offer low price. Another glaring example of this supremacy of market is the case of Rent Control legislations enacted by most of the State Governments throughout India. Though government tried to regulate rental market by levying artificial control by freezing of rent which is grossly contrary to market forces operating in the real estate market, the market invented a scheme of payment of *pugree*, premium, salami or key money, under which the landlord was financially rewarded in advance, in lieu of loss of rental income due to freezing of rent.

In case the information about prevailing recent prices in locality is not available in the government records, inquiries with estate brokers, property owners, etc. is essential.

Now-a-days there are number of websites offer platform to sellers to advertise their property. Valuers need to be careful to use such data available on the internet. Valuer must ensure that the prices available on internet are reliable.

11.4 Process of valuation in market approach

Steps Involved

The process of valuation in the market approach involves following steps:

- Collect data in respect of recent instances of sale of similar land/properties in the vicinity from different sources and weed out non genuine sales.
- Select comparable and genuine instances of sales which are proximate in time as well as proximate in situation with the property under valuation.
- Visit physically, site and location of all the properties involved in the genuine instances of sale and record all favourable and unfavourable aspects of these properties. Formula for success in any valuation assessment is “Inspect before you value”. Inspection of the subject property and properties involved in the instances of sale is a MUST.
- For the purpose of deciding genuineness of sales, obtain sale documents or copies of these documents and examine for any unusual covenants or precarious conditions. During inspection of site/properties, contact and enquire with sellers or purchasers to find out whether the sale was genuine and was not a forced sale or distress sale though it has been executed in normal business like circumstances. This will help in proving the valuation in the Court of law if necessary.
- Analyse and work out rate of sale in each of the genuine instances of sale.
- Compare each of the properties involved in instances of sale with the subject property and give appropriate weightages to the rates of sale for favourable and unfavourable factors. Also assign appropriate weightages for major attributes like time factor, size or area of property, situation and location aspects, specification or age factor for building, utility and infrastructure services, etc. Care should be taken by the valuer to assign weightages according to the importance and the priorities attached by the local people in the locality in which the subject property and properties sold are situated.

Priorities for size of flat or the specifications would be quite different in poor class localities and in posh areas.

- Freehold properties is to be compared with freehold properties.
- Leasehold properties is to be compared with leasehold properties.
- Properties occupied by the tenants protected under the Rent Control Act to be compared with properties occupied by the tenants protected under the Rent Control Act.
- Properties occupied by the tenants not protected under the Rent Control Act to be compared with properties occupied by the tenants not protected under the Rent Control Act.
- Work out final estimate by comparison techniques or by weightage score system and form final opinion for the market value of the subject property.
- Deduct the cost of immediate repairs, unpaid taxes and other liabilities (e.g. mortgaged dues) from market value.

11.5 Sources of Data

There are several sources from which sale instances of a particular locality can be collected.

- (i) Sales recorded at the Registrar's Office of the concerned district.
- (ii) Information from local brokers/residents (local enquiry).
- (iii) Advertisements in newspapers/websites.
- (iv) Land Acquisition cases data.
- (v) Auction sale information of different authorities.
- (vi) Valuers own Data Bank.

Each State Government at their District Registrar's Office, maintains a register of property transactions which is called Index II Register. In this register, Registrar records all sale transactions that have taken place during the year in the entire district under his jurisdiction.

Each of these entries of sales in the register shows name of the seller (Transferor), name of the purchaser (Transferee), identification of property i.e. plot No., survey No. or City Survey No. etc., name of village in which said property falls, the date of execution of document and the date of registration of document in Registrar's Office. This register also shows sale price or transfer consideration, area of the property sold,

serial number of registration of the sale in register. Register further shows the type of transfer document viz. sale transaction, lease assignment, mortgage deed, release deed, gift deed, rectification deed etc. These sales are recorded in village wise lists which are compiled in alphabetical order. All sales in a particular village in a particular year are recorded in the register in chronological order of dates and months of the said year. Registrar maintains separate register for each year. Old records of past 100 years are preserved and maintained by the Registrar. These are made available to the public on payment of fixed inspection and search fees. Hence a valuer can obtain detailed information about land or property transactions of all sales in any locality, for current and any previous years from the Registrar's Office of the concerned District of the State.

The Registrar's Office, apart from issuing certified Extract of Index II Entries, also issues certified true photo copies (on requisition) of any sale documents of any year that is registered in the Index II Register. Study of the copy of a document will enable valuer to understand background and the conditions, if any, of sale transaction as well as whether the property sold with entirely under owner occupation/wholly or partly occupied by tenant, sale to sitting tenants etc. This document copy will normally indicate the date of agreement to sale, the date when earnest money has been paid, the date when balance consideration was paid and date of registration with Registrar as endorsed on the conveyance or lease deed. The rate of consideration per unit area should be considered as on the date when earnest money was paid and if earnest money is not paid then the date of agreement to sale because that is the first date when sale price has been agreed between the seller and the purchaser.

Many states have made on line availability of property transactions.

Another source of data regarding sale transactions in a locality is the local inquiry. Information from local estate brokers dealing in such real estate transactions is quite useful. Information from local residents and the property owners will also be helpful. Particularly owners who have purchased or sold properties in a locality can give information about the transactions.

Advertisements in local Newspaper/web sites and business papers also give information on sale prices offered and the unit rates of various types of properties in the locality.

Information available about the land acquisition cases and the detailed land acquisition Awards in respect of the properties acquired in the locality can also be considered as valid data indicating prevalent rate as on the material date.

Auction sales by Income Tax Department by Govt. or Semi Govt. undertakings, by Banks custodian, Improvement Trusts, Court Receiver or Court Registrar also give

information about the price at which properties are auctioned. These prices are required to be checked whether they represent the market value or not.

Past experience of valuer himself, his own data bank can also indicate prevailing trend in the real estate market in the locality concerned.

11.6 ESSENTIAL CHECKS

Before undertaking comparison with sale transactions, the valuer must first check and study title deeds of subject property very carefully. Correct area of the property and ownership title be examined thoroughly.

The areas of lands or properties sold can be checked from the following:

- (i) Area shown in the Government Records called 7/12 Extract or the area shown in Extract from the Property Register Card.
- (ii) Area stated in conveyance deed (Title deed).
- (iii) Area shown in sanctioned plan. (If building is erected on land).
- (iv) Area as per actual survey carried out on site by the valuer.

In case "Plot areas as per all these sources differ the area as actually measured on site or the area shown in the 7/12 extract or the property Register Card, whichever is less should be taken as correct area.

Actual survey of land if done by Plane Table Survey or by Theodolite Survey, resultant area by each method may differ. However area of land arrived at by the theodolite survey is more authentic as it gives the actual area on a horizontal plane.

In case, if as per actual survey, plot area is found to be much more than area shown in government records, property owner should be advised to get the area corrected in Govt. Records by getting resurvey of the plot done by the City Survey Officer or the District Inspector of Land Records (D.I.L.R). Unless such correction is carried out, in the Govt. records higher plot area as per actual survey should not be adopted.

There are also four sources for checking the correct built-up floor area or carpet area of the ownership premises. (Flats / shops / offices / factory galas).

- (i) Area shown in purchase document.
- (ii) Area shown in society's record/condominium record.
- (iii) Area shown in sanctioned plan of the building.

(iv) Area as per actual survey on site by valuer.

In this case also, areas may differ due to several reasons. However there is not much complication in finding out the correct built-up floor area of the ownership premises. If the ownership premises are built as per sanctioned plan and no unauthorized extensions are carried out, valuer should adopt actual area found as per actual survey on site as the correct area of ownership premises. In case unauthorized works are carried out beyond sanctioned plans the said extra area should be ignored or valued as scrap. Area as per society's records should not be adopted as far as possible. Valuer should adopt carpet area or built-up area as the basis for estimation of market value according to the practice followed in the real estate market of the said locality.

11.7 FACTORS OR ASPECTS OF COMPARISON ; LAND AND BUILT-UP PROPERTIES

General

Market values of lands and properties depend on many factor or aspects, which can be broadly categorized into four groups as mentioned below:

(1) Physical and Technical:

Which includes –

- (a) Land itself mainly size/area, shape access, etc.
- (b) Location with reference to amenities and facilities and utility services – infrastructure – available in locality.
- (c) Buildings/Development which include Engineering aspects, architectural aspects and facilities within property itself.
- (d) Utility and other services in the property.

(2) Legal Aspects:

Besides the limitations and burdens placed on property by police power and taxation, there are many government programmes that stimulate private enterprises and help to create a healthy business climate. High employment, general economic stability, and business opportunity are partially the result of government involvement in our economy.

Whether regarded as positive or negative, the various government actions can be classified as legal forces. They have a far-reaching effect on the value of real estate.

A partial list of political/legal aspects affecting value includes:

- (a) Zoning and land-use regulation.
- (b) Rent Acts.
- (c) Building and safety regulations.
- (d) Environmental protection laws.
- (e) Police, fire and health protection services.
- (f) Crime prevention, education and recreation services.
- (g) Public works: power, water transportation, sewers and flood control.
- (h) Fiscal policy and taxation.
- (i) Monetary policy and control
- (j) Government – sponsored urban redevelopment and housing finance programmes.
- (k) Regulation of industries and business.

(3) **Social Aspects:**

The social forces affecting values includes all the characteristics and customs of the people that make up the community. Here is the partial list:

- (a) Family sizes and age-group distribution in the neighbourhoods and communities.
- (b) Neighbourhood stability and attitudes about property.
- (c) Population growth, decline or shifts at the community, regional and national levels.
- (d) Life-style and living standards, often combined with other forces.
- (e) Attitudes about law enforcement, the role of government and individual responsibility.
- (f) Attitudes towards public education.

(4) Economic Aspects:

The major economic forces affecting real estate include:

- (a) Income level of neighbourhood and community residence.
- (b) Employment opportunity and rents.
- (c) Level of wages.
- (d) Availability of money and credit and interest rate levels.
- (e) Price levels and property tax burdens.
- (f) Personal saving levels and investment returns.
- (g) General business activity.
- (h) Supply and demand in housing.
- (i) Production of goods and services.

Economic factors will also include micro-economic and macro-economic factors. Micro-economic factors include total population of a place/town/city, population growth rate and population movement (all related to demand), occupational or employment in economic sectors and changes therein (indicating demand for various activities – commercial, industrial, etc). Economic activities and income level of citizens/residents of place/town etc., trend and direction of urban growth etc. These aspects give general ideas regarding demand for and supply of various types of properties, level of prices and trends in the real estate market in a place, town or city as a whole having almost same effect on all the properties in the urban/rural and do not affect individual properties severally or in different ways.

Macro-economic factors include (i) economic indices like B.S.E./N.S.E. indices, inflation rate foreign exchange rate of interests on Govt. securities etc. (ii) per capita income (iii) domestic savings, (iv) investments in different forms like Govt. bonds, national saving certificates, company shares and debentures, fixed deposits, physical assets, gold and cash in hand/bank accounts etc. (v) capital formation in various sectors and especially in Construction (roughly indicating supply of properties) and in Real Estate (indicating demand for real estate) etc. The information about or figures regarding such macro-economic factors are usually available at the National level or at the State level. These macro-economic factors help in identifying past trends and thereby in

estimating likely trends in the real estate market in general. These do not affect individual or particular properties in different or discriminatory ways.

Climatic conditions also have equal effect on demand and supply of properties in urban/rural areas as a whole and do not have varying effect on properties individually. The climatic conditions and micro economic and macro-economic conditions which do not have varying effect on market values of individual lands/properties need not therefore be considered as factors for comparing properties sold or let out at rent with property to be valued or with properties sold respectively. The effect of economic indices micro-economic and macro-economic factors on fair market values of properties will be dealt with while discussing the income approach to valuation. The other physical, legal, social and economic factors will now be discussed in this Unit.

Land and properties have many characteristics. Some characteristic or attributes enhance values of lands and properties while some other attributes reduce values of lands and properties. Due to the number of such factors and properties being heterogeneous estimation of fair market values of land and properties by comparison becomes difficult task. Out of these number of factors of comparison some main attributes of factors will be discussed with a view to enable the student to appreciate how and in what way they tend to increase or decrease market values of properties in the real estate market. Some of these aspects are inherent in land itself while some other aspects like development, legal provisions like land use zoning development control rules, building bye-laws, provisions of various land laws are artificial and man-made factors affecting market values of properties.

PHYSICAL : LAND

There are several factors of comparison about the land itself, each affecting its market value. These are discussed hereunder:

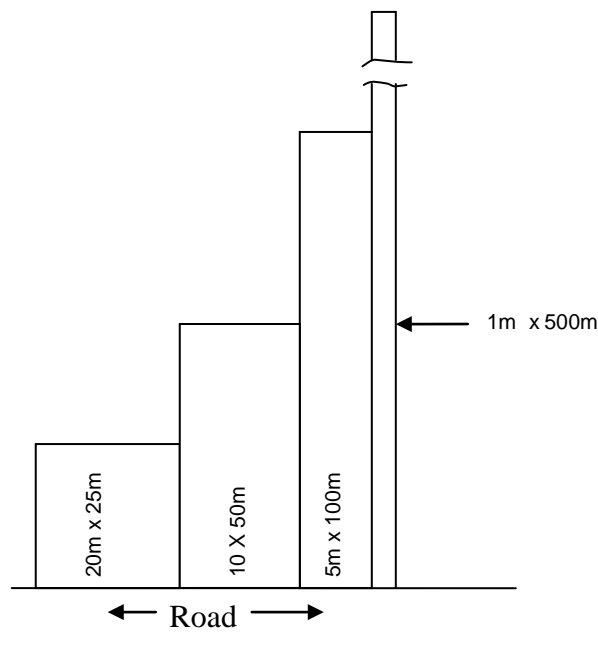
(1) Size or Area

Total price or market value of land or property increases with increase in its area. The number of persons who can afford to pay such high prices, as compared to the number of persons who can afford to pay prices at lower levels, becomes less and less thereby resulting in lesser demand and less competition at higher prices. The rate per unit area i.e. Rs. per sq. meter or Rs. per Arc/Hectare therefore decreases with increase in the area of property and vice-versa though total or absolute price increase. The extent or proportion of such reduction in the rate of value per Unit area / with increase in the area of property is the subject of study of the real estate market in the concerned locality. Normal size of non-agriculture also differs from locality to locality and from different users i.e. residential, commercial and industrial.

(2) Shape

A rectangular shape is the ideal shape in case of agricultural lands (due to ease in ploughing and other agricultural operations) as also in the case of non-agricultural lands (facilitating design and construction of buildings and avoiding waste of area). Earlier when building construction in a piece of land or plot was limited by area coverage height and marginal open spaces areas of land with acute angle e.g. in triangular or irregular shape or curved shape or lands with narrow widths reduced the buildable area in addition to being unfit for proper use. With the concept of F.S.I./F.A.R. though there is no reduction in buildable area, the land at such acute shape cannot still be put to proper use resulting in some reduction in the rate of market value per unit area and the extent of such reduction is again the subject of study of real estate market.

Area of land in each of the following cases is same 500 sq. m. but due to size its value will be considerably different.



Local beliefs and preferences also play a role in the matter of shape of land e.g. land with less frontage as compared to width at the rear (Gomukhi or shape of mouth of cow) is preferred to land with wider frontage (Vyaghra Mukhi or Tiger mouth).

(3) Access

Plots with access by wider road i.e. having frontage along wider road fetch land values at higher rate per Unit area mainly due to (a) better accessibility and (b) commercial

use is normally permissible in plots fronting on roads having width of 12 m. or more. The rate of land value per unit area also increases with better road surface.

Sometimes plots derive an access through right of way from front plot. The right of way may be permanent or may be for some specified period. Some times right of way land is purchased out-right with right to use F.S.I. Such access road merges with plot and becomes part of the plot. In some other case, right of way is given on annual rental basis. In such case right of use of F.S.I. or development rights are retained by the owner who has granted right of way. Under such agreements, right only to pass and repass, right to lay cable, water mains, drain lines etc. are granted. Such access road is not part of the plot area.

Depending upon such conditions, rights and liability, value of plot on rear side is determined. In case of rental right of way, capitalized value of annual rental should be deducted from the land value to account for rental liability.

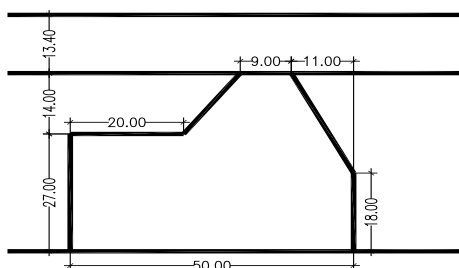


Figure – A

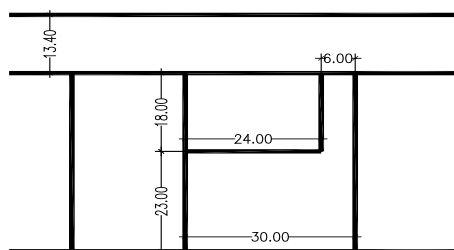


Figure - B

Some times accessibility of the plot is limited along the road. Full width of the plot does not abut on the road but only part width of the plot in front touches the road. Remaining portion of plot width do not touch road (vide fig-A).

Some times only access road portion of the plot abuts on main road and side access leads from main road to the main portion of the plot which is in the rear. (vide fig-B). Such plots are called Tandem plots. Such plots are valued at 15% to 20% discount than the rate of the plot directly abutting on the main road or the municipal road.

Plots with restricted frontage (fig.A), creates problem of entry and exists after constructions of the building in the plot. Such plots also lack prominence as the building in plot has to be erected at further away distance from the road, similar to the construction of the building in the tandem plot. Hence view or visibility of the building from the street is restricted. Such plot may also fetch little lesser price as compared to the plot having full frontage abutting along the road. However, reduction

in value will be marginal if the building planning and the amenities inside the plot are not much affected due to such small frontage.

Plot having no frontage on any road, i.e. land locked land, generally, no development is permitted by the local authority, for want of access road up to the plot. Such plots are normally valued at 1/4 to 1/5 of the normal land rate prevalent in the locality i.e. at discount of 75% to 80% in land values.

However, before adopting such adhoc discount, valuer should investigate on following points in an attempt to find out possibilities of having access to the plot as detailed below:

- (i) How far the plot is away from the public street? If there is only one plot gap between land and locked land and municipal road, there may be chance of obtaining right of way from side plot owner, to convert land locked plot into plot with access. Discount value in such a case would be quite less and it may perhaps correspond to the cost of acquiring right of way. However, such reduced discount can be considered only after obtaining written wiliness of such plot owner to grant right of way.

Plot located at much greater distance from public road and having several plots in between and held by different owners would have lesser chance of obtaining right of way from several plot owners. Such plots are likely to remain land locked for many years. However, inquiry should also be made regarding any road proposal in Development Plan giving access in such land.

- (ii) Valuer should find out whether any of the owners of next adjoining plots on all four sides, are ready and willing to purchase this land locked land or not? There is every possibility that one of the adjoining plot owner may be willing to buy the plot at much reduced price of prevalent land rate, depending on circumstances and negotiating skills.

(4) **Frontage**

Lands having wider frontage generally fetch at higher rate per unit area since plots with wider frontage provide better and easy access and also provide more flexibility in architectural design. In commercial areas wider frontage provides for more display area as an additional advantage.

Some times lands/plots have roads at the front as well as at the rear. In case of lands situated in residential zone having large area with and front and rear frontages provide access from two road facilitating better and economic layout. In commercial areas, road at the rear facilitates goods traffic by trucks etc.

Plots/lands having return frontage like corner plots, fetch land values at higher rate per unit area due to better and easy access in residential and commercial areas. In residential plots roads on two sides facilitate better light and ventilation to rooms.

In plots with commercial use in addition to better access, it provides for additional display area and facilitates for better internal design.

The extent or percentage of higher rate of land value for a corner plot over that for a middle or row plot should **not** be adopted adhoc or by any thumb rule. The extent of such increase should be arrived at by detail study of the local real estate market in the form of percentage increase in the rate of rent per unit area or in the form of increase in 'security' i.e. in lower rate of interest (i.e. higher Y.P.) or both.

(5) **Frontage – Depth Ratio**

In residential areas (i.e. for residential use) depth equal to 1.5 times to 2.0 times (maximum) frontage ($D=1.5 \times F$ to $2.0 \times F$) is considered as ideal. Plots with depth more than twice the frontage fetch land values at **lower rates** per unit area. In commercial areas lesser the depth, as compared to frontage, higher the rate of land value per unit area as it provides better accessibility for customers. In other words, in commercial plots wider frontage is preferable.

(6) **Topography/Level**

A level piece of land or land with gentle slope is preferred to sloping, undulating or low lying land and fetches land value at higher rate for simple reason that it saves the cost of leveling filling etc. Lands with steep slopes make building construction costly due to cutting and filling construction of retaining walls, etc. Further piece of land at the level equal to or more than the level of access road is preferred (and fetch land value at higher rate per unit area) than that at level lower than road level in which case there is possibility of water stagnation. Land/plots at higher level e.g. hill top, commands wider and better view.

(7) **Soil Classification**

In agricultural land fertile soil is preferred and fetches land value at higher rate for obvious reason of increased productivity. In agricultural lands natural and soil drainage is also important.

In non-agricultural land stability rather than fertility is the criteria and land with stable and higher load bearing capacity fetches land value at higher rate per unit area as it provides better foundations and saves cost of laying foundations as compared to lands

with low bearing capacity like reclaimed land, filled up or marshy lands, lands on embankment, land with black cotton soil etc.

(8) Orientation

The orientation of plot in context of wind direction is an important feature for consideration for land value assessment. In western region of India, flow of wind is from west or south west direction. Hence in these areas, plots having road on west are more preferred than having roads on east. Western cool breeze from west side would benefit residents of the building and hence plots having west side orientation, in these areas, would fetch little more price than the plot having eastern aspect.

However wind direction in north east part of India, like West Bengal, is from south east direction and hence in such region east frontage and south frontage of plots are considered more valuable than west front plots. Plots having orientation on windward direction are more valuable than plot facing leeward direction.

(9) Vista

The open unobstructed view of the building from the front is known as Vista. Building having Vista impresses its viewers. Rashtrapati Bhavan in New Delhi, is an excellent examples of building enjoying excellent Vista. Every one is greatly impressed by the view of this building even from a very long distance. Apart from good architecture and excellent aesthetic of this building, unobstructed view from distance. VISTA also plays its own role in creating pleasing effect on the viewer. Vista also helps in better environment.

'T' junction plots are another example of plots having a Vista. The building can be seen from a long distance. If the cross road making 'T' junction, is on windward side, and if building is residential, 'Vista' will fetch higher land value as compared to the adjoining plots lacking Vista. On the other hand if such a plot is not on leeward direction, it may fetch only slightly higher land rate due to Vista. It should however be noted, that such 'T' junction plots in certain areas of India like Andhra Pradesh, Tamilnadu are considered inauspicious. Hence in such areas not only that there will not be any positive extra price due to vista effect but on the other hand there may be discount value for such plots in such areas, due to plot being considered inauspicious by the majority of the purchasers in the locality.

Plots with commercial or industrial buildings enjoying Vista, will fetch higher rates depending upon advertisement value or prominence effect due to Vista rather than wind aspect.

In less developed area, or out-skirts area of the town, where plenty of all round open land exists, Vista loses its importance. Plot having Vista or prominence due to view may be valued at higher rates depending upon locality and advantage. Valuer may also consider adding some lumpsum amount in prevalent land rate instead of percentage increase in base value, to account for this factor, depending on study of local real estate market.

(10) View Aspect

This is also similar attribute like 'Vista'. Plot overlooking public garden or a river or a lake or a hill or sea command some extra price in the market due to pleasing view aspect. Even if garden or river is not on next adjoining land but across the road or beyond adjoining unbuilt land, such land will fetch higher price due to uninterrupted view. Water front property (Directly abutting sea or river) sometimes may fetch much higher rate as compared to rate of land in the rear. This craze for water front properties may perhaps be existing through out the world. Latent desire of every human being perhaps is to stay close to nature.

(11) Status of Land

There are two types of status of land. Virgin status of land and Married status of land. This is also called Land without improvements and land with improvements (constructions). First status of land is generally identified as open plot of land. Such open plot of land is called as virgin land. It is without any construction whatsoever. Second status of land is with partial or full improvements on the plot. These improvements are in form of building constructions for various types of users. Such land is therefore called developed land or land married with the structure. In real estate market virgin land is considered more valuable than the land married to the structure. In Manisingh's case² Punjab and Haryana Court upheld this phenomena and stated that builtup land has lesser rate than land rate of open plot land on which purchaser has wide choice of developments in the plot as well as freedom available for alternative users of land and planning as per wishes and taste of the owner.

(12) Stigma Effect

Many a times there is a 'stigma' attached to land or a property. Land have been used as burial ground or it was an atomic reactor site in the past or some crime or murder story is linked with such land or property. Even Ghost stories connected with land or building is not uncommon in India. In all such cases local residents desist from purchasing such property due to stigma of unpleasant usage of land in the past. This reduces its value in the market. This 'stigma' may be for short duration or for long duration. Certain rumors like haunted house or murder story linked land, regains its

original character as the years pass by. People forget old stories and stigma effect wears out.

(13) Vastu Shashtra Aspect

‘Vastu Shashtra’ is a very old Indian science having concepts and norms for an ideal land and ideal house. It prescribes certain norms for good land qualities and ideal planning principles for rooms in a building. Several persons in our country religiously and some of them blindly believe in these principles and norms. They may be superstitious or may not be superstitious, but majority of them honestly believe that purchase of land which meets with Vastu Shashtra norms would bring peace and happiness to their family. Such persons also believe that purchase of land having features contrary to Vastu principles will bring bad omen and disaster for their families. Plot with adverse “Vastu” therefore will have low value.

As per Vastu Shashtra norms, land having road on east side or north side are considered good but land having road on south side or west side are considered poor. Some of these norms consider ‘T’ junction plots as inauspicious. Plot situated at the dead end of the road or near cul-de-sac are also considered to have poor Vastu. As per Vastu norms, plot having ground level in south west corner as compared to the ground level of north east corner of plot, is considered as ideal, i.e. good vastu. However reverse slope in plot is considered as poor and defective “Vastu”. Existence of well or a water body (Tank/Pond) in this N.E. corner of the plot, is also considered good.

Extension of plot in North East corner (North or East projections) is considered Good for the Growth and progress of the resident. However extension of the plot south west corner is considered bad because as per vastushashtra, it would bring financial loss, mental ill health and accidental injury to the plot owner. Plot extensions on North West and South East are also similarly considered poor vastu.

In urban area where majority persons and developers do not believe in this science, the Vastu factor would loose its effect on land values. However in rural areas and in the locality where majority of the local population believe in this science, value of plot with bad vastu will certainly fetch less price in the market. Valuer should therefore inquire in the local market about this aspect before arriving at final land values. Valuers should always bear in mind that these are personal factors and not common for all having universal application.

(14) Feng Shui Aspect

Like Vastu Shashtra, this system is also a science of wellbeing. This is a Chinese science based on equilibrium of wind (Feng) and water (Shui) for happiness of the family of the property owner. Under this system, it is believed that there are two prime energies

existing in universe. Yin (Female force) and Yang (Male force). Balance of yin-yang results in welfare and happiness. This system also believes that each individual has his own 'personal trigram' based on his birth date. Similarly Feng Shui norms states that each land house has its own 'House Trigram' depending upon road position. Plot with road on west has 'Chen trigram' and plot with road on east has Tui Trigram. For peace, happiness and prosperity, 'Personal Trigram' of owner of the house and 'House Trigram' must match and must be of same group. But if both 'Trigram' do not match, it brings misfortunes and evil influences or disaster for the property owner and his family members. This aspect does not have effect so much on land values in India because very few persons know and believe in this theory or system. However in certain cities, flat values do have effect of Feng Shui in a small way

Physical : Location/Situation

In the case of physical location and situation whether it is more advantageous or less advantageous depends mainly on the distance of the property concerned from (i) work-places, (ii) business centres like shops and markets (iii) social facilities like educational and medical facilities (iv) recreational and civic amenities like gardens, playgrounds, cinemas, theatres, town hall and public buildings etc. (v) transport facilities etc. Lesser the distance more is the advantageous location and more the distance, less is the advantageous location. Locations having effect of natural forces, environmental conditions around properties and development potential of the surroundings area/locality/ neighborhood are also other aspects related to physical location or situation in respect of property to be valued and properties in the vicinity sold or let-out/rented with which property to be valued in being compared. These aspects are discussed in detail as under:

(1) Natural Forces

There are certain areas of land which are considered prone to recurring damage to the land and buildings due to various natural forces, like earth-quacks, land erosion due to sea, sea water penetrating in sub-soil thereby making lands salty and uncultivable, due to salt efflorescence etc. Lands frequently subjected to cyclones and high tides of tsunami floods, land erosion due to sea waves, etc. will be obviously less in demand and land values would, therefore, tend to be low.

(2) Environmental Aspect

The properties may be close to obnoxious industries like chemical or cement factories, slaughter house and tanneries, textile mill or a cigarette factory, lands and properties in proximity to such obnoxious industries invariably fetch low value due to permanent nuisance of air pollution and health hazards e.g. Bhopal gas tragedy. Similarly value of

lands and properties too close to Atomic Reactors or Atomic power station would reduce, due to likely danger of radio active leakage and mal functions of units.

Garbage dumping ground of municipal authorities or dumping yard of chemical wastes are yet another example of cause of ecological imbalance. Similarly stone quarry operations causing blast noise and stone dust create air and noise pollution which would reduce values or properties in surrounding areas.

On the other hand properties enjoying frontage on sea or sea beaches or water elements like rivers, lakes etc., properties situated on elevated/high lands enjoying commanding views, properties situated quite and peaceful areas with greenery around etc. enjoy better environment and would fetch higher values.

(3) Work Places

These include offices, industries, Central Business Districts (C.B.D.) with commercial establishment and offices, market yards etc.

(4) Business Centres/Places

Local neighborhood district or district shopping centres, local markets etc.

(5) Social Facilities

These include educational facilities like schools, colleges, etc. and medical facilities like clinics, dispensaries, hospitals, etc.

(6) Recreational Amenities

These include local open spaces or tot lots, playgrounds, gardens, etc. and cinemas, theatres, libraries, etc.

(7) Civic Amenities

Town hall and other public buildings.

(8) Transport Facilities

Providing, easy access to various parts of an urban area as also to out-stations.

- (a) **Railway. Stations**, especially of local trains and also for long distance trains.
- (b) **Local or City Bus Services**: Bus stations, bus stops, bus routes and their frequencies, etc.

(9) In the case of **residential flats and shops**, their location on certain floor on the front or rear side of a building, their orientation will be important factors for comparison.

(10) Shops

In the case of shops additional factors for comparison will be (a) Central place, meeting place or junction of two major roads etc. or at exit or entrance of local railway stations where people naturally pass by (b) Pedestrian traffic. Heavier the pedestrian traffic higher will be the market values of properties.

(11) Industries require facilities for transportation of raw materials and finished goods by road or rail. Locations near the source of raw materials in the case of weight-losing industries in which bulk and weight are reduced during industrial process like Power Plant or near the market in the case of foot loose industries which can be located any where because there is not much difference in weight of raw material and finished goods.

(12) Availability of Utility Services in the locality

Availability of water supply, drainage, sewerage and electricity in adequate measures is important factor having effect on market values of lands and built-up properties.

PHYSICAL : BUILDINGS

(A) Engineering Aspects

- 1) Specifications: Higher the specifications, higher will be the values.
- 2) Workmanship: Better workmanship, higher the values.
- 3) Type of Structure and Structural/Design/Strength are important aspect especially for safety.

- 4) Type and Strength of Foundations is also important for safety aspect.
- 5) Maintenance and Repairs: A well maintained building in better condition of repairs will fetch higher market value, and vice-versa. Immediate repairs also reduce market value of built-up properties.
- 6) Age and Future Life: Buildings with more future life are generally preferred, where buildings are to be retained.
- 7) Area: In case of residential flats, shops and commercial establishment and offices demand for such accommodation decreases with increased built up area (size) of the premises.

(B) Architectural Aspects

- 8) Architectural Design: Arrangement of Spaces/Rooms.

Convenient arrangement of rooms and division of accommodation in Day Areas and Night Areas resulting in as minimum movements as possible is preferable which fetch higher rents and prices. In case of residential flats arrangement of common passages, staircases and lifts are important.

- 9) Light and Ventilation: Placement of window openings ensuring better lights and ventilation to rooms fetch higher rents and market values.
- 10) Façade and Elevation: Attractive façade may create feeling of higher class or elite.
- 11) In shops and Commercial establishments like malls etc. important aspects will be –
 - a) Display areas and show-rooms facilities.
 - b) Internal circulation and display of goods/articles.
 - c) Arrangement of counters, space and convenience of customers.
 - d) Lighting arrangements.
 - e) Facilities for storage of goods, etc.

(C) Utility Services within premises

- 12) Water Supply:
 - a) Plumbing specifications and workmanship
 - b) Timing of supply
 - c) Overhead Tanks

- 13) Electricity:
 - a) Quality of wiring, fittings and workmanship
 - b) Timing of Supply
 - c) Voltage
- 14) Sewerage: Quality of fittings and plumbing.
- 15) Drainage, rain water and waste water if not connected to sewerage.

(D) Common Services and Amenities

- 16) Sweeping Common Areas: Especially for flats and shopping centres.
- 17) Watchman Services
- 18) Parking for Vehicles
- 19) Garden/Children's Play area - for flats, shops and commercial areas
- 20) Terrace facilities in case of residential flats
- 21) Lifts - for flats and shops
- 22) Fire Fighting Arrangements - Especially in case of high rise residential and Commercial buildings
- 23) Drinking Water Facility - For shops and commercial areas.
- 24) Public Conveniences - For commercial buildings
- 25) Open spaces within premises and their use - in case of residential bungalows.
- 26) Common Amenities - within the premises -

In case of residential flats, common amenities like common hall, club and gymnasium, swimming pool, canteen etc. tend to increase market value of residential flats.

LEGAL ASPECTS

1) Title or ownership

Land may be owned by a single person or by several joint owners holding undivided shares in the property. Jointly owned property i.e. property owned by several co-owners with undivided shares, are difficult to be sold easily and quickly. It takes time to achieve consensus amongst co-owners on fair sale price and on the terms and conditions of sale. Sale of ancestral property involving consent and signature of 20 to 30 or even more co-owners is not uncommon in India. Such land deals take much more time to effect the sale as compared to deal by single individual owner. Price obtainable in the market for such property owned by many co-owners holding undivided shares are therefore less attractive than the single owner property. Courts have not considered these aspects in its proper perspective. One co-owner can also sale his undivided share in property in which case the proportionate price obtainable to such share is less than the market price due to several difficulties in such sale.

Courts have however, allowed discount in land values only for sale of undivided share of co-owners and not for collective sale by all co-owners.

In case of J.N.Bose³, Calcutta High Court allowed 10% rebate on property value for notional sale of undivided share in the market. Similar view was upheld in case of Ashimasinha⁴ by the Calcutta High Court.

If the plot is divisible by metes and bounds (Physical sub-division) between co-owners, value of property may not depreciate in value. However if jointly on the property is not divisible by metes and bounds amongst co-owners, property value falls in open market. Sale of Property owned by a co-operative society, a limited company, a public trust or association of persons also suffer from draw back of delay in decision on account of process of obtaining consensus of several persons and also due to procedural delays in completing administrative and legal formalities of sale.

2) Tenure

This attribute is not natural attribute of land but it is artificially created quality of land imposed by man to suit to his working system. "Tenure" comes from Greek word "Teno" meaning "I hold" and hence "Tenure" denotes or means conditions of holding land.

Basically there are two types of Tenures of land:

- (i) 'Fee Simple or free hold.
- (ii) Leasehold.

In freehold land tenure, the owner has absolute and permanent ownership of land. He is holding all the rights (100% rights) that are available under Transfer of Property Act. The owner of freehold land, enjoys unrestricted use of land, except laws governing land use and land development (Restrictions under Town Planning Act development control rules and Building Bye Laws, Urban Land Ceilings Act, etc.). He is however responsible for payment of Land Revenue to Government for Agricultural or Non Agricultural use of land. This land assessment (Land Revenue) arises from the principle that “All land belongs to Grown/Nation” and is given to individuals for specific use on payment of specific amount of rent called “Assessment” or land revenue. This is quite different from land tax or land assessment levied by Municipal Corporations or Local Authorities.

In Leasehold tenure, the freehold owner of land, called “Lessor”, gives away some of his rights to the occupant, called ‘Lessee’, for specific period, on mutually agreed terms, conditions and rent reserved under the lease.

Market value of land having freehold tenure will ,therefore, be obviously higher than the market value of land having leasehold tenure.

In addition to these two basic types of land tenures, there were some other special land tenures (leasehold type) also existing in the past, in the city of Mumbai. Other towns may also have different land tenures which are quite different from those described below. Valuer should therefore study the background and rights of the occupants under all these tenures and conditions of holding there under before valuing the land.

- (i) **Toka Tenure** : All waste land and uncultivated land in City, given for cultivation on fixed ground rent, by the then governing authority, East India Co., was called land with Toka Tenure.
- (ii) **Foras Tenure** : These lands were also waste land but these lands were occasionally sub-merged under salt water. Lands were given out by the Government on nominal lease rent with condition to reclaim land and use it for agricultural work.
- (iii) **Inami Tenure** : These foras land were given as ‘gift’ to certain persons in appreciation of their services to then governing authority. These Inamdar’s (owners and their successors) were exempted from payment of land revenue.
- (iv) **Pension and Tax Tenure** : Ownership of these lands were doubtful or defective at one time and the then Governing Authority made the land freehold by charging ground rent. Said authority also charged to owners tax for difference.

- (v) **Fazandari Tenure** : It is similar to Pension and Tax Tenure land held in perpetuity but in this case owners of land rented out land to Fazandari Tenant for yearly rent, and said tenant could not be evicted so long as he paid rent regularly.
- (vi) **Quit and Ground Rent Tenure** : These land were developed land in old town area on which special quit rent was charged by the then governing authority, in addition to the regular ground rent on the land.
- (vii) **Sanadi Tenure**: These lands are given on regular sanad by the government for construction of houses by charging fixed ground rent.

All these seven types of land tenure existing in Bombay City were abolished in 1969 by introduction of Bombay City (Inami and Special Tenures). Abolition and Maharashtra Land Revenue Code (Amendment) Act 1969. This Act was made effective from 1.8.1971.

Following types or tenures are also common in some of the States in India:

- (a) **New Tenure**: It is like old tenures but not transferable unless payment of fixed percentage of the difference between land value as freehold land and land value as new tenure land.
- (b) **Service Inam**: Like Inami Tenure this land is given for specific services to be rendered to the society. Land is not transferable. This land is held till the services are rendered.
- (c) **Devsthan Inam**: This land is given for maintenance of Devsthan. It may be Temple, Durgah etc. This land is also not transferable.

There would be similar or different types of special tenures of land prevalent in the other state or the town of India. In Tamilnadu, one of the tenures of land is called Porombok land. This land is government land and no construction is permitted on such land in the Chennai area. 'Chatram Zaari' tenure of land was existing in which only occupancy enjoyment right was available to the occupant. Thus, each tenure has its own restrictions and the occupant of the land holds rights corresponding to the rules prescribed under such special tenures.

The owner of freehold land or land with old tenures may grant lease of land by lease deed in favour of another person i.e 'Lessee' for certain period. Lessors freehold rights and Lessees leasehold rights both exist simultaneously in the same land. On expiry of lease period the land reverts back to Lessor, and leasehold interest is terminated. A

Lessee or head lessee can further lease out his interest under sub-lease. The period of such sub-lease must be less than the period of lease, atleast by one day and so on.

As there are no conditions attached to freehold land, it fetches higher value as compared to the land subjected to other types of tenures.

In leasehold land there are two interest viz. lessor's and lessees, which have to be valued separately as –

(i) Value of Lessor's interest in land.

(ii) Value of Lessee's interest in land

Lessor's interest comprises of right to enjoy rent reserved under lease for the lease term and also comprises of right of reversion of the property on termination or maturity of lease period. Lessee's interest consists of right to enjoy profit rent (i.e. net income from Fair Market rent – lease rent) during lease period. Lessee's interest is less secured from that of freehold interest and hence it is capitalized at higher remunerative rate of interest (by about 1%) that for freehold interest. Profit rent is further less secured than lease rent.

The value of these two rights greatly depends upon the terms and conditions of lease, lease period and lease rent.

3) Special Covenants

There are some lands which are subjected to direct or indirect restrictions in form of covenants. These covenants are created by the predecessors in title and the same are attached to land and hence they pass with the title of land. These restrictions are binding not only to present land owner but also to his successors and to all those deriving title from him. Some land owners create covenant in form of keeping a garden space or unbuilt open land on certain portion of the plot while selling such plot. Such covenant not only permits unobstructed view from building in rear side plot of such seller but it also enables permanent enjoyment of light and ventilation through such front plot to the rear side plot owners.

Another type of restrictive covenant generally found, is in the form of height restriction of building on a plot. To maintain orderly development in the layout or within the colony and to retain a definite and orderly skyline, society creates a covenant, while granting lease to its members, in such a society, there is restriction of height of a building to be constructed on a plot, say building not exceeding two or three storeys or height of building not exceeding 7 m or 10 m. Some societies while

granting lease to its members, create a covenant that on leased plot only specified F.S.I. could be used, even though local authority permits much higher F.S.I

All these covenants substantially reduced the value of land, corresponding to the effect of restrictions, on the development on the plot.

4) Easement Rights

Some times a property may be subjected to easement rights enjoyed by other adjacent property. It is also some type of encumbrance on property which will reduce the value of property affected by easement. While it will enhance value of the property which falls/enjoys such easement rights may be of several types such as right of way, right to derive light and ventilation, right of support, etc.

If the owner of property A owns easement right of light over adjoining property B, property A has Dominant rights over property B and the property B is subservient to property A. Value of property B will be reduced due to right of light of owner of the property A, while value of property A will get enhanced.

There may be easement in form of right of way over front plot 'X' by owner of rear plot 'Y'. It will, to a certain extent, reduced value of subservient plot 'X'.

5) Other Encumbrances

Land may be subjected to different types of encumbrances or impediments. Land encumbrance may be in form of a mortgage of the property by the land owner (Mortgagor). Encumbrance may be in form of litigation in court about land ownership dispute and there may be stay of the Court against sale of the property.

The impediments could also be in form of encroachments by tress passers or slum lords who by force erect slum hutments on the land. Removal of such encumbrance is very difficult even with due process of law. Mortgaged, litigated or encroached land in variably fetch low price in the market.

The reduction in land value in case of mortgaged property would be corresponding to the mortgaged debt and cost of clearing mortgaged encumbrance.

In case of litigated property, value of land should be deferred for anticipated period of final settlement of legal dispute through Court. This is to account for deduction in value of litigated property.

In case of encroachment or slum hutments on plot, land value would get reduced corresponding to the cost of removal of encroachments or tress-pass. Encumbrance of slum on plot would also reduce the value of land. Reduction depend on

development possibility on plot which will be as per slum clearance policy of Government for permitting construction on such land.

6) Town Planning Act

Provisions of –

Draft or Final Development plans or Master plans prepared by Local Planning Authorities i.e. Municipal Corporations/Councils or Planning and Development authorities, include proposals for (a) allocation of land uses or Land Use Zoning (b) proposals for new roads, road widening and designation or reservation of lands for various public purposes providing civic amenities, social facilities and Utility Services etc. (c) Development Control Rules for regulating development. All these proposals have their effect on market values of properties in different ways. Land use zoning restricts type **and quality of use** of properties while Development Control Rules to prescribe restrictions on **intensity of use**.

(a) Land Use Zoning

Development plans allocate lands for various uses such as residential, commercial, industrial use etc. (Land Use Zoning).

Factory building is not allowed in a Residential Zone and residential building is not permitted in Industrial Zone. Depending upon permitted land use, value of land varies. Thus land values which are otherwise floating, get settled due to Land Use Zoning.

The lands allocated for commercial use are comparatively less in area than those allocated for residential use. Lands earmarked as commercial use are wholly located at focal points or at prominent locations having better accessibility. Land for commercial use is firstly greater in demand than supply and secondly its rent fetching capacity is more. Lands earmarked for Commercial use, therefore, fetch higher price as compared to rate of land for plot marked for residential use. Industrial user usually fetch less than commercial use. The rate of land for industrial use in prominent industrial areas however may or may not be less than land rates for residential user plot in same locality.

(b) Lands Designated for Acquisition:

Lands marked for public reservations lose its value considerably because such plots are not permitted to be developed by the owner and it will be acquired by local authority for public purpose. There are hardly any buyers for such property and hence the value of such plots goes down. Such reserved sites, if acquired Under the Land Acquisition Act, are paid compensation at full fair market value considering their

potential as per surrounding areas as if they are not reserved (please refer Section 24, fourthly, of Land Acquisition Act 1894). The compensation paid under Land Acquisition Act is usually lower than the fair market value due to lower consideration recorded in the sale deed and therefore in actual open market it fetches low value due to un-builtability and less demand. However recently, some of the Municipal Corporations have come out with the provisions to grant transfer of development rights to the owner of such plot. If such lands are handed over to Municipal Corporation free of cost and free of encumbrances, T.D.R. is granted by the local authority to the land owners. In such cases, value of such plots would correspond with the T.D.R. rates prevalent in the market in the concerned locality.

(c) Development Control Rules:

Every local authority and municipal corporation prescribes rules and bylaws for developments and constructions within the land under its jurisdiction. These building bylaws and development control rules (D.C.Rs) also affects value of lands. Important provisions of these bylaws affecting value of lands are F.S.I. (Floor Space Index) or density control provision, open space rules and high restrictions. If F.S.I. of certain area is 1.00 and in next adjoining area in same locality if permitted F.S.I. is restricted to 0.75 only, land values in lower F.S.I. area goes down even though both lands may be quite proximate and perhaps enjoying similar civil amenities. Similarly when local authority increase or decrease the F.S.I. of the zone, while undertaking review of earlier D.C. Rules, land values in such locality correspondingly increase or decrease with immediate effect. In some Development Master Plans. F.S.I. is termed as F.A.R. (Floor Area Ratio).

For certain narrow plots, only ground floor or ground and first floor are allowed to be built on plot as per provision or Development Control Rules. Many a times such restriction results in lesser utilization of F.S.I. thereby limiting intensity of use as compared to the permissible limits for the locality. This restriction, therefore, reduces the property values. Minimum open space required to be provided all round the building, also some times results in less intensity of development in the plot and hence reduces values for properties.

Development rules of some Municipality, requires 10% or 15% of plot area, of the large size plots, to be provided for Amenities Space (Garden Area). Under Layout and Sub-division Rules F.S.I. of this amenity area is not permitted in construction. This rule also reduces land values.

7) Central and State Govt. Legislations

There are some Central and State Govt. Legislation which restrict or regulate development on lands and some times regulate even holding of land. These restrictions in turn, reduce value of properties in the open market.

- (a) Urban Land Ceiling Act of 1976 is classic example of the law enacted by the Central Government and adopted and implemented by various State Governments, restricting holding of land in urban areas. This Act restricted and prescribed ceiling on area of ownership of urban land, held by land owner. Land ceiling limit for 'A' class city was fixed at 500 Sq. m. In area. Ceiling limits for 'B', 'C' and 'D' class cities were fixed at 1000 Sq. m., 1500 Sq. m. and 2000 Sq. m. respectively. This Act in effect gave raise to novel concept of two tier rating of land values, for different land proportion in the same plot. Proportion of the plot falling within ceiling limit was to be valued at market rate, whereas remaining proportion of the land in the same plot, which formed an excess vacant land as per U.L.C. Act, was required to be valued at very low rate prescribed under the Act. This Act is abolished by the several State Governments but it is still in force in a few States like Maharashtra, Andhra Pradesh and State of West Bengal.
- (b) **Rent Control Act** is another Act which in effect artificially reduced values of properties to a very low level. As per provisions of Rent Control Act of Maharashtra, rent of tenants in buildings constructed on land, falling in rent controlled area, is frozen at its standard rent level and the same can not be normally increased. Under this Act tenant can not be normally evicted from premises and thereby protected tenants are virtually getting permanent protection against eviction. Tenancy rights do not extinguish even after the collapse of the building. Tenant could claim tenancy in the rebuilt building constructed on the plot. Thus landlord does not virtually get back land, once building on land is let out.

Different States have enacted different Rent Control Acts to suit to the conditions prevalent in the respective State. However provisions of freezing of rent and protection against eviction are common for all Acts.

Normally residential, commercial and even industrial lettings are covered in Rent Act. However premises given on leave and license basis are not protected under Rent Act.

- (c) **National Highway Act and Railway Act** regulates development in the plot adjacent to Highway and Railway lines by prescribing restrictions of no construction zone or set back lines/building lines for a certain distance inside the

plot from Highway center/Highway boundary. For a small plot this restriction may result into an unbuildable plot and in turn its value for the non agricultural purpose will reduce drastically.

- (d) **Civil Aviation Authority** regulates and restricts height of buildings on the plot in vicinity of Air Ports. These height restrictions will result in low consumption of F.S.I. on plot and ultimately low value of the land.
- (e) **Coastal Regulations** restricts and regulates development on all lands falling within 500 m. Distance from high tide line along then sea coasts. This Act reduces value of sea front property, falling within 500 m. Distance from high tide line, rather than increasing its value.

Some times clearance is required from irrigation canals and also 'nallah' passing through the plot. This reduces buildability in the plot. If optimum use of land is not possible because of these restrictions, value of land falls substantially.

- (f) **Indian Electricity Act** regulates development on land falling under power transmission lines. If high tension power transmissions line passes through the plot, no construction is permitted under the said transmission line. On two sides of such a line also no development is permitted for certain prescribed safety distance. The portion of land affected 'no development area' depreciate the value of land. If such plot is too small in area, it may have greater loss in value due to such restriction as compared to erosion in value of the large size plot.

SOCIAL ASPECTS

1. Community Aspects

It is seen that certain persons prefer to stay with their own community or in the neighborhood of persons of same religious groups. We therefore find Parsi colony, Hindu colony, Brahmanwada, Harijanwas, Catholic society, Mohammedan locality etc. Land values in such locality fall because number of buyers will be restricted only to certain class of buyers of said community or religious groups; it is like a sale in closed market or restricted market. Obviously due to restricted demand and unwillingness of buyers of other community to invest in such areas, sellers are forced to sale their properties to the person of the same community, even at lower rate than its real worth.

Proximity of Church, Masjid, Jain Temple (Derasar), Gurudwara is another religious factor which needs to be considered by a valuer while estimating land values in such community based localities. A Jain buyer would be pleased to pay higher price for land

if Jain Temple (Derasar) is close by. They prefer to be close to place of worship. This phenomena is observed even in areas which are not predominantly community or religions based settlements.

Some times the covenant in the title document of the plot in such colonies prohibits sale of property to persons belonging to the other religious faith or cult. In case of St. Anthony's Society⁵ Bombay High Court held that the restriction of society membership only for the Roman Catholics was contrary to the 'open membership' principle under societies laws. However subsequently, in case of Zorastrian Radih Society⁶, Supreme Court held that it is legal to have society confined to persons of a particular persuasion, belief, trade, way of life or a religion. Due to such restrictions and covenant, number of buyers of such properties will be very few and hence value of land in such closed or restricted market would fall.

2. Economic and Social Status of Residents

Another point for consideration of the valuer is the Life style and living standards of the residents in the concerned locality which depend on their economic and social status. Living standard of the residents of posh area will be high and hence land values and rental values will be high in such posh area. Some other areas of the same ward which are considered as middle class locality, the prices are likely to be moderate. Some areas which are developed as poor class locality will have minimum land values due to the low paying capacity of local residents and unwillingness of richer class persons to reside in such area. Similarly cleanliness of a locality, which depend on habits of local residents contribute to increase in prices of properties in such localities.

3. Anti-Social Elements

Presence of persons with criminal record in the locality or presence of slum nearly result in reducing effective demand for properties in such locality resulting in lowering market values of properties. The extent of reduction in market values depends on the degree of nuisance felt by law abiding citizens.

ECONOMIC ASPECTS

Market value of properties depends mainly on net income which remains after deducting annual out goings from gross income.

1. Gross Annual Income

In case of owner occupied properties and properties occupied by tenants not **protected** by Rent Control Act, fair market rent, estimated on the basis of recent rental instances in respect of similar properties in the vicinity should be considered. In the

case of properties occupied by protected tenants actual rent or standard rent whichever is more should be considered.

2. Annual Outgoings

- (a) Municipal Taxes : Actual annual municipal taxes
- (b) Annual Maintenance and Repairs: Usually these are not carried out annually. Even though these are undertaken periodically, their annual incidence works out to 10% to 15% of gross annual income depending on age and type and quality of construction.
- (c) Cost of Services provided.
- (d) Management charges including bad debts vacancies, etc.
- (e) Insurance.

3. Net Annual Income

4. Immediate Repairs required

Cost of immediate repairs is required to be deducted from capitalized value of property.

5. Financial Liabilities, if any, like mortgage charges etc.

Note: All the factors/aspects contributing to enhance/reduce value mentioned above are under normal circumstances. However, valuer has to estimate the value taking into consideration how all these factors locally operate based on local demand and supply.

Conclusion about Factors of Comparison

It is not necessary that all the 60 to 70 or more factors of comparison must be considered for comparing properties. For the purpose of comparison only those factors or aspects which are relevant in a particular case only should be considered only for comparison of rental values and not for maintainable rent under yield method of valuation.. Whether a particular aspect is relevant for comparison or not i.e. relevancy of a particular factor or aspect varies from case to case. In estimating fair market value or rent of open land, for example, Comparison would be between the land to be valued or lease out on rent and the open lands sold at a price or leased out on rent and factors or aspects of comparison in respect of buildings such as

engineering and architectural aspects, services provided within buildings or common services, amenities and facilities provided within particular premises of a building or a group of buildings would not be relevant and need not therefore be considered. In the case of flats or shops sold or let-out separately to different persons many aspects in respect of land may be irrelevant. Similarly aspects which are common or uniformly available or uniformly not available **for all the properties to be compared** need not be considered for comparison, for example (a) electric supply available for all the properties uninterrupted or with equal hours of load shedding, (b) same or similar timings of water supply (c) equal or no nuisance of antisocial elements (d) Govt. policies or legislation with same incidence etc. A valuer has thus to exercise his discretion diligently to decide which aspects being relevant or irrelevant in a particular case, should or should not be considered for comparison between the properties concerned. Further it should be always kept in mind that the time or the date of transaction is also one of the most important dimensions in comparison which a valuer can never afford to overlook.

12.0 Application : Market Approach

A. METHODS AND TECHNIQUES OF COMPARISON AND ESTIMATING MARKET VALUE

12.1 GENERAL

Fair market value of a property by the market approach is estimated by comparing the property to be valued with the properties recently sold (for market approach) or let out (for income approach) in the nearby locality, also taking into consideration the consideration prices or the rentals at which those have been sold or let out. There are as many as 60 to 70 or more factors of comparison as discussed in the Unit 2, apart from the time of transactions, which fact alone makes the comparison among the properties rather difficult.

Further all these 60 to 70 or more factors of comparison have five or six levels or rankings at which these are provided or are available, ranging from the highest to the lowest levels. For example –

- (a) In the case of size or area of land/property sold or let out it may vary say from 300 Sq. m. (with higher rate of price or rent per unit area and therefore with higher ranking) to 500 Sq. m., 1000 Sq. m., 2000 Sq. m. and 5000 Sq. m. (with lowest rate of price/rent per unit area and therefore with lowest ranking).
- (b) In the case of location/situation the levels can be decided according to the distance of facility or amenity or work places etc., say market or shopping, bus stop (and frequency of buses), school etc. from the property being compared say 250 m, 500 m, 1 km, 2 km and above 2 km etc. with ranking of the facility being inverse in proportion to the distance between the property and the facility/amenity, etc.
- (c) In the case of utility services e.g. tapped water supply levels or ranking can be decided on the basis of timing of availability of supply say (i) 24 hours a day (ii) 2 or 3 hours in the morning and 2 or 3 hours in the evening (iii) 1 hour in the morning and 1 hour in the evening (iv) 2 hours only once in a day (v) no supply by tap water and so on and more the availability of supply higher the level or ranking.
- (d) In case of buildings e.g. higher the specification of building materials and workmanship or plumbing or better the light and ventilation (or more convenient arrangement of rooms) higher will be level or ranking with higher rate per unit area of price/rent.

Such five or six levels of each of the 60 to 70 or more factors of comparison make direct comparison among the properties extremely difficult. It is therefore necessary to develop and adopt suitable methods or technique for comparing various properties for estimating fair rate per unit area of market value or rent of properties concerned. It is also necessary to ensure that such complicated or complex comparison is as objective as possible eliminating as much as possible, the subjective element in the comparison.

There are methods or techniques which can be, and are usually, adopted for comparing properties involved in the instances of sale and/or rentals with the property to valued etc. These are –

1. **Quick and Adhoc Comparison Technique: or Hedonic Pricing Model.**
2. **Adoption of weightages**
3. **Adjustment Grid Model**
4. Price Quality Regression Technique
5. Weightage Score System.

1, 2 and 3 are discussed in details hereunder.

QUICK AND ADHOC COMPARISON TECHNIQUE OR HEDONIC PRICING MODEL

Under sales comparison method, this comparison technique is well known. It has been in use for many years. Many valuers adopt this technique so as to save time for furnishing quick valuation reports to the clients. This method is also known as Hedonic Pricing Model. Under this model, price of the property is expressed by the formula.

$$P = f (STLA)$$

Where:

- | | | |
|---|---|---|
| P | = | Price of the property in the market. |
| f | = | Stands for function of |
| S | = | Size or covered area of the premises. |
| T | = | Time factor at which asset is traded in the market. |
| L | = | Location of the property |
| A | = | Age or physical conditions of the property. |

It will be seen that out of large number of factors which affect value of a property in the real estate market, only four factors are considered in this model. Under this

ad hoc comparison model, a valuer compares only these four factors of both properties viz. property involved in sale instances and the subject property. A valuer arrives at the rate to be adopted after this ad hoc comparison. There is no doubt that price of the property is the function of area, location, time period and age or physical condition. Location in respect with proximity of civic amenities is a major factor affecting value. Similarly time factor represents demand and supply position and environment of the real estate market at a relevant period of time which determines price of an asset. However age factor is only for buildings and that too in a small way. It does not apply in case of comparison for estimating market value of open land where many characteristics of land decide its value in the open market. Similarly size or area factor is not a major and important factor for estimating cost of building, but it does constitute an important attribute for estimating market value of land. Demand for larger area is comparatively less than demand for smaller areas and hence the rate per unit area of price is lower for large areas than that for comparatively smaller area of land.

This ad hoc comparison method is already discussed earlier. However for sake of revision this is discussed again. The steps followed by a valuer under this method are as under :

- (i) A valuer first collects data in respect of instances of sale in the locality nearer to the relevant date of valuation. Non genuine instances of sales are excluded.
- (ii) The rates of market value yielded and the attributes of the properties involved in the genuine sales are compared with the attribute of the subject property. All the relevant four factors and percentage adjustments applicable are recorded.
- (iii) A valuer then arrives at a concluding overall effect of these comparisons. It may be positive percentage adjustments over sale instance rate or negative percentage adjustments over said rate.
- (iv) A valuer then finally estimates the final rate of market value per unit area for the subject property based on his experience, expertise and his overall subjective impression. Hence it is called ad hoc analysis.

Comments

It would be seen that this technique takes into consideration only four broad factors of comparison as against 70 or more factors and 5 to 6 levels of each of the 70 + factors. It gives quick but very crude and rough estimate of the rate of market value based on subjective judgment and may thus be a 'guesstimate' rather than fair and reasonable 'estimate' of market value. It may therefore be used for getting quick and rough idea about market value of a property but should never be used for purpose of report on

valuation of a property which should be more objective and capable of being proved on sound logic whenever required.

Following examples will explain the steps, involved in this technique.

Example :

An industrial gala, 600 Sq. m. Area, on ground floor of building was recently sold at Rs.22,000/Sq. m. Find out fair value for 120 Sq. m. gala which is on 1st floor of same building.

Solution:

Consider location and size factor for industrial units upper floor is a disadvantage and hence it will fetch market value at lower rate. Smaller size may or may not be so much important for the industrial unit as compared to the upper floor situation aspects. Rate of Rs.20,000/Sq. m. i.e. slightly lower than Rs.22,000 per Sq. m. for gala on the G.F. is estimated for the gala on F.F. Market value of the subject gala is therefore 120 Sq. m. @ Rs.20,000/ Sq. m. = Rs.24,00,000/-.

Example:

A residential flat, 75 Sq. m. area in 15 years old building is sold at Rs.20,000/Sq. m. in May 2005. Building is on main road and it has garden and parking facilities in the plot. Advice of fair purchase price in April 2006 for 50 Sq. m. flats in nearby by-lane, in building which is 30 years old and having inferior specification than sale instance flat.

Solution:

Consider age, location and time factor. Rate of sale instance for the flat for March 2006 could be –

- + 10% for 1 year difference i.e. time factor.
- 10% for 15 years age and specification difference.
- 10% for by-lane location
- 10% (Overall % decrease)

Note: All the above percentages are adhoc and subjective.

Rate of Rs.18,000/Sq. m. (0.90 x 20,000) is estimated.

Fair value of flat = 50 Sq. m. @ Rs.18,000/Sq. m. = Rs.9,00,000/-

Example:

Advice on fair purchase price for 850 Sq. m. area plot on main road of town for year June 2006. Civic amenities are close by but plot is 2m lower than the road level. Following 3 sales are available in locality.

Sale 'A': 1200 sq. m. corner plot abutting on the road running parallel to the main road, sold in Dec. 2004 for Rs.6,00,000/-.

Sale 'B': 750 Sq. m. Plot in by-lane sold in September 2005 for Rs.3,00,000/-.

Sale 'C' - 500 Sq. m. Plot at 1 km distance in poor class locality sold in May 2005 for Rs.175,000/-. Adopt 12%/year price rise in real estate market rates

Adopt Cost of earth filling at Rs. 15/cu. mt.

Solution:

Consider location and time factor for all three sales.

$$\text{Sale 'A':} \quad \text{Rate} = \frac{60,000}{1200} = \text{Rs. } 500/\text{Sq. m.}$$

- 15% for corner plot.
- + 18% for time period difference (18 months)
- + 3% (overall % increase)

Rs. 500 + Rs. 15 = Rs.515/- per Sq. m. is the adjusted rate.

$$\text{Sale 'B':} \quad \text{Rate} = \frac{300,000}{750} = \text{Rs. } 450/\text{Sq. m.}$$

- + 10% for by-lane location.
- + 9% for time period difference (9 months)
- + 19% (overall % increase)

Rs. 450 + Rs. 86 = Rs.536/- per Sq. m. is the adjusted rate

$$\text{Sale 'C':} \quad \text{Rate} = \frac{175,000}{500} = \text{Rs. } 350/\text{Sq. m.}$$

- + 40% for location aspect.
- + 11% for time period of 11 months
- + 51% (overall % increase)

Rs. 350 + Rs. 179 = Rs.529/- per Sq. m. is the adjusted rate

Estimated base rate of Rs.530/Sq. m. for the subject property. The plot is 2 m below road level involving 1 Sq. m. x 2 m i.e. 2 cu.mt. earth filling. Cost of murum filling = 2 cu. mt. at Rs.15/ cu. mt. = Rs.30/Sq. m.

Net rate of plot = Rs.530 – Rs.30 = Rs.500/- per Sq. m. in June 2006.

Fair purchase price = 850 Sq. m.. @ Rs. 500/Sq. m. = Rs.425,000/-

Comments

It may be noted that percentage adjustment like + 10%, - 10%, - 15%, + 18% over even + 40% for factors like time, locations, specifications, etc. are adhoc percentage adjustment. Strictly speaking such inferences regarding percentage variations in the rates of market values or prices per unit area can be truly drawn when only one singular factor of comparison (out of 70 plus factors and their 5 or 6 levels) changes, all other factors remaining constant. For example percentage variation in the rate of market value per unit area due to time factors can truly be inferred only if THE SAME land or property has been resold after two or three years, similarly such percentage variation in the rates of market values of a row plot and corner plot in the same row can be drawn, and that too only roughly, only if those two plots have been sold on or about the same date only. Drawing inferences about such percentage variation in the rate of market value on account of change in one of the factors of comparison when some of the other factors have also changed, even though in varying degrees, will be incorrect and misleading. What is true about the variations in the rates of market value is also true in respect of the rates of rents which also change from place to place, town to town and city to city. Perhaps the only fair and reasonable basis for drawing inferences about such percentage variation would be the variations in the rates of interest yielded by the properties sold found out by analysis of each of the instances of sale because such rates of interest takes into consideration all the factors of comparison simultaneously, and is irrespective of place (or town or city) and time, though it is influenced by the overall national economic conditions. This subject will be discussed in details in the Unit dealing with the Income approach.

ADOPTION OF WEIGHTAGES

As stated earlier, land has innumerable characteristics or attributes (Economic/Physical/Social/Legal). All these can not be adopted for simple and quick comparison though these can be duly considered in detail comparison by other elaborate technique. Only few major attributes are considered here.

In India, no scientific market research has been done to identify correct market weightages for each of the attributes independently. It is perhaps thought that it is not possible to do such a market survey and arrive at fair and reasonable results in the

Real Estate Market prevalent in our country. Again parallel economy aspect in sale transaction records may also discourage such an exercise. One sale may show only 60% of actual sale price paid whereas another sale in same locality may record in the registered document only 20% of the actual amount actually paid (80% being paid in Black money)

However, some countries have done commendable research in this field. They have identified as many as 400 to 500 attributes as against 70 and 5 or 6 levels as stated earlier which affect the price of the property in the market and they have also found fair and reasonable weightages for each of such attributes to help in comparison. British Columbia Town Authority is leader in this field.

Many valuers are of firm view that one should not indulge into adhoc practice. A valuer should find out proper weightages for various attributes by study of actual real estate market in the concerned locality. This view of-course is sound and scientific view and the ideal approach for estimating weightages. This has however not been done so far in true sense.

Weightages for land comparison

In these circumstances it is thought fit to suggest some broad idea about likely adhoc weightages for different attributes for open land. These are purely adhoc weightages and would change from locality to locality depending upon local market. These weightages can not supercede weightages derived from actual market survey i.e. by scientific analysis.

In following table, purely adhoc weightages are given for each individual variation in attribute of subject property vis-à-vis sale instance property.

Attribute of subject land	Corresponding Attribute of sale Instance plot	Positive or negative weightages to be applied to the sale instance rate,
• Double frontage	Single frontage	+15% to +20%
• Large size plot	Small size plot	- 15% to - 40%
• Time Factor current year	1 year before	+ 5% to + 15% per year
• Main Road	By-lane	+15% to +40%
• Plot without road (City limit) i.e. landlocked land.	Plot abutting road	- 75% to - 80%
• Joint ownership	Single ownership	- 5% to -15%
• Land has excess	Land area within	Deduct amount as per Govt.

vacant land under U.L.C. Act	ceiling limit	Policy.
• Low lying land	Level ground	Deduct for cost of filling
• Sea front plot	Away from sea	+ 20% to +30%
• Pending litigation (Stay of Court against sale)	No litigation	- 30% or more.

Even while estimating values on basis of adhoc weightages a valuer must not forget basic valuation concepts e.g. while electing adhoc percentages decrease for largeness of plot.

Similarly for landlocked land in city area, Valuer must first examine possibility of securing proper access to subject plot by purchase, or by easement right and then allow fair decrease in the percentage on value. It must be remembered that this deduction is not applicable for agricultural land because agricultural access upto field is available to the owner under law. In absence of scientific field data about a locality, a valuer may estimate values by estimating adhoc weightages as explained below.

If subject plot has double frontage and plot involved in a sale instance has single frontage and rate of price is Rs.3000/Sq. m. land rate of the subject plot may be estimated at Rs.3000 +15% i.e. $3000 + 450 = 3450$ /Sq. m. Adjustment in values for other attribute can be similarly worked out.

These all are only adhoc weightages. These figures would change with different locations and different towns. There could be many more such indicative figures which may work in one locality and some towns but may not work another town or another locality. A valuer should therefore undertake market studies/surveys and make appropriate local inquiry on these aspects before arriving at any such weightages. Priorities given by local residence of different attributes should be kept in view by valuer e.g. if local residents believe in Vastu Principles, a valuer cannot neglect it.

Value Ranking Technique for Assigning Weightages

The various weightages for various attributes required to be applied to the rates of market value shown by the sale instance have to be adopted in a very prudent manner and better if they are support by evidence and not on any adhoc assumptions. The adoption of weightages and adjustment in the rates has to be done in judicious manner better than a man of ordinary prudence would be able to do, and it should not tend to be speculative.

Before we study other method of comparison, we must learn how these weightages for different attributes could be worked out. This is done by what is known as Value Ranking Technique.

This method of finding out weightages for an attribute is quite simple. First four to six genuine instances of sale are collected from the same locality. Then each one is given a rank on the basis of quality of particular attribute. Poorest quality is given rank 1 and sale with richest quality of said attribute given higher rank, Say 6. The rates of market value per unit area shown by these sales are compared in isolation of all other attributes, assuming that other attributes are of identical quality.

The following example will make it very clear.

Example:

Following sales of flat are collected for current year.

Sale 'A': Ordinary or poor quality specification. Sale rate Rs.9,000/Sq. m.

Sale 'B': Standard specification. Sale rate Rs.12,000/Sq. m.

Sale 'C': Deluxe specification. Sale rate Rs.15,000/Sq. m.

Sale 'D': Super Deluxe specification. Sale rate Rs.18,000/Sq. m.

Find out weightage for 'Specification' factor in said locality. Also calculate rate of flat having specifications quality between sale 'C' and sale 'D'.

Solution:

Sale 'A' is given Rank 1 and sales 'B', 'C' and 'D' are given ranks 2,3 and 4 respectively.

We find that quality of specification of subject flat is between Rank 3 and 4, we can therefore easily interpret that its fair rate should be between Rs.15,000/Sq. m. to Rs.18,000/sq. mt, Say Rs.16,000/Sq. m. This rate can also be found by drawing graph with specification grade vis-à-vis rate of flats.

To find out weightage for specifications factor, we must work out difference % between two grades of specifications. Difference is as under:

Sale 'B' has 33.33% higher rate than sale rate 'A'.

Sale 'C' has 66.66% higher rate than sale rate 'A'.

Sale 'D' has 99.99% higher rate than sale rate 'A'.

Hence weightages for specification factor can be adopted at 33.33%.

Weightages for other factors could be evaluated similarly.

Comments on Adoption of weightages:

The comments in earlier paragraphs also apply equally to the weightages adopted in this method.

ADJUSTMENT GRID MODEL

Evaluation of rate of market value per unit area under this model is also similar to approach under Hedonic Model. However, under this model working is less adhoc and systematic to some extent.

In this method also 4 to 6 comparable and genuine sales are first collected by a valuer in a locality. For the purpose of comparison with subject property, 4 or more major attributes are taken into consideration by a valuer. There after for each attribute ranks are given. (i) Rank (5) for Best Quality attribute, (ii) Rank (3) for Medium Quality attribute, (iii) Rank (1) for Poor Quality attribute, if the flat involved in a sale instance has best specification Rank (5) is given to it where as flat having medium quality and poor specification are given Rank (3) and (1) respectively.

Let us see how ranks are given for different attributes of the properties.

Location Factor : Rank (5) if civic amenities are close by. Rank (3) if amenities are at moderate distance. Rank (1) if amenities are far off at more than 1 km distance.

Size: Rank (5) if flat area is 75 Sq. m. or less. Rank (3) if flat area is 75 Sq. m. to 150 Sq. m. Rank (1) if flat area is 150 Sq. m. or more.

Age: Rank (5) Building less than 10 years age. Rank (3) Building having age 10 to 30 years period. Rank (1) Building having age 30 years or more.

Specification: Rank (5) Deluxe specification. Rank (3) Standard specification. Rank (1) Poor specification.

Time: Rank (5) within 3 months prior to the date of valuation. Rank (3) within 6 months prior to the date of valuation. Rank (1) after 6 months prior to the date of valuation.

There could be many more factors or attributes of property which can be considered by the valuer for comparison and adjustment.

Having considered genuine instances of sale, major attributes and having given ranks, now all sales are placed in the adjustment grid in tabular form. Now ranks of each attribute of the property involved in each of the instances of sale is compared with rank of said attribute of the subject property. Appropriate weightage is given for higher or lower rank. The peculiarity of comparing each selected attribute of instances of sale properties with subject property is in the fact that each attribute is compared in isolation of all other attributes. If size factor of the properties involved in the sales is compared with that of the subject property, then for that particular time effect due to variation in specifications or its location angle is ignored. Entire comparison and rank and weightage factor is adopted in isolation of the effect of all other attribute. Only rank of each sale in respect of the said attribute alone is considered. Positive and negative weightages are given looking to inferior or superior rank of instances of sale property.

In short it can be said that this system of ranking and comparison is an only notional adhoc process of bringing sale instance flat to the level of quality of attribute of subject property. If attribute of sale instance property is superior to quality of attribute of subject property, a negative weightage is considered for adjustment to instances of sale rate so that sale instance property quality is brought down to level quality of subject property. In case of inferior quality instances of sale, positive weightage is considered to bring up said quality to level of subject property. It is like making Rich man poor by tax (- ve) and making poor man rich by grant or subsidy (+ ve) so that all are equal. These individual weightages are ultimately totaled up to find out overall effect on basic sale instance rate. Finally derived adjusted rate in case of each instances of sale is then computed and than final comparison is done. Having done this entire balance sheet process, an opinion is formed about fair rate for subject property.

The following example will explain the whole adjustment process:

Example :

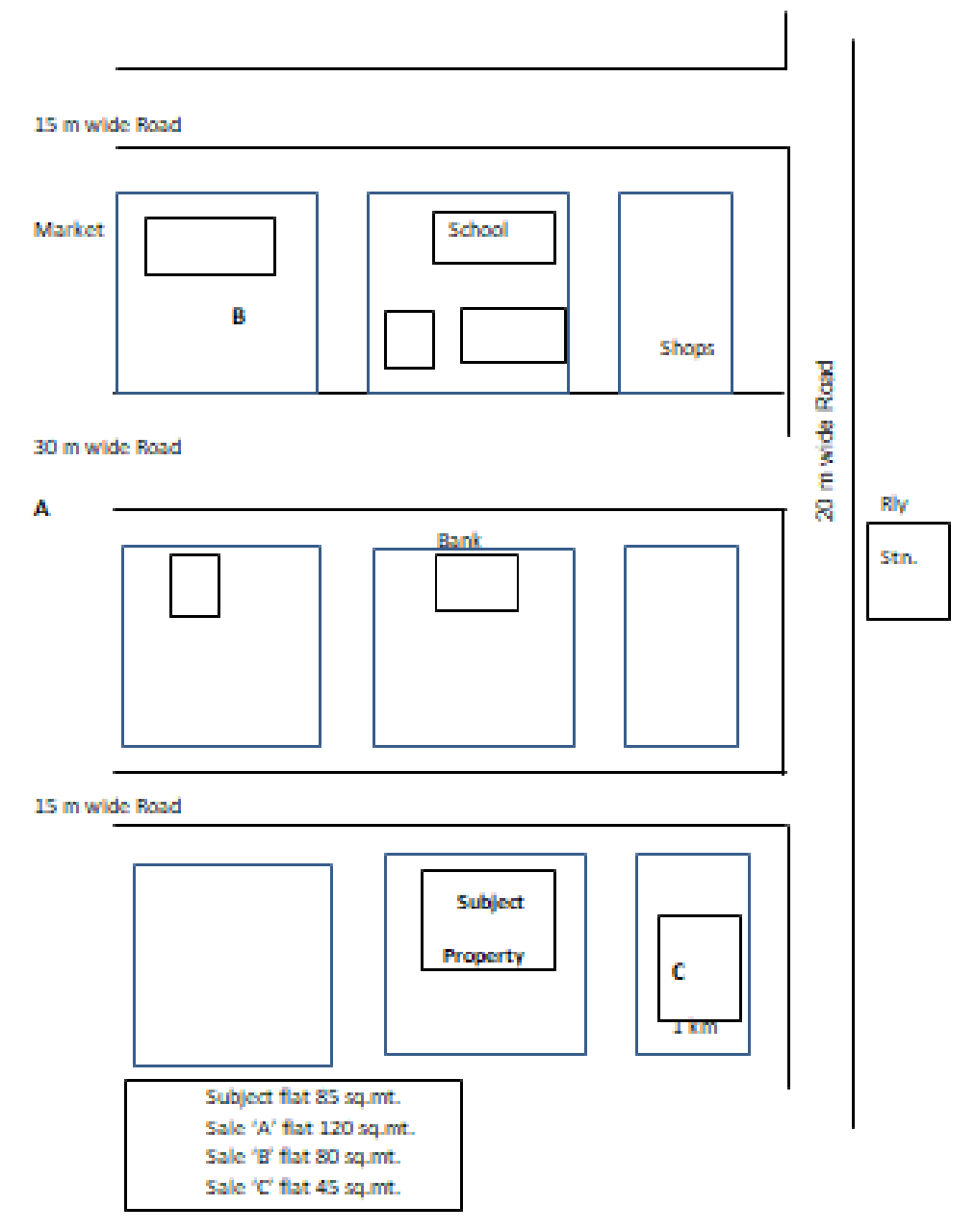
A residential flats (subject property) is in 4 years old building. The building is in middle class locality on road parallel to main road. Building is 4 years old with good specification and good aesthetics. Area of flat is 85 Sq. m. Marble flooring is provided. Value the flat as on 31.3.2006 based on following three sale instances which are readily available for comparison.

Sale 'A': 120 Sq. m. flat sold on 31.8.2006 at Rs.8000/Sq. m. rate. Building is 22 years old and abuts on main road. Good specification and marble floor are provided. Building is with garden and swimming pool.

Sale 'B': 80 Sq. m. flat sold on 31.1.2006 at Rs.5600/Sq. m. rate. It is in by-lane but it is closer to market and school as compared to subject flat. Building is 18 years old and specification is average with mosaic tiles flooring.

Sale 'C': 45 Sq. m. flat sold on 30.10.2005 at Rs.4000/Sq. m. rate. It is at 1 km distance from the market and station. It is in poor class locality. Building is 30 years old with poor specification.

Sketch - A
(Not to Scale)



Solution:

Grid Table given below is as per Adjustment Grid Model.
(It is Balance Sheet of weighted values).

GRID TABLE

Sr.	Details of factors	Subject flat 85 Sq. m.	Sale 'A' 120 Sq. m.	Sale 'B' 80 Sq. m.	Sale 'C' 45 Sq. m.	Remarks
1.	Sale Rate	To Find	8,000	5,600	4,000	Rate Rs./Sq. m.
2.	Time Factor	March 2005	- 5 months	+ 2 months	+ 5 months	
3.	Weightage Adjustment for time.	-	- 5% -400	+ 2% +112	+ 5% + 200	Weightage 1%/month
4.	Adjusted Rate.	-	7,600	5,712	4,200	Rs./Sq. m.
5.	Location Factor	Rank 3 Weightage	5 -15%	3 -5%	1 +25%	Ranks % Weightage
6.	Size Factor	Rank 3 Weightage	1 - 5%	3 Nil	5 - 5%	Ranks % Weightage
7.	Age Factor	Rank 5 Weightage	1 + 9%	3 + 7%	1 +13%	Weightage 1%/2 years.
8.	Specification Factor	Rank 3 Weightage	5 -10%	3 + 15%	1 +25%	Ranks % Weightage
9.	Overall variation Serial 5 to 8	Rank 3 Weightage	-11%	+ 17%	+58%	% Weightage over rate in Serial – 4.
10.	Adjusted values.	Estimated. Rate 6,700	6,764	6,683	6,636	Rate Rs/Sq. m.

Rate adopted for subject flat = Rs.6700/- Per Sq. m.

Value of subject flat on 31.3.2006

85 Sq. m. @ Rs. 6700/Sq. m. = Rs.569,500/- Say Rs.570,000/-.

It will be seen from the above example and its solution that the sequence of adjustment (Basic rule) starts with applying weightage for the time factor first on the basic rates of the sales. Weightages for the other attribute are considered thereafter on the overall basis and applied to already time adjusted rates and not on the basic rate of the sale.

It will also be seen that before adjustment of rates, difference in rate between highest and lowest rate in locality was Rs.4000/Sq. m. (100% difference). However after making notional adjustments by giving weightages for different attributes, difference between highest and lowest rates is reduced to only Rs.128/Sq. m. (Hardly 2%) difference. This reduced difference makes valuer's job very easy in selecting appropriate rate for subject property.

Another important point to be noticed is the Rule that for the inferior quality attribute (Lower rank), positive weightage is considered whereas for superior attribute (Higher rank) negative weightage is considered. However for equal rank the weightage could be +ve or -ve or Nil, as the case may be.

This exercise can be done in exactly similar manner by selecting more than 3 sale instances for comparison. Valuer can also adopt as many more attributes as he thinks fit for comparison instead of selecting merely five major attributes as done in above example.

This adjustment grid model can be adopted for comparison of not only ownership flats but also for open plots, shops and industrial units (Galas).

Example

An open plot in residential zone (subject property) has an area of 600 Sq. m. Plot abuts on 27 m wide major link road of the town and all civic amenities are available close by. Shops are not permitted on the plot. Value the plot as on 31.10.2006 if following 3 sales are available.

Sale 'A': 2500 Sq. m. plot is sold on 4.6.2006 at Rs.3800/sq. mt rate. It is a corner plot on 18 m wide main road. Permitted user is shops on ground floor and residence on upper floor. Civic amenities are at 10 minutes walk.

Sale 'B': 1000 Sq. m. plot is sold on 1.12.2005 at Rs.3000/Sq. m. rate. It is in 12 m wide by-lane. Plot has single frontage. Civic amenities are available within 20 minutes walking distance.

Sale 'C': 400 Sq. m. plot is sold on 25.1.2006 for Rs.2400/sq. mt rate. It is Vyagramukhi shape plot abutting on 9 m wide dead end lane. Shops are not permitted on the plot. Neighborhood is poor class locality.

Solution:

Sale instance details are given in tabular form as under:

Details of weightages adopted and working of adjusted rates are also given in the Grid Table (Balance Sheet of rates).

GRID TABLE

Sr.	Details of factors	Subject plot 600 Sq. m.	Sale 'A' 2500 Sq. m.	Sale 'B' 1000 Sq. m.	Sale 'C' 400 Sq. m.	Remarks
1.	Sale Rate	To Find	3800	3000	2400	Rate Rs./Sq. m.
2.	Time Factor	October 2006	+ 5 months	+ 11 months	+ 9 months	
3.	Adjustment for time.	-	+ 10% + 380	+ 22% + 660	+ 18% + 432	Weightage 2%/month
4.	Adjusted Rate.	-	4180	3660	2832	Rs./Sq. m.
5.	Location Factor	5	5 -10%	3 + 5%	1 +15%	Sale 'A' is Corner plot.
6.	Size Factor	5	1 + 10%	3 + 5%	5 + 10%	Sale 'C' is Vyagramukhi
7.	User Factor	3	5 - 15%	5 - 15%	3 Nil	Sale 'A'/'B' are with shops
8.	Road width Factor	5	5 + 5%	3 + 10%	1 +10%	Ranks Weightage
9.	Overall % weightage variation	-	-10%	+ 5%	+ 35%	Weightage over rate in Serial – 4.
10.	Adjusted values.	Estimated. 3850	3762	3843	3823	Rate Rs/Sq. m.

Rate adopted for subject plot = Rs.3850/- Per Sq. m..

Value of subject plot on 31.10.2006

600 sq. mt @ Rs. 3850/sq. mt = Rs.23,10,000/- Say Rs.23,00,000/-.

Note: Adjustment for time in this land valuation example is estimated at 2%/month vis-à-vis 1%/month estimated in previous example for valuation of flat. This may be perhaps because valuer thinks that appreciation in land values is much higher than appreciation in rates of flat during same period of time.

Comments

In this method also weightages adopted for time and ranks are purely adhoc, perhaps on the basis of intuition developed by experience of practice in a particular area.

Unless these weightages adopted on the basis of adequate reasonable evidence by thorough study of the real estate market in locality in which the property to be valued is situated, such weightages and therefore the entire technique would prove to be unscientific, without sound logical reasoning and would therefore be difficult to be proved when needed.

Comments in earlier paragraph are equally applicable to this method/ technique also.

PRICE QUALITY REGRESSION TECHNIQUE

Under Sales Comparison Method of market approach, this is yet another recent technique of comparison of sale instances. However this technique will be more useful in the cases where valuer has more details from the market studies about the correct weightages for different attributes of a property. Adopting adhoc or arbitrary weightages without any market survey or market findings and applying it under this price quality regression technique is likely to result in less accurate adjustments instead of fair and reasonable adjustments.

Under this technique values are estimated by the formula –

$$y = a + b'x'$$

y = Estimated sale price of property

a = Market price factor or time factor,

b = Quality factor or regression coefficient.

x = Ranking factor

Market price factor “a” is a constant coefficient worked out from several genuine sale instances executed at different periods of time indicating different rates.

Quality factor “b” is another constant coefficient worked out from several genuine instances of sales having number of different quality aspects like age, Specifications, Location, Services, Prominence, Neighborhood, Topography etc.

Ranking factor “x” is fixed ranks given to the subject property in respect of various attributes (Quality factor) affecting market and required adjustments in the value. Normally ranks given for attributes are 1-3-5 for poor-medium and best quality of attributes respectively.

WEIGHTAGE SCORE SYSTEM

General

The weightage score system has been adopted by the students of Master of Valuation (Real Estate), Sardar Patel University, Vallabh Vidhynagar, Gujarat in their dissertations since 1997-98 for the purpose of comparing properties involved in the instances of sale and rentals and properties to be valued, for estimating fair market rents of the properties sold and properties to be valued and for estimating fair market values of properties to be valued. The principle aim of this method is to ensure that the subjective element in comparison of properties is eliminated as far as possible and thereby ensure that the comparison is as objective and practical as possible. In view of this aim ascertaining the relative importance of all the relevant factors/aspects and their levels felt by the local population in respect of residential/or commercial properties in a locality concerned and also ascertaining **the priorities** given by them to all the relevant factors of comparison and their levels and **assigning appropriate weightages** to all the relevant factors of comparison and their levels in accordance with such importance and priorities is the most important and crucial step in this method. The efficiency and usefulness of this method in practice depends on assigning appropriate weightages to all the factors of comparison and their levels strictly according to the importance and priorities given to the factors of comparison and to their levels by the people of the concerned locality/area. In this method all relevant factors of comparison and their levels are duly considered without excluding any of the factors. Therefore it is the most practicable method without involving any assumptions and adhocism.

Important steps in the method

The important steps in this method are -

- 1) Identifying relevant factors of comparison and their levels.
- 2) Assigning appropriate weightages to relevant factors of comparison and their levels.
- 3) Preparing weightage Criteria Table.
- 4) Working out Total weightage score for each of the properties rented/let-out and/or sold, and that of the property to be valued.
- 5) Comparing the properties on the basis of total weightage scores, areas and the dates of transaction and estimating fair market rent/value.

Identifying Relevant Factors of Comparison

There are more than 60 to 70 factors of comparison. The criteria or tests for deciding which factor is relevant and which factors is not relevant for comparison of properties

has been also discussed earlier. The relevant factors of comparison and the levels at which those factors are available or provided should be identified.

Assigning Weightages

This is the most important steps in this method. In order to ensure that the weightages assigned to each and every factor of comparison and to each of its levels are appropriate and practical, a valuer is expected to inquire, during his inspection of site, about the relative importance given by the local population to all the relevant factors of comparison and their level, ascertain local preferences in respect of those factors and their levels and assign weightages to the relevant factors of comparison and their levels strictly in accordance with such relative importance and preferences indicated by local people. The weightages so assigned may and normally will vary from locality to locality in one and the same urban/rural area according to local circumstances prevailing in a locality and according to availability of facilities, amenities, services, etc. Assigning weightages, to the relevant factors of comparison and to their levels - subjectively only on the basis of knowledge and experience of a valuer needs to be avoided in any case.

Weightage Criteria Table

Once the appropriate and reasonable weightages are assigned to the relevant factors of comparison and their levels, the next step is to prepare a weightage criteria table which normally varies from locality to locality. The relevant factors of comparison are arranged in the top horizontal row in a logical systematic order with respective weightages assigned to them shown below each of the factors. The levels of the factors to be considered are arranged in vertical columns, from the highest level with higher weightage in the top row and the lowest level with lowest weightage in bottom row. The weightages assigned to the levels of each of the factors are shown in the respective column of each of the factor.

Total weightage scores of properties : Computation of

Having assigned appropriate weightages according to local relative importance and preferences, to each of the relevant factors and their levels, the next step to compute or workout total weightage score of the properties to be valued, and total weightage scores of the properties involved in the instance of rentals and sales. The multiplications of the weightage assigned to the relevant factor of comparison and the weightage assigned to the level of that factor existing provided or available to a particular property, gives weightage score of that factor in respect of that particular property. For example, weightage score for specification of a building and for the water supply are say 5 and 6 respectively and the weightages assigned to the level of these factors in respect of a particular property are say 4 and 3, the weightage scores

of these two factors i.e. specifications and water supply in respect of that particular property will be 20 (5 x 4) and 18 (6 x 3). The summation of weightage scores of all the factors of comparison in respect of a property gives the total weightage score of that particular property. The total weightage scores of all the relevant factors of comparison and their levels can be worked out in respect of the property to be valued and the properties involved in the instance of rentals and sales. It is advisable to prepare a table showing total weightage scores of the properties involved in the instance of rentals and sales and the property to be valued.

Estimating Fair Market Rent/Value by Comparison

While assigning appropriate weightages it is found whether difficult to assign proper weightage for the factor 'Area' of land or flat though appropriate weightages can be reasonably assigned to other factors of comparison and their levels. The area of a property has considerable and major effect on the demand for a property and hence on its market value. The relationship between the change in the area of a property and corresponding change in its market value can be found out by careful and thorough study of the real estate market in a locality after which appropriate weightage for the factor "Area" can be reasonably assigned, till that time comparison between the properties will be required to be carried out on the basis of area, total weightage score (indicating combined effect of all the relevant factors of comparison and their levels), time of transaction and the rate per unit area of rent/market value.

Example

Calculate Total Weightage Score (TWS) considering following factors for property under consideration and instances of sales:

Sr.	Factors	Property under consideration	Instances of Sale – 1	Instances of Sale – 2
1.	Built up area (BUA) (sq. m.)	125	100	145
2.	Distance of Market and Shopping (km)	2	5	1.2
3.	Distance of Railway Station (km)	1.3	6	2.4
4.	Access/Frontage on	40' Layout Road	20' Bye Lane	60' Road

Solution

Weightage Criteria Table, prepared after market inquiries and local preferences, is as under:

	BUA (sq. m.)	Market and shopping (km)	Railway station (km)	Access/ Frontage on
Wt. →	15	6	4	4
Level ↓				
1	Above 140	very far	More than 3	
2	121 to 140	1.5 to 2.0	2.5 to 3.0	20' Bye lane
3	101 to 120	1.0 to 1.5	1.5 to 2.0	40' Layout Road
4	76 to 100	0.5 to 1.0	1.0 to 1.5	60' Road
5	30 to 75	Less than 0.5	Up to 1	80' Road

Factors	Property under consideration	Instances of sale – 1	Instances of sale – 2
Built up area (BUA) (sq. m.)	15 x 2 = 30	15 x 4 = 60	15 x 1 = 15
Distance of Market and Shopping (km)	6 x 2 = 12	6 x 1 = 6	6 x 3 = 18
Distance of Railway Station (km)	4 x 4 = 16	4 x 1 = 4	4 x 2 = 8
Access/Frontage on	4 x 3 = 12	4 x 2 = 8	4 x 4 = 16
Total Weightage Score	70	78	57

B. MARKET APPROACH: COROLLARIES

GENERAL

In developing areas in and around the developed urban areas and if developed area of a town/city many a times transaction of sale in respect of similar and comparable lands are hardly available. In valuing large areas of open lands in or near the developing areas, sale transactions in respect of developed building plots of comparatively much smaller areas only are available; and transaction of sale at similar large open lands are not available. Similarly in cases of valuation of open building plots, in developed area recent instances of sale of similar open building plots in the locality are not available and only recent sale transactions of built-up flats are available. In such cases large areas of open land or building plots to be valued have firstly to be brought on par with the developed plots or built-up flats involved in the recent instances of sale so as to be comparable where after market values of large open lands or open building plots can be valued by market approach. Hypothetical layout schemes or hypothetical building schemes are required to be prepared so that the plots or flats in such hypothetical schemes are brought at par with the plots or flats recently sold in the nearby concerned localities. These methods are known as **hypothetical lay-out and hypothetical building methods**.

Similarly some properties in urban areas are not put to the highest and best possible use or have become obsolete due to change in the circumstances are required to be redeveloped (Redevelopment properties) with a view to realise full potential value which is latent in such properties. In valuing such properties it is necessary – (i) to determine the best permissible use residential or commercial in accordance with the Zoning and Layout Regulations or Development Control Regulations (D.C.Rs.), (ii) to estimate the market value of plot laid out or built up flats or commercial area, (iii) to consider the time required to dispose off the plots, flats or commercial area and to realise the total amount by selling the plots, flats, etc. and (iv) to estimate the cost of development, construction and other costs including development charges payable at the time of obtaining development permission, fees of architect and engineers, legal costs, agent's commission, developers profit, etc; cost of financing the project i.e. interest on capital invested, etc. After deducting from the total amount of realisation duly deferred all such costs, duly deferring the development and/or construction costs for the average period of development and including developers profit (for times spent, efforts made by the developers and some remuneration for risk factor) and interest on capital invested etc., what remains i.e. the residue – is reasonably considered as market value of land. This method is therefore known as **Residual Method**.

In some cases open lands to be valued have much more depth as compared to the land involved in the recent instances of sale in the locality. In order to meet the land to be

valued comparable to the lands involved in the instances of sale, it is divided into suitable belts taking into consideration the depths of lands involved in sale transactions. The market value of each of the belts is then estimated by comparison with lands sold and the total of the market value of such belts represents fair market value of the land to be valued. This method is known as **Belting Method**. This method is also used in respect of commercial properties.

The objective of hypothetical layout or building method or belting method is to estimate fair market value of land. Where the data of recent sale transactions in respect of similar and comparable lands are available, a valuer should estimate market value of a property by comparison by any of the techniques or methods of comparison depending on whether quick and rough idea about the market value is needed or fair and reasonable estimate of market value is required. The quick and adhoc method of comparison will give only rough idea about the market trend while more elaborate and sophisticated method will give fair and reasonable estimate of the market value of a property.

Where however the data of recent sale transactions in respect of similar and comparable lands is **not available then only** the hypothetical layout or building methods should be used and that too **as a last resort**. These methods involve assumptions at almost all the stages and if any of the assumptions, goes wrong it will lead to incorrect or wrong estimate of market value of lands. The Supreme Court of India has arrived at the total deductions varying from 25% to 66.67% for arriving at residual value of land depending on the circumstances of the case. The Supreme Court has, therefore, advised that in view of large number of assumptions involved hypothetical layout and building methods may be used as a last resort only, where data regarding recent sale transactions of similar and comparable lands in the vicinity is not available.

HYPOTHETICAL LAYOUT OR PLOTTING METHOD

General

The objective of the hypothetical layout method is to estimate fair market value of land having large area on the basis of data of sale transaction in respect of small size open building plots, fully or partially developed, where data of recent sale transactions in respect of similar and comparable lands of large size/area is not available.

Steps in the Hypothetical Layout Method

The steps in the hypothetical layout method are as under –

- (1) In the first instance it is necessary to bring the open land under valuation having large area on par with the small size building plots involved in the recent sale transaction in the nearby locality and thereby to make it comparable with such building plots. The first steps in this method is to prepare the best possible layout of the land to be valued, strictly according to the prevailing development control rules or the building bye-laws. It is therefore necessary to prepare a few (usually 4 or 5) alternative layouts providing buildable plots of suitable sizes, duly observing all the requirements of the D.C. Rules or Building bye-laws especially regarding plot sizes (which should also be according to demand in the locality) width of layout roads and percentage of common open space (usually 10% to 15%) and other common facilities, (if so required) and then select the best one giving highest percentage of saleable area of building plots without violating any of the rules and regulations. Normally the best layout gives 65% to 75% area as total saleable plot area. The areas and percentage of common spaces, road area and total plot area (saleable area) should be shown in the layout.

A layout may be prepared for residential building plots, which is usually the case, or commercial plots according to land. Use zoning and more importantly, according to the use to which plots involved in sale transactions are put to.

- (2) To estimate fair market values of each and every saleable building plot by comparing it with the building plots involved in the recent instances of sale in the nearby locality, taking into consideration at least main important factor of comparison like size, situation, location, access and frontage on main or layout road etc. A plan showing instances of the sale and the layout plan of the land under valuation should, preferably, be prepared. On the basis of such estimated market values of plots the total amount realisable (gross realisation amount) by sale of all the plots is worked out.
- (3) The time required to sell all the plots provided in the layout is then estimated **on the basis of data** regarding number of building plots sold in the locality and nearby areas sold during last 5 years, and the number of other duly approved layouts and total number of plots provided in such layout indicating possible competition from other developers. The gross realisation by sale of all the plots is then deferred by the average period for selling plots (i.e. half the total period) at appropriate rate of interest considering the use and the risk involved in the sale of residential or commercial plots.

- (4) To estimate the cost of development including cost of leveling, the cost of providing infrastructure i.e. roads, water supply, sewerage, electricity, street lighting, arboriculture (road side tree plantation) etc. and cost of development of common community spaces like garden etc. including construction of compound wall or fencing and cost of any other development works. The level and quality of the infrastructure development to be provided in the layout should be the same as that provided for plots involved in the instances of sale. For example if the plots sold have access by W.B.M. or Tar road without road side drains, without street lights and without provision of sewerage, the plots in the layout should also be provided access by W.B.M. or black top road without roadside drains and street lighting and without provision of sewerage etc.

The development works should be normally completed atleast one or two years ahead of sale of all plots. The total cost of development works should, therefore, be deferred at appropriate rate of interest by the period of one year less than the average period for sale of all the plot. For example average period for sale of all the plots is three years (i.e. total period of six years for the sale of all plots) the total cost of works should deferred by 2 years (i.e. time for completion of all the development works would 4 years).

- (5) To estimate other costs which include –
- (a) Fees of architect, other consultant, engineer and advocate/solicitor.
 - (b) Development charges to be paid while obtaining development permission.
 - (c) Cost of management developers' on remuneration advertisement etc. This needs to be deferred for average period for project completion.
 - (d) Legal costs (about 1% to 2% of sale price), agent's commission (about 1% to 2% of sale price), stamp duty on sale deeds, etc. This cost also should be deferred for average period for completion of the project.
- (6) To estimate developers profit as percentage on the amount of gross realization by sale of plot and also the time required for completion of the project.

The percentage developer's profit is in inverse proportion to the amount of gross realisation i.e. more the amount of gross realisation lesser the percentage of developers profit and vice-versa.

The percentage of developers profit is in direct proportion to time of completion of the project i.e. more the time higher the percentage of profit and vice-versa.

The developers profit varies from 10% to 20% of the amount of gross realisation.

- (7) To estimate/work out cost of financing the project i.e. interest on capital invested by the developer.
- (8) To estimate market value of land by deducting all the costs and developers profit from the gross realization by sale of all plots deferred by the average project period.

Thus the market value of land is equal to the amount remaining after allowing deductions on account of all the costs and the Developers Profit from the amount of gross realization deferred for the average period for completion of the project. Thus market value of land is the amount of gross realization remaining (residual) after deducting all the cost including the cost of financing and developer's profit. This method is therefore also known as the 'Residual Method'.

The Statement of Valuation

The Statement for estimating the market value of land will be as under: -

- 1) Realization by sale of plots
 - (a) Gross realization by sale of plotA
 - (b) Deferred at% for the average project period B

Income	A x B	(A x B)
---------------	--------------	----------------

- 2) Deduct all costs and Developer's Profit
 - (i) Development Cost C
 - Deferred at ...% for D
 -years

C x D	C x D
--------------	--------------
 - (ii) Fees Arch., Engg., Solicitors and Consultants. E
 - (iii) Development Charges to be paid to Local Planning Authority. F
 - (iv) Cost of management, Developer's remuneration, Legal costs, Commission, G

Stamp duty, etc.

Deferred at% for The average project. period	B		
	G x B	G x H	
(v) Developers Profit		15% A.	
(vi) Interest on Capital		H	
Total Expenditure	{{(C x D) + E + F + GB+15%A + H}}		

3) Market value of Land = Income - Total Expenditure M

Example:

The following example will explain how the value of large size plot is estimated with the help of Hypothetical Layout Scheme.

Example

An investor desires to purchase a plot admeasuring 150 m x 225 m. size in out-skirts area of a town. Prevalent rate of small size plots (400 S.M. to 600 S.M. plot area), in the locality, abutting main road, is Rs.1000/S.M. Garden area required to be provided is 10% of total plot area. Adopt road width at 14 meter and 10 meters. Sale of all plots is likely to take 2 years. Adopt road cost at Rs.200/SM, cost of laying services at Rs.20/SM. Architects fees at 6% of cost of amenities. Assume Developer's profit at 12% and expected rate of return 9%. Ignore legal and stamp charges and adopt brokerage and advertisement charges at 2% of sale price. Advice on fair purchase price of the plot by adopting plotting scheme method of valuation.

Solution : A hypothetical layout is first prepared for the plot (Vide Fig-A).

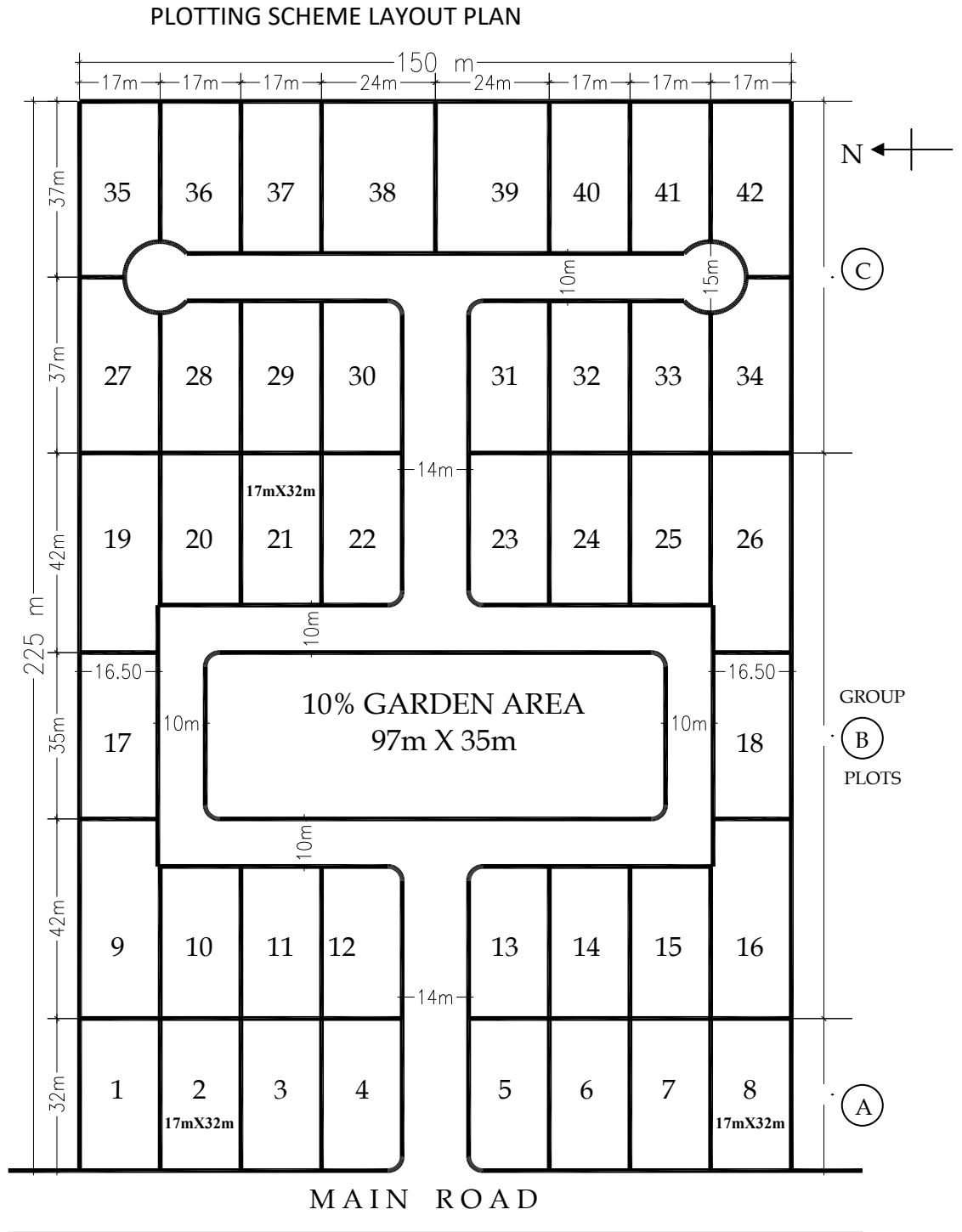


Figure- A

From the fig-A on the previous page, relevant details works out as under.

- TOTAL AREA OF PLOT = 150m X 225m = 33750 Sq. m.
- 10% GARDEN AREA = 97m X 35m = 3395 Sq. m.
- INTERNAL ROAD AREA = (AS PER PLAN Fig-A) = 6196 Sq. m.
- GROUP 'A' PLOTS : PLOT NOS. (1) TO (8) = (8 NOS.)
- GROUP 'B' PLOTS : PLOT NOS. (9) TO (26) = (18 NOS.)
- GROUP 'C' PLOTS : PLOT NOS. (27) TO (42) = (16 NOS.)

In the above layout, Central garden of 97 m. x 35 m. with 3395 SM. area is proposed. 14 meters and 10 meters wide internal layout roads are also proposed. Total 42 plots are proposed which could be divided into 3 groups for value purpose.

Group 'A' Plots : Along main road.

8 Nos. x 17 m. x 32 m. = 4,352 Sq. m.

Group 'B' Plots : (Overlooking Garden) :

12 Nos. x 17 m. x 32 m. = 6528 Sq. m.
 4 Nos. x 17 m x 42 m. = 2856 Sq. m.
 2 Nos. x 16.5 m. x 35 m. = 1155 Sq. m. = 10,539 Sq. m.

Group 'C' Plots : (Last zone)

6 Nos. x 17 m. x 32 m. = 3264 Sq. m.
 2 Nos. x 24 m. x 32 m. = 1536 Sq. m.
 4 plots x 531 sq.mts. = 2124 Sq. m.
 4 plots x 586 sq.mts. = 2344 Sq. m. = 9,268 Sq. m.

Total area of all 42 plots = 24,159 Sq. m.

Area of internal roads.

2 Nos. x 14 m x 64 m = 1792 Sq. m.
 2 Nos. x 10 m x 117 m = 2340 Sq. m.
 2 Nos. x 10 m x 35 m = 700 Sq. m.
 1 No. x 10 m x 101 m = 1010 Sq. m.
 2 Nos. 0.785 x 15² = 354 Sq. m. = 6,196 Sq. m.

(18.36 % of total plot).

As plots with main road frontage have value of Rs.1000/Sq. m., rate for 'A' group plots is estimated at Rs.1000/Sq. m. Rate of 'B' group plots is estimated at Rs.900/Sq. m. and rate of 'C' group plots is estimated at Rs.800/Sq. m. This discount of 10% and 20% is not a fixed percentage and it could vary depending upon town, locality, demand and market trend, evidenced by instances of sale of similar comparable plots.

Value of plots :

'A' Group = 4352 sq.mts. @ Rs.1000/Sq. m.	= Rs. 43,52,000
'B' Group = 10,539 sq.mts. @ Rs.900/Sq. m.	= Rs. 94,85,100
'C' Group = 9268 sq.mts. @ Rs.800/Sq. m.	= <u>Rs. 74,14,400</u>
Total realisation.	<u>Rs.2,12,51,500/-</u>

As sale of all plots will take 2 years period, value is deferred for 1 year at 9% yield.

Present Value (deferred value) of land :

$$212,51,500 \times 0.917 = \text{Rs.}194,87,625/-$$

Say Rs.1,94,88,000/- (a)

From this receivable value following expenses are deducted.

Cost of road construction: 6196 SM @ Rs.200/SM.	= Rs.12,39,200
Cost of amenity water and light: 24,159 SM @ Rs.20/SM.	= Rs. 4,83,180
Cost of Garden development: 3395 SM @ Rs.10/SM.	= Rs. 33,950
Cost of Architects fees 6% of Developer's cost: Rs.17,56,330	= Rs. 1,05,380
Developer's profit @ 12% of 194,88,000 Land value	= Rs.23,38,560
Cost of advertisement and brokerage 2% land value	= <u>Rs. 3,89,760</u>
Total	= Rs.45,90,030
Say Rs.45,90,000/-	(b)

$$\text{Net Realisable Value} = (a) - (b)$$

$$= \text{Rs.}194,88,000 - \text{Rs.}45,90,000 = \text{Rs.}148,98,000/- \quad (c)$$

The investor/developer can be advised to offer a sum of Rs.148 Lacs for the plot.

Assumptions Involved

The number of assumptions are involved in this method. Various ways and means can be adopted and due care can be taken to ensure that these assumptions would be reasonable as possible. The main assumptions in this method and care to be taken in respect of each of the assumptions are discussed hereunder:

(1) The layout is the best possible layout:

In order to eliminate this assumption it is necessary to prepare a few (atleast 4 or 5) alternative layout and select on in which the total area under all the plots, i.e. total

saleable area is maximum possible after following the rules and regulations, and in which circulation pattern i.e. the road system is simple and best possible. A layout thus adopted can be proved to be the best possible.

(2) Time for completion of the project or the time within which all plots would be sold.

Data regarding the number of building plots sold every year in the locality and near about should be collected for last five years. Similarly data regarding the layout approved by the Local Planning Authority and the total number of plots likely to be available for sale and in near future (3 to 4 years) along with the information about the concerned developers may be collected. On the basis of such information the number of plots which can reasonably be sold every year from the hypothetical layout, and the time within which all the plots will be sold can be estimated fairly and reasonably.

(3) Infrastructure development cost and cost of other developments:

These engineering costs can be reasonably estimated on the basis of lengths and quantities and the current District Scheduled Rates (D.S.Rs.) for the concerned works. Care should be taken to provide for escalation of costs during period of completion of the development works.

(4) Rate of interest for deferment:

The rate of interest for deferment should be estimated on the basis of market studies and analysis of sale in respect of similar residential or commercial properties. In estimating the rate of interest due consideration should be given to (i) superior or inferior location of land under valuation which may result in variation up to about 0.25% or so (ii) the fact that investment in land is slightly more secured than that in built-up properties and (iii) the risk involved in sale of building plots within the estimated time frame of the project.

(5) Developers profit:

It has been stated in steps 6, para 3.8.2 that the developers profit is in inverse proportion to the amount of gross realisation by sale of plots and directly proportionate to the time of completion of a project. It is advisable **that** a valuer studies similar development projects in the locality undertaken by other developers, find out the actual profit and its percentage relationship with the gross realisation and the **period** of the projects studied before reasonably deciding the percentage of profit.

The fees of the consultants and agents commission are at the prescribed and prevailing percentage either to the cost of development works or to the gross realisation. Similar

is the case with management and establishment changes. While the amount of stamp duty is charged according to the prices at which plots are sold. The market value of each and every plot is estimated by a valuer by comparison with the rates of market value at which similarly developed and comparable building plots recently sold in the vicinity which is normal practice of a valuer. All such costs and the amount of gross realisation by sale of all the plots are thus reasonable and fair estimates and are not assumptions.

Conclusion

It is again emphasized that since the Hypothetical Layout or Plotting Method involved a number of assumptions it should be used only as a **last resort** where data in respect of sale transactions of similar and comparable open lands having similar large areas, is not available, as has been observed by the Supreme Court of India.

HYPOTHETICAL BUILDING METHOD

The Hypothetical Building Method is adopted in estimating market value of open land in two circumstances or in two types of cases viz –

- (1) In estimating market value of open piece of land in developed areas where data regarding recent transactions in respect of similar comparable open lands is not available and data only regarding recent instances of sale of built up residential flats or built up shops and/or offices is available; and
- (2) In estimating market value of land occupied by built up properties, not put to the highest and best use and not utilizing their full potentials, needing Redevelopment i.e. Redevelopment **Properties**. In this case also data regarding recent sale transactions in respect of similar comparable Redevelopment Properties is not available and the data available is only regarding recent instances of sale in the vicinity in respect of built-up residential flats or commercial accommodation i.e. shops and offices.

In both the cases the land to be valued is required to be brought to the state similar and comparable to that of the properties involved in the sale transactions i.e. residential flats or/and for shops and offices. A hypothetical building scheme is therefore undertaken providing residential flats and/or shops and offices **similar and comparable** to flats, shops and offices involved in sale transactions, **in all respects** including area, specifications and workmanship, provisions similar utility services, amenities and facilities, common services and facilities, etc.

The steps to be taken in the hypothetical building method, assumptions to be made and care to be taken in respect of the assumptions are the same as those in respect of

the hypothetical layout method with the exception that instead of plots built up flats, shops or offices are provided and further the infrastructure development and its cost is replaced by construction of a suitable building and the cost of its construction. Similarly instead of best possible layout, in this method the design of the building for providing built-up accommodation must be best possible, with the best economy in space articulation or accommodation (with high percentage of carpet area to built-up area)

In the case of Hypothetical building scheme in respect of Redevelopment property there would be a few additional item on income side as well as on expenditure side.

These are -

- 1) Income Side : Income from sale of scrap building material.
- 2) Expenditure :
 - (a) Cost of pulling down old building.
 - (b) Cost of buying out or rehousing tenants/occupants of old building.

In case where the developer intends to let out the flats, shops, offices etc. on rent instead of out right sale of accommodation the **sale proceed** or the gross realization by selling the flats etc. on income side will be **replaced by the Capitalised value** of net annual income (capitalised at appropriate rate of interest). In this case also where built-up accommodation is let out, it is absolutely, necessary to allow (and deduct) developers profit for the entrepreneurship and the risk factor and cannot be done away with on account of receiving net income from rent which is return on capital invested i.e. investment, which is quite different from the profit.

The statement of valuation in the hypothetical building method would be similar to that in the case of hypothetical layout method, except for the changes as mentioned in para 3.9.4 and as mentioned above in this para.

Example:

Example: A developer desires to purchase a property by entering in an agreement to sale/purchase to gather with irrevocable power of attorney to get the plans duly approved and enter into agreement to sale flats, etc. and having following details:

Area of plot 1800 Sq. m. old tenanted buildings of ground floor exist in the plot and it has 500 Sq. m. built-up floor areas. Total rent is 2500/month. F.S.I. of zone is 1.00. Replacement cost of building is Rs. 8500/Sq. m. Present sale price of flats in the locality is Rs.50,000/Sq. m. Expected developer profit is 15% on sale value. Interest on borrowed capital is 12% on 15% of sale value for 1½ year period. Assume settlement

period with tenant and complete development at two years and legal cost at Rs. 1,00,000/- Scrap value at Rs.600/Sq. m. Advice on fair price on land purchased to be offered to vendor. It is assume that the builder will get plans duly approved and start selling the flats on the basis of approved plans without waiting for tenant being evicted.

Solution:

Total built-up area under hypothetical building scheme is 1800 Sq. m. Tenants re-housing will take up 500 Sq. m. Area.

Hence net saleable area = 1800 – 500 = 1300 Sq. m.

Net realizable sale value = 1300 Sq. m. @ Rs.50,000/Sq. m.
= Rs.6,50,00,000/-

This sum will not be realized immediately. Project of this magnitude may take say 2 years time for sale of all flats in the project and full realisation of estimated sale value.

It is therefore proper to defer the value at 12% for 1 year i.e. ½ period of realization of total sum.

Deferring value at 12% for 1 year, we get net present value of realisable sum:

$$= \text{Rs. } 6,50,00,000/- \times 0.892$$

$$= \text{Rs. } 5,79,80,000/-$$

Total expenses and outgoings:

(i) Building cost: 1800 Sq. m. @ Rs. 8500/Sq. m.	=	Rs. 1,53,00,000
(ii) Developers profit at 15% of 650 lacs	=	Rs. 97,50,000
(iii) Interest at 12% on 325 lacs for 1½ year	=	Rs. 58,50,000
(iv) Legal expenses.	=	<u>Rs. 1,00,000</u>
Total expenses	=	Rs. 3,10,00,000

Deferred total expenses and outgoing at 12% for 1 year:

$$= \text{Rs. } 3,10,00,000/- \times 0.892$$

$$= \text{Rs. } 2,76,52,000/-$$

Net Income in project = Rs. 5,79,80,000 - Rs. 2,76,52,000
= Rs. 3,03,28,000/-

Total income	=	Rs. 3,03,28,000 + Scrape value
Scrape Value	=	500 Sq. m. @ Rs. 600/ Sq. m.
	=	Rs. 3,00,000/-
Total income	=	Rs. 3,03,28,000/- + Rs. 3,00,000/-
	=	Rs. 3,06,28,000/-
Rate of land	=	Rs. 3,06,28,000/-/1800
	=	Rs. 17,015 per Sq. m.

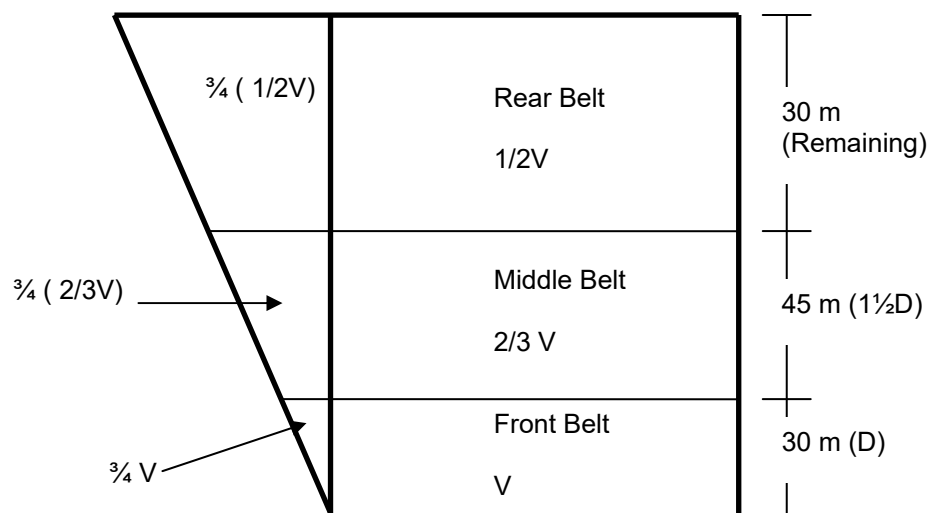
The market value of the property/land is estimated at Rs. 3,06,28,000/-

Note: In view of the assumptions involved, this Hypothetical Building Method also should be adopted as the last resort in absence of data of sale transactions in respect of properties similar and comparable to the land to be valued.

BELTING METHOD

The belting method is also a corollary of Market approach. This method is used where sale transactions only in respect of properties having lesser depths are available, for estimating value of properties with greater depth. This method is especially applicable to commercial properties where income fetching capacity and hence the value of interior portion of a commercial accommodation goes on decreasing. This method is **applicable** in case of **properties in one single ownership**, having greater depths and should **not** be used for estimating values of properties in different ownership situated at different and more depths or distances (i.e. in the interior) from the access road.

This method is based on the principle that front portion of land is more valuable than its rear portion. The total plot is therefore divided into three horizontal belts.



This method also is based on assumptions and thumb rules and hence should be used only where sale transaction in respect of comparable properties are not available. The Supreme Court have given thumb rule to be adopted for estimating Values of lands and properties having greater depth on the basis of rates of market values indicated by lands and properties having smaller depths. In these methods three belts are envisaged. If the depth of first belt on the basis of average depth of properties fronting on the road is "D", the depth of the second belt as per decision of the Supreme Court, shall be 1.5D, and the remaining part shall lie in the third belt. Further if the value of the part of the land or properties laying in the first belt is estimated at the rate of 'V', on the basis of available sale transactions, the Value of the portion in the 2nd belt shall be estimated at the rate '2/3 V' and that of the portion lying in the 3rd belt shall be ½ V. Further the value of the recess portion i.e. portion lying outside the line drawn perpendicular to frontage, shall be taken as ¾ th of the rate of value of the belt in which such recess portion lies.

Example

Example: A large size plot having 150 m road frontage and 400 m depth is required to be valued for purchase. Work out the value of plot by Belting Theory, if nearby small size plots are available at the rate of Rs.300/Sq. m.

Solution: Depths of 1st, 2nd and 3rd belts are adopted at 30 m, 45 m and 325 m respectively. Rates of these belts are adopted at Rs.300/Sq. m., Rs.200/Sq. m. and Rs.150/Sq. m. respectively.

$$\text{Value of 1}^{\text{st}} \text{ belt} = 150 \times 30 \times 300 = \text{Rs. } 13,50,000$$

$$\text{Value of 2}^{\text{nd}} \text{ belt} = 150 \times 45 \times 200 = \text{Rs. } 13,50,000$$

$$\begin{aligned} \text{Value of 3}^{\text{rd}} \text{ belt} &= 150 \times 325 \times 150 = \underline{\text{Rs. } 73,12,500,} \\ \text{Total value} &= \text{Rs. } 1,00,12,500 \end{aligned}$$

Note

This method is heavily dependant on Thumb Rules and hence may be adopted only as a Last Resort.

13.0 Cost approach

13.1 Valuation is a process of estimating the value of rights of various parties in a property as per the terms of agreement. Moreover, it is necessary to see that result does not turn out to be a brick mortar valuation.

In our country, cost approach is widely used for valuation of property even in case of property which can be valued by market and income approaches. Moreover, the cost approach is a contractor's method of valuation, but in our country it is traditionally known as land and building method, thereby it gives an impression that in valuation exercise land and buildings are valued separately which is not correct.

Let us consider three properties (A, B and C) consisting of piece of land with structure constructed by three different owners located side by side and identical in following aspects:

- (a) Square plot of land having a size of 20m x 20m (400 sq.m.) purchased for ₹1.0 cr. two years back
- (b) Zoning is residential
- (c) FAR is 1.0
- (d) Age is 1 year
- (e) RCC construction on ground floor only having built up area 160 sq.m. with an investment of ₹40 lakh in structure.
- (f) Total investment in each property is ₹1.4 cr.

If current land rate and cost of construction per sq.m. are ₹ 30,000/- and 26,500/-per sq.m., respectively then the value of these three properties as per the traditional land and building method will be reported as under:

Value of land $400 \times 30,000$ = ₹ 1.2 crore

Current cost of construction $160 \times 26,500$ = ₹ 42,40,000/-

Building is 1 year old.

Total economic life structure is considered to be 60 years. Scrap value is considered to be NIL.

Depreciation on straight line method for a building one year old

$$= 100 \div 60$$

$$= 1.66 \%$$

Therefore, depreciation = $42,40,000 \times 1.66 \div 100$

$$= ₹ 70,384/-$$

Value of structure	=	42,40,000 – 70,384
	=	₹41,69,616/-
Value of property		
Value of land	=	₹ 1,40,00,000/-
Value of structure	=	<u>₹ 41,69,616/-</u>
Total	=	<u>₹ 1,81,69,616/-</u> Say ₹ 1.82 cr.

Now let us examine whether these three properties if sold in the open market can fetch above price.

The investment in each of the three properties is same i.e. ₹ 1.4 cr. They are also identical with respects to the parameters given above but each owner has constructed the structures as under:

Owner A has invested ₹ 40 lakh in carrying out RCC construction of 160 sq.m. But he has constructed RCC pillar having 160 sq.m area with a height so that total expenditure incurred is ₹ 40 lakh.

Owner B also has invested ₹ 40 lakh in residential building with RCC construction having an area of 160 sq.m. but the arrangement within the building for rooms, bathrooms, kitchen etc. is not as per current market trend.

Owner C also has invested ₹ 40 lakh in residential building with RCC construction having an area of 160 sq.m. but the planning is absolutely as per current market trend.

Though these three properties are identical from the point of view of size and rectangular piece of land, same area of construction, age and investment but marketability is very much affected.

Therefore, when cost approach is used it is essential for valuer to consider whether the property is marketable at the value worked out for land and depreciated replacement cost (where depreciation is considered on account of wear and tear only). If not, then in order to make it marketable, the additional factors out of following, whichever applicable, are required to be considered:

(i) Physical Depreciation – curable:

- Damaged roof top.
- Poor maintenance of external walls.
- Damaged trim.

- Damaged floors.
- Damaged wall finish.
- Damaged trim finish.
- Damaged bath fixtures.
- Damaged kitchen fixtures.
- Damaged plumbing and water supplies.
- Damaged electrical switches and fixtures.
- General wear and tear that is economically curable.

(ii) Physical Depreciation – incurable:

- Loss in value resulting from the wearing out of irreplaceable items.
- Damage to concealed foundations, exterior walls, load-bearing members of roof, structural defects.

(iii) Functional obsolescence – curable:

- Crack or failure in foundations caused by other than poor structural design or workmanship.
- Undersized and weak roof members.
- Inadequacy or absence of baths.
- Obsolete bath fixtures.
- Fixtures or finish below neighbourhood standards.
- Poor kitchen layout.
- Inadequate kitchen cabinets.
- Obsolete kitchen fixtures.
- Obsolete plumbing and water supply system.
- Inadequate ventilating.
- Obsolete ventilating.
- Inadequate electrical wiring.
- Single pane windows.
- Outdated electrical fixtures.
- Insufficient electrical service.

(iv) Functional obsolescence – incurable:

- Oversized foundations.
- Cracked foundations.
- Oversized roof members.
- Column spaces too narrow for efficient parking layout.
- Poor workmanship in walls.
- Poor workmanship in structural framing, oversized or undersized structural framing.

- Oversized, undersized, or poor workmanship in floor and roof slabs.
- Poor quality in workmanship in finished floor.
- Poor quality and workmanship in walls.
- Bath fixtures above neighborhood standard.
- Super-adequacy in electrical wiring.
- Garage too small or super-adequate.
- Architecture poor, unusual, bad floor plan, excessive ceiling height, poor plot plan.
- Excessive wall thickness.
- Any functional characteristic of a building that has become non-functional by reason of new materials, new techniques, or decreased costs.

(v) External obsolescence:

- Architectural over improvement or under improvement for neighborhood.
- Nuisances such as smoke, dirt, noise, odor, traffic, zoning, change in use, rent control, excessive taxes, inadequate transportation, shopping, schools, and parks.
- Local, regional, and national legislation.
- Changes in economic conditions.
- Potential profitability

The drawback in calculating the depreciation is that only depreciation for wear and tear is considered and it does not take into consideration the cost of cure to make the property marketable. **Therefore, depreciated replacement cost worked out is subject to demand and supply/potential profitability.**

In certain instances, recourse may have to be taken to the cost as an evidence of value, particularly in cases where type of the properties under valuation seldom change hands in the market.

This method involves the following four steps in estimating value of a property:

- (1) To estimate fair market value of open land under valuation by comparison with the open lands in the neighbourhood which have been recently sold or purchased. (a)
- (2) To estimate either cost of reproduction or cost of replacement of development i.e. building, as new, at the present day scheduled rates of construction at the site where building is located. (b)
- (3) To estimate fair allowance for depreciation for wear and tear and to deduct the same from cost of reproduction/replacement cost of building. (c)

- (4) Allowance for obsolescence as out lined earlier. (d)
- (5) Market value of property = (a + b) – (c + d)

This method is useful in following circumstances.

- (i) Value of of the properties like Temples, Churchs, Museums, Schools, Colleges, Hospitals and other public buildings which are not sold in the market nor rented and hence Market and Inacome Approaches can not be applied. You can perhaps value Taj Mahal by this method.
- (ii) In case of individual factory building (special purpose buildings) for sale and puchase or for financial statement purpose. For Bank loan or even for taxation purpose. **Such valuation carried out by Cost Approach are subject to potential profitability.**
- (iii) In big factory complex, having different type of structures, this method is useful to arrive at present worth of these buildings and land.
- (iv) For Income-Tax purpose or Wealth-Tax purpose to find out actual funds invested in residential bungalow vis-a- vis declaired cost in I.T. Return.
- (v) For Capitla Gain-Tax purpose or Wealth-Tax purpose also this method has to be some time resorted to by the valuer in certail cases.

13.2 PART - A: LAND VALUE

MARKET VALUE OF LAND

The market value of the land component of the property under valuation is estimated by the Market Approach.

The characteristics of land, various factor for comparision for comparing land and building, various method of comparision including the colories of Market Approach for estimating market value of open land have already been discussed in details in Market Approach.

13.3 PART B: VALUE OF BUILDING

DEFINITIONS: TERMINOLOGY USED IN BUILDING COSTS

After study of valuation of open land and study regarding the method of depreciation in the first semester, we can now study valuation of building. Building of any type is considered as improvements on land. Value of building primarily depends on its cost of replacement or reproduction. It also depends on amount of depreciation and its usefulness on the date of valuation. Various terminology used in connection with the determination of building value are as under.

Historic Cost: It is the actual cost of construction in terms of money as actually spent by the owner, in erecting a building on the plot. It is the first time cost of acquisition of

building as distinguished from cost to the subsequent purchasers. This actual cost is inclusive of cost of labour and cost of building materials and it also includes cost of all works and services like civil, plumbing and electrical works. This actual cost may or may not include contractor's profit. If building is erected under self supervision and by giving labour contract, actual building cost does not include contractor's profit which varies from 10% to 25% or even more in some of the special projects.

Original Cost: To distinguish between cost to first owner and cost to subsequent owners, accountants have coined this word 'Original cost'. In fact both Historic Cost and Original Cost are actual cost to the owner but both are not same. If cost of building in 1990 is Rs.5 lacs to the first owner, and it is sold for Rs. 10 lacs in year 2000 to the new (Second) owner, Rs.Five lacs is Historic Cost of the building and Rs.Ten lacs is original cost to the second owner. To distinguish between the actual cost to the first owner of building (Cost when first constructed) and actual cost to the second owner of building (Price paid for existing building), the words Historic Cost and Original Cost are used respectively. Original cost in reality is the Depreciated Replacement Cost of the building or market value of the building to the new owner of the building. However for the purposes of taking the amounts on balance sheet, word "Original Cost" is generally adopted by the accountants instead of "Actual Cost" or "Historic Cost".

Replacement Cost : It is the most commonly used term in valuation by Cost Approach. It is the cost of construction or cost of creating the new asset (Building/Machine), having identical utility and performing similar functions, as is being performed by the existing old asset, which is assumed to be replaced. The replacement cost in reality is "cost as if new" in the year of valuation.

New asset need not have exactly same specification. It may have improved specification in accordance with latest technology in vogue in the year of valuation. If old timber frame structure with load bearing walls could be replaced at cheaper cost, say by putting up an R.C.C. framed building, replacement cost of old building has to be estimated by assuming as if it is replaced today by R.C.C. framed building. However it should be seen that builtup floor area of new construction is exactly same as old building so that it has identical utility and it will perform similar functions.

Reproduction Cost: This is most mistaken term in valuation. Many valuers make a mistake in considering Reproduction Cost to have same meaning as Replacement Cost. They, therefore, loosely use these words without understanding difference between the two terms 'Reproduction Cost' and 'Replacement Cost'. In fact, reproduction cost is the cost to produce identical asset i.e. exact replica (mirror image) of the old existing asset to be valued. It has not only the same utility and functions but it also has exactly same specifications without taking into consideration improved technology or the present day trend. Building Insurance for a "heritage building" or a property having historical background and with ornamental construction, may require special mention in the insurance policy, about risk for insurance for "Reproduction Cost" as new for the building, instead of insuring asset for "Replacement Cost" as is usually done. Even in land acquisition matters also if ornamental building is acquired, its depreciated

reproduction cost should be considered instead of depreciated replacement cost of the building.

Depreciation: This is the term used to indicate loss in money value of the asset due to age and usage. It may be due to normal wear and tear due to usage, or due to deterioration and decay on account of aging process or weather condition and environmental condition etc. since its creation. It could be due to obsolescence and inadequacy of the asset.

Net Present Value (NPV): The difference, if any, between the present value of the all expected benefits, or positive cash flows, and the present value of Capital outlays, or negative Cash flow.

Net Current Reproduction/Replacement Cost (NCRC): It is worked out by deducting depreciation from Replacement or Reproduction Cost of the asset. The Cost Approach is used for specialized asset for which sale instances are rarely available like large factory etc. and therefore NCRC is subject to potential profitability.

But for building having age of 60 to 80 years, we find that reproduction cost is more than its replacement cost. Hence invariably current replacement cost is considered to arrive at the value in market. For new machine where new cheaper and improved model is not introduced in the market and even for new buildings where no change in trend and technology has taken place, current reproduction cost has to be considered. In such cases Replacement Cost and Reproduction Cost will be same.

This concept of deducting depreciation from Replacement Cost, as if new, in the year of valuation, is based on two basic assumptions.

- (i) It is assumed that prospective buyer, of ordinary prudence, would first consider what would be the cost to him, if he acquires similar brand new asset from the market. (Reproduction Cost new).
- (ii) Second assumption is that such a buyer would also consider "How much less he should pay" for the old asset (Depreciation) which he is actually getting instead of brand new asset.

In these assumptions, time taken for erection of a building or time taken in installation of machine and going into production is not considered.

Another point to be kept in view is the fact that in these workings, Historical Cost (Actual cost some time in the past) of asset is not considered but Replacement Cost and in some cases Reproduction cost is taken as base to deduct depreciation.

13.4 METHODS FOR ESTIMATING BUILDING COST

There are five different methods of estimating cost of construction -

- (i) Book Value Method.
- (ii) Flat Rate Method.

- (iii) Cost Index Method.
- (iv) Detailed Quantity Method.
- (v) Reinstatement Method.

Detailed quantity method is the most reliable method but it is very much cumbersome and time consuming. Hence generally valuers prefer and adopt Flat Rate Method or Cost Index Method for working out the cost of construction i.e. Replacement Cost as new in the year of valuation. However, the Courts consider detailed quantity method as more accurate method.

In making a claim under Land Acquisition Act for non marketable buildings like Temple, Museum reinstatement method is always used.

Book Value Method:

In this method, actual cost (historic cost) incurred in year of construction by the owner is taken as the basis for estimating current replacement cost of the building. By multiplying actually incurred cost of the asset with the cost index factor, the valuer can arrive at the present day replacement cost of the building or the machine.

Example

A residential building was built in the year 1978 at an actual cost of Rs. 500,000/-. If Building Cost Index for year 1978 and 1998 were 125 and 1442 respectively, with 1-10-1976 as base index 100, work out replacement Cost of the building for the year 1998.

Solution

$$\begin{aligned}\text{Replacement Cost in 1998} &= \text{Rs. } 500,000 \times 1442/125 \\ &= \text{Rs. } 57,68,000/-\end{aligned}$$

This Building Cost Index for any locality can be worked out from prevalent rates of building materials and labour, in the locality, in respective years. C.P.W.D. publishes for their departmental use, such indices for different towns in India. Several practicing valuers have their own data bank, of cost of construction for past several years, for the locality where they practice. These details are compiled by them on the basis of their personal experience during their practice. Some other valuers, who do not plan and supervise buildings themselves, collect relevant data from their friends who are practicing as Architects, Engineers or Contractors. With the help of this data, Data Bank of Building Cost Indices for the different year is compiled and updated from time to time.

In book value method, it is very essential to have correct and reliable Historic Cost of the building. Some owners do not maintain proper books of account Records of historic cost of the buildings are also not very clear because phase wise, year wise and building wise building costs are not indicated separately but are all clubbed together in to one single figure. In all such cases, Replacement cost estimation by this method will

give erroneous result. Some factory owners include in the building cost, machinery foundation cost also. Some others, club interest cost on borrowed capital also with the actual building cost. Such figures are not useful in working out replacement cost of building by book value method.

This method ,however ,is very much useful to arrive at present day cost of special type of structures like Air-craft Hangers, Customised factory buildings designed for special industrial requirements , ornamental structures or public utility buildings whose Historical Cost is known.

Example

A Boeing Repair Shop Hanger (Area 11,352 Sq.m) was constructed at Mumbai in year 1999 at the total cost of Rs.68.00 Crores. Find out its present day replacement cost in year 2006, if cost of construction of normal building was Rs.8600/Sq. m. in 1999 and Rs.11,800/Sq. m. in year 2006.

Solution

$$\begin{aligned}
 \text{Historic Cost} &= \text{Rs.}68,00,00,000/- \\
 \text{Present day Rep.Cost.} &= 68,00,00,000 \times \frac{11,800}{8600} \\
 &= \text{Rs.}93,30,23,240/- \\
 &\text{Say Rs.}93,30,00,000/-
 \end{aligned}$$

Though building cost rates given are for residential building and not for hanger building, the rate of building involved in these rates, to a certain extent, would indicate overall price rise in the rates of building materials and labour in the locality, during this 7 years period.

Example

A factory building (Area 1200 Sq. m.) with 30'-0" roof height was constructed in 1974 at the cost of Rs.540,000/-. Calculate its replacement cost in year 1995 if prevalent building construction cost in 1974 and 1995 were Rs.540/Sq. m. and Rs.5900/Sq. m. respectively.

Solution

$$\begin{aligned}
 \text{Historical Cost (1974)} &= \text{Rs.}540,000/- \\
 \text{Replacement Cost (1995)} &= 540,000 \times \frac{5900}{540} = \text{Rs.}58,99,999/- \\
 &\text{Say Rs.}59,00,000/-
 \end{aligned}$$

Flat Rate Method

Flat Rate Method involves estimating the building cost on the basis of unit rate of building area or volume and adopting flat rate of similar construction. The unit of the area of the building, could be net carpet area basis or total builtup floor area basis. It could also be based on the volume of construction. Let us take a Building which has got following data.

Total Carpet Area of building	= 500 Sq.m
Total Built up area of building	= 650 Sq.ms
Total Cubic content of building	= 2000 Cubic m

Cost of construction can be estimated by adopting flat rate method by adopting any one of the above three units as the base of estimation. Result will be the same as under.

Carpet area rate say Rs.1000/S.M.

Building Cost = 500 S.M. @ Rs.1000 = Rs.500,000/-

Builtup area flat rate of Rs.770/S.M.

Builing Cost = 650 S.M. @Rs.770 = Rs.500,500/-

Volume content rate Rs.250/Cubic Metre.

Building Cost = 2000 C.M. @ Rs.250 = Rs.500,000/-

The important aspect in considering and adopting this flat rate is the correctness of basic rates of construction cost, which has to be duly modified to arrive at flat rate applicable to the building under valuation. The basic rate of construction cost can be derived from valuers own data bank and compilations or the rate could be collected from local Contractors or Architects by making inquiries.

Prevalent rates of building cost in urban area and nearby rural area will be quite different. If a residential building costs at the flat rate of Rs.8000/Sq. m. (Builtup area basis) during relevant period of time in an urban area, it is very likely that exactly similar building would cost hardly Rs.5000/Sq. m.,during same period, in adjoining rural area. Thus not only specification of the building but the locality of the building is also equally important in fixing flat rate.

Before finally adopting flat rate, a valuer has to modify basic rate after considering several factors of variation. The basic rate under data bank may have some fixed specifications and standard design. The building to be valued may have superior or inferior specification which will call for suitable adjustment in the basic flat rate.

Adjustment is also required for other factors like shape and design of the building. The building to be valued may have several offsets or having curved shape, which will involve extra cost than rectangular shaped building. Adjustment may also be necessary for design and elevation aspects. The building with heavy architectural features would

cost more than the standard type of design. Floor placements are also required to be considered. Only ground floor building would have much higher flat rate of cost as compared to the rate of cost for two or three storied building. Floor Height variation also requires adjustment in flat rate.

If separate Data Bank of cost is not maintained for residential and factory buildings, a valuer will have to make adjustment for the use of the building also. Factory buildings do not have small size rooms like residential buildings. Number of partition walls are very few and doors and windows are also less in number. Plumbing cost is also much less in factory building. Building height is more for factory buildings. All these call for adjustment in the basic rate, if it is for residential building. It is extremely difficult to modify rate in such a manner. An experienced valuer is also likely to commit some error if several adjustments are required to be made in the basic rate. It is better to avoid such complex adjustments. The Data Bank for factory constructions should be separate so that several adjustments are not required. However adjustment for specification and shape variations are of minor nature and it can be precisely done by an experienced valuer.

Example

A low rise residential building (Area 600 Sq.mts) is provided with marble floors in all rooms. Plumbing and electrification works of the building are of concealed type. As per data bank of the valuer, cost of standard residential building in year 2006, in said locality was Rs.8000/Sq. m. Standard building will have mosaic tiles floor and open plumbing and electrification works. Calculate Replacement Cost of building in year 2006, if marble floor was costing Rs.500/Sq. m. extra over cost of mosaic tiles flooring.

Solution

Basic Replacement Cost	=	Rs.8000/Sq. m.
<u>Add</u> : Extra cost for marble flooring	=	<u>Rs. 500/Sq. m.</u>
Total	=	Rs.8500/Sq. m.

Add : Extra cost at 10% of basic rate for concealed

Plumbing and electrification works. (25% - 15%)	=	<u>Rs. 800/Sq. m.</u>
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Adjusted Flat Rate	=	Rs.9300/Sq. m.
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Replacement cost in 2006	=	600 Sq. m.@ Rs.9300/Sq. m.
	=	Rs.55,80,000/-

The process of working out Replacement Cost of building is as under :-

- (i) First the building is inspected and surveyed by the valuer. Overall measurements of the building and dimensions of all the offsets of the building are taken and

recorded. Measurements of all the floors are also taken. Projections or setbacks on upper floors are also meticulously recorded.

- (ii) Detailed specifications (Civil, Plumbing and Electrical) of the building is recorded. Finishing of different rooms including toilets are also recorded.
- (iii) Actual built-up floor area of the building is worked out and then the same is compared with the area as per municipal approved plan. If any unauthorised work is executed on site, the same is considered or ignored depending upon requirements of the assignment. If work is for cost of construction under Income Tax Act, actual area is adopted. If it is for sale purpose, unauthorised area is normally ignored.

However, a valuer can also consider some discounted value for the unauthorised portion of the building provided that the same can be regularised by the authority as per policy of the local approving authority. Some governments have norms fixed for regularisation of unauthorised works by charging some 'Impact or Regularisation fee'. Some governments have one cut-off date fixed to identify old unauthorised constructions. Buildings built before such cut-off date are called 'tolerated structures' and the same is not to be demolished by the authority. In all such cases, some token value could be assigned even for such unauthorised area.

- (iv) Having fixed total built up area, a valuer can refer to his Data Bank to find out Replacement Cost rate, for the similar building, for the relevant year of valuation.
- (v) If Data Bank for such building is not available, local inquiry is made with local contractors and Architects to find out prevalent cost of construction for such a building.
- (vi) Adjustment in the basic rate is then made for variations in specification and type of design and aesthetics of the building.
- (vii) If development works cost is not included in the basic building rate, cost of compound wall, pavements etc. should be separately added.
- (viii) Final replacement cost is worked out, as if new, in the relevant year of valuation.
- (ix) Depreciation is then allowed for the past age of the building.
- (x) Net final value = Replacement cost - Depreciation.

Compilation for cost of construction (Sample of Data Bank), for a standard residential building, should be prepared by every valuer, for his own personal use, for the area (Town or City) in which he is practicing. Cost Index multiplier factors for the different years can also be worked out from this data bank with respect to one fixed base year. However all these figures will be specific only for the valuer who prepared it and it will change from person to person and town to town. However the multiplier factor worked out from cost rates would certainly indicate price rise or fall (trend) in cost of building materials and it would also include variations in the labour rates, in the said locality, from year to year.

Cost Index Method :

This method is mainly devised and adopted by Central P.W.D. Engineers, for working out quickly, the cost estimates of a building proposed to be constructed by the Central Government, in different parts of the country. These block estimates are not very precise and the same are prepared only for the purpose of obtaining administrative approval of the project and for budgetary sanctions of the project. For tendering and actual execution of the building, detailed quantities of the building are worked out and fairly accurate estimates are prepared.

In cost index method, for the preparation of the basic Cost Index as well as subsequent Cost Indices following procedure is adopted. First one base year is selected. Then standard building design as per government norms is selected. Detailed quantity of said building is worked out as per standard Government specification. The cost per unit area rate for the said building is worked out for said building, for the said base year, as per the rates of various building items prevalent at that time in Delhi. This rate is taken as the base rate of the building, for the said base year having Cost Index of 100. Say for base year 1-1-1992, with Cost Index 100, building cost for an R.C.C. framed building is fixed at Rs.2810/Sq. m. for residential building up to 6 storeys, for the Delhi city. This rate is arrived at by adopting prevalent rate of building materials and labour in Delhi City, in the year 1-1-1992.

Cost Index for the subsequent years after 1992, are worked out by considering price rise in the market in building materials as well as in labour, in Delhi area, in the year of valuation, as compared to the base year, say 1992. Basic Cost Index as well as subsequent Cost Indices, for the other cities of the country, are also worked out in the similar manner by considering price variations in building material rates and labour cost in the base year at Delhi, vis-à-vis cost of materials and the labour, in the year of valuation, in the town or city of the subject property under valuation.

As stated above, the basic rate for cost of residential building, i.e. Rate of Rs.2810/Sq. m., for the city of Delhi, is based on cost of building materials and cost of labour as prevalent in Delhi, on 1-1-1992. If rate of residential building in Chennai is required to be found out, for the year say 2000, the valuer has to find out cost of materials and labour in Chennai in year 2000 and then compare it with rates of materials in Delhi in base year 1992. By this comparison process, valuer can find out cost of residential buildings in Chennai for year 2000 in comparison of Delhi rate of 1992. If cost index of 1992 is taken as 100 and if rates of building materials in Chennai in 2000 were 40% higher, as compared to the building materials rates in Delhi in year 1992, Cost Index of Chennai will be considered at 140 for the year 2000.

Rate of cost of residential building in Chennai in year 2000 will be worked out as: –

$$\text{Rs.2810} \times 140/100 = \text{Rs.3934/Sq. m. in year 2000.}$$

Though this method prima facie appears to be absurd, it does give some idea of comparable costs, in different years, in different areas, because basis adopted is building material rates and labour rates in different areas.

This method invariably calls for adjustment in the basic rate arrived at from cost index working. The reason is that basic rate as per C.P.W.D. Data Bank for year 1992 is for some fixed and standard specification. The proposed building in Chennai may not have similar specification. This will call for adjustments in the Indexed Building Cost Rate.

In this method, C.P.W.D. Data Bank(viz. plinth area rate memorandum with four annexures), gives different basic rates for office building, schools, Hostels and residential buildings for year 1992. It also gives norms for factors of adjustment for variation in floor heights, plinth heights, foundation depth etc. C.P.W.D. changes the Data Bank figures after certain period say 10 to 15 years. Original base year was 1-10-1976, then it was 1-1-1992 and then the base year of 1-9-1999 was fixed with new plinth area rates. However, in the present discussion, 1992 base year figures and statements are considered.

The above referred CPWD memorandum (Data Bank) along with annexure I and Annexure IV are given in Table at the end of this Unit. For details of annexure II and annexure III of the memorandum, which are not included in this Unit, a reference is invited to the Indian Valuer Journal, November 1992 issue or to the Director General (Works) CPWD, Nirman Bhavan, New Delhi.

Normally different District Superintendents publish Cost Index of respective areas under their jurisdiction from time to time, with 1992 or 1999 as the base year. However this Cost Index of specific town or village area can also be worked out directly, by collecting rates of building materials and the labour in the concerned locality and by using cost weightages given in the Annexure IV of this C.P.W.D. memorandum. In this annexure, method of working out Cost Index is given. There are nine items of building materials and labour which are considered for working out new Cost Index. Appropriate weightage of these 9 items are also fixed. The technique of working out new cost index lies in comparing building material and labour rates at Delhi in base year, with the prevalent rate of building materials and labour in required town area, in the valuation year. Following example will explain the cost index working.

It will be appropriate to mention that this Cost Index has to be worked out as laid down in proforma Annexure IV of CPWD memorandum reproduced in the Table at the end of this chapter.

Example

Calculate Cost Index of a small town Vallabh Vidya Nagar in Gujrat for the year 1997 , by adopting 1992 as the base year. Rates of all 9 items at Vallabh Vidyanagar for the year January 1997 are also given as under.

Solution

Rates of 1992 at Delhi and weightages are adopted as per Annexure-IV

Sr.	Items of Material/ Labour	Unit of Item	Rate as on 1-1-1992 at Delhi	Rate on Jan. 1997 V. V. Nagar	Weightage of Material and Labour	New Cost Index (f) = $\frac{(d) \times (e)}{(c)}$
	(a)	(b)	(c)	(d)	(e)	(f)
(i)	Bricks	1000 Nos.	800.00	850	16.00	17.00
(ii)	Sand	C.M.	146.00	124	4.00	3.40
(iii)	Aggregate	C.M.	185.00	247	4.50	6.00
(iv)	Cement	100 Kg	213.28	250	19.00	22.27
(v)	Timber	C.M.	12334.00	31752	9.50	24.45
(vi)	Steel	100 Kg	1342.50	1350	23.50	23.63
(vii)	Mason	Each	55.71	130	8.00	18.67
(viii)	Carpenter	Each	55.71	130	3.50	8.16
(ix)	Beldar	Each	34.30	45	12.00	15.74
				Total	100.00	139.32

From the above working of the costs, we can conclude that the Cost Index at V.V. Nagar in January 1997 was 139 as compared to the cost index of 100 at Delhi in January 1992.

The following example will show how this Cost index figures are used to find out the cost of building in different years at Delhi as well as other towns.

Example

An R.C.C. framed building at Delhi, in 1-1-92 would cost Rs.2810/Sq. m. If Cost Index of V.V. Nagar is 139 in 1997, calculate rate of cost of construction for similar R.C.C. building at V.V. Nagar for the year 1997.

Solution

Rate of cost of construction in 1997 at V.V. Nagar :

$$= 2810 \times \frac{139}{100} = \text{Rs.}3905.90 \text{ Per Sq. m.}$$

Say Rs.3906/- Per S.M.

There are different views on the correctness of this method.

- (i) First of all, the plinth area rates and weightages are for Government buildings having special type of economic planning and economic specifications as stated in Annexure II of CPWD memorandum. Buildings in private sector are having quite different specification and this will call for many many adjustments in plinth area rates derived from Cost Index calculations. So many adjustments in basic rate will defeat the very purpose of Cost Index Method.
- (ii) The weightages adopted for 9 items under Cost Index proforma (Annexure IV) may also be true for Government buildings and not for private sector buildings. If we look at these weightages, we will find that for R.C.C. framed building weightage for bricks is adopted at 16%. This is too high. It will not be more than 5% for framed building. Timber is taken at 9.50% weightage because wooden windows and doors are not permitted for Govt. buildings. In fact in private buildings, use of wood is as high as 18%. Most important item viz. floor tiles in rooms and toilet block is totally ignored in this working. In actual private construction buildings, cost of floor tiles and dado is as high as 9%. Thus basis of arriving at New Cost Index viz. weightages adopted for buildings itself is not beyond doubt and needs correction.
- (iii) The same weightages are adopted and used for all types of buildings i.e. load bearing structure, R.C.C. framed building, residential building, school building etc. Weightages of building materials for all these types of buildings vary substantially. Atleast weightages for R.C.C. framed and load bearing structures should be prescribed separately.
- (iv) Another limitation of this method is the fact that it does not provide for adjustments for different type of building materials adopted in building construction in different parts of the county. In some parts like Assam, wood is extensively used in building construction, as said material is readily available very cheap, locally. Similarly in the other parts like Maharashtra, Rubbles and stone are extensively used in construction as it is available very cheap locally. In Rajasthan, large stone slabs are used as floor and ceiling materials instead of R.C.C.slabs. These aspects are not considered in the CPWD annexure IV and basic rate costing.
- (v) Again the concept of arriving at building cost for year 2006, in any town of this vast country, from basic cost of building at Delhi in year 1992, itself prima facie appears illogical and unscientific. State wise basis would be more appropriate.
- (vi) This method is adopted by C.P.W.D. Engineers for cost estimation purpose before construction and not for arriving at the fair cost of completed buildings. In valuation practice, this method is adopted to find out actual cost of the completed buildings for Income Tax purpose or to find out replacement cost of such existing building for sale or Bank mortgage purpose.

For approximate cost estimation of a building which is yet to be constructed, this method may be appropriate .Some approximation in such cost estimates will not

materially damage the budget provision. But for actual cost of building estimation or for sale and purchase and mortgage purposes, where higher precision in the cost estimation and higher degree of accuracy is required in estimation process, adoption of this cost index method may not be proper. It may not completely satisfy expectations of valuers and users of a valuation report. In all such cases, adoption of detailed quantity survey method of working out building cost, would be more appropriate.

With all these limitations also, this method can not be totally ruled out as a useless method. What is required, is suitable modifications to remove its limitations.

A valuer can make his own proforma with his own weightages as found by him in his area or state. Even rates of building materials and labour for base year, could be as prevalent in his own state instead of Delhi rates. This will give more authenticity to this method. However while doing such drastic changes; care must be taken by the valuer to work out in great detail basic quantities of building materials and labor required for standard type of building in his area.

Even detailed quantity of all building items and market rates of all such items including cost of plumbing and electrification works for the base year will have to be worked out and preserved for proving or for evidence at later date. Only then adoption of such a modified Cost Index calculations will be acceptable to the concerned authorities and Court.

Example

A valuer practicing in Mumbai has worked out following weightages for low-rise R.C.C. framed building (G + 3) in suburban areas of Mumbai for the base year 1980. Rates of building materials and labour in the locality as in 1980 are also given. Cost of R.C.C. framed building as per these weightages and rates as in 1980 were Rs.75/Sft. excluding cost of plumbing and electrification works.

Calculate Cost Index for the same locality for year 2004 from cost of building materials and labour given below. Also calculate total cost of 10,000 Sq. Ft. R.C.C. framed building for the year 2004 if plumbing and electrification cost is 18% of civil cost.

Solution

Sr.	Items of Material/ Labour	Unit of Item	Rate as on Mumbai as on 1-1-1980	Rate at Mumbai as on 1-1-2004	Weightage of Material and Labour	New Cost Index (B x C) A
			A	B	C	D
(i)	Bricks	1000 Nos.	300	2000	4.80	32.00
(ii)	Sand	CM	85	530	5.80	36.00
(iii)	Aggregate	CM	88	714	3.20	26.00
(iv)	Cement	100 Kg	54	300	20.70	115.00
(v)	Timber	CM	5500	44100	18.40	147.50
(vi)	Steel	100 Kg	442	2200	18.10	90.00

(vii)	Tiles	10 Sq. m.	350	1200	9.10	31.20
(viii)	Mason	Each	40	150	6.22	23.30
(ix)	Carpenter	Each	35	150	4.14	18.00
(x)	Coolie	Each	8	60	9.54	72.00
Total					100.00	591.00

Cost of construction (civil works) in 2004 = $75 \times 591/100$ = Rs.443.25/Sft.

Add : 18% for plumbing and electrification = Rs.79.78/ Sq.Ft.
 Total cost = Rs.523.03/ Sq.Ft.

Say Rs.523/- per Sq.Ft.

Total cost of building in 2004 = $10,000 \times 523$ = Rs.52,23,000/-

The above example shows the method how Cost Index Method could be favourably used with any base year, if a valuer has authentic data of prevalent material rates for base year and current year and also correct weightages of building materials used in construction.

It is a matter for research for enterprising valuers to investigate and work out correct weightages of building materials and labour utilised in different type of buildings in private sector works. Separate weightages should be worked out for different types of buildings as under:

- (i) R.C.C. framed building (Low rise) say G + 3 upper floors (Residential).
- (ii) R.C.C. framed building G + 6 and above (High rise) with lift (Residential).
- (iii) R.C.C. framed G + 2 (Factory/Godown building).
- (iv) Load bearing structure Ground + 1st floor (Residential).
- (v) Factory/Godown building Ground floor (R.C.C.column and Steel roof truss).
- (vi) R.C.C. framed Ground + 2 upper (School building).

The findings of such a research will be an eye opener. Not only brick, steel and cement weightages will vary substantially but even corresponding labour cost weightages are also bound to be quite different from those suggested and adopted by C.P.W.D.

There is also a great need for a valuer to know percentage of total civil work cost that is incurred at different stages of construction. These percentages also will differ for say residential buildings and factory building. It may also vary from locality to locality. Cost incurred at different stages will not be same for the rural area and the urban area. These details are necessary for the valuer, when he has to certify cost of funds utilised in the building construction, while the work is still under construction. Banks, LIC and other financial institutions, invariably ask for such a cost certificate, before release of further funds to the borrower. All these workings are also not fixed and it is not having universal application. Each valuer should himself work out these details from any one completed building in his locality, where full and correct cost details with vouchers are available for said work.

Detailed Quantity Survey Method

This is most reliable and accurate method of valuation for cost estimation purpose for a building. This is therefore most favourable method of Courts also.

- (i) In this method, detailed quantities of all civil work items, carried out in the completed building, are worked out.
- (ii) Then prevalent rates of such civil works items, as quoted in market in year of valuation, are adopted. These details will give correct cost estimate of the building.

Normally current scheduled rates of P.W.D. of the concerned locality, for relevant year of valuation, are adopted. However some valuers adopt C.P.W.D. scheduled rates and some valuers adopt quoted or tendered rates of civil work contractors for the concerned year for construction works in private sector. Any one of these rates can be adopted, provided, the valuer is able to prove and justify that said rates did prevail in the market, in the concerned locality, at the relevant period of time. Valuer can also prove correctness of these rates by independently deriving item rate working, from Rate Analysis of particular civil work items which would be based on the prevalent rates of the building materials and labour rate, in the locality, in relevant year.

Quantity surveying methods are outside the scope of this study book.

Reinstatement Method :

This method of estimating cost is similar to the Detailed Quantity Survey Method of estimating the cost, with the difference that depreciation is not deducted from reproduction or replacement cost. As stated earlier this is normally used while filing claims under the Land Acquisition act for the non marketable properties like Temple, Masjid etc.

Even while insuring House or factory, some owners insure the buildings for Reinstatement value and not for the Depreciated Cost basis. Here also full reproduction cost is considered without deducting depreciation.

When any religious building (Temple/Masjid) is required to be shifted due to land acquisition or road widening, government or local authority reinstates the said structure elsewhere or gives full compensation for the reinstatement by owners, along with other incidental costs.

In order to reinstate such building, suitable alternative and equivalent open land in the same or nearby locality is granted and building providing similar/same facilities, amenities etc. required for purpose as provided in the existing structure but without any extravagance and ornamentation is constructed where such original purpose can be served or activities performed. The cost of purchasing such equivalent open land and the cost of construction of such building is wholly considered as value for reinstating such religious or public building, along with the other incidental costs.

Since the original purpose is to be reinstated in a newly constructed building, NO DEPRECIATION is allowed or deducted.

In addition to the above costs, the incidental cost of shifting of articles, objects etc. to the new building and cost of consequent religious functions for shifting and reinstating the Deity etc. are included in the total value of such building, estimated by Reinstatement Method. This method is usually required to be followed in acquisition of such religious or special public buildings (which are rare cases).

The following various types of examples are given with solutions, indicating how by use of this method, value estimation of the land and building is worked out.

Example

Ground floor of a residential bungalow was constructed in 1985 at the cost of Rs.350,000/-. First floor was constructed in 1990 at the cost of Rs.600,000/-. Work out Replacement Cost of bungalow for the year 2003, by Book Value Method, if Building Cost multiplier factor with 1960 as base year, for year 1985, 1990 and 2003 were 14.16, 27.08 and 87.50 respectively.

Solution

$$\begin{array}{rcl}
 \text{Gr. Floor Replacement Cost} & = & 350,000 \times \frac{87.50}{14.16} & = \text{Rs.21,62,782} \\
 \\
 \text{Fr. Floor Replacement Cost} & = & 600,000 \times \frac{87.50}{27.08} & = \text{Rs.19,38,700} \\
 \\
 \text{Total R.C. in 2003} & & & = \text{Rs.41,01,482} \\
 \text{Say} & & & \text{Rs.41,00,000/-}
 \end{array}$$

Example

A factory building having 1000 Sq. m. built-up floor area is constructed in year 1990. Total area of plot is 5000 Sq. m. Replacement cost of building in March 2004 is Rs.7500/Sq. m. Land rate for industrial user is Rs.1000/Sq. m. now. Value the property today for Bank loan purpose.

Solution

$$\begin{array}{rcl}
 \text{Land value} & = & 5000 \text{ Sq. m. @ Rs.1000/Sq. m.} \\
 & = & \text{Rs.50,00,000} & \text{(a)}
 \end{array}$$

Building Replacement Cost

$$\begin{array}{rcl}
 & = & 1000 \text{ Sq. m. @ Rs.7500/- Per Sq. m.} \\
 & = & \text{Rs.75.00,000}
 \end{array}$$

Less : Depreciation for 14 years.

$$= 0.9 \times 75,00,000 \times 14/60 = \text{Rs.}15,75,000$$

Net Present Value

$$= \text{Rs.}75,00,000 - \text{Rs.}15,75,000 = \text{Rs.}59,25,000 \quad (\text{b})$$

Total value of factory

$$= \text{Rs.}50,00,000 + \text{Rs.}59,25,000 = \text{Rs.}1,09,25,000/- \quad (\text{c})$$

Example

A residential load bearing structure having 280 Sq. m. builtup floor area is constructed in 1965 at Delhi. Area of plot is 650 Sq. m. Calculate value of property as on 1-4-1981, if prevalent land rate in 1981, in locality was Rs.1200/Sq. m. Cost Index for Delhi in 1981 was 176 with base year 1-10-1976 as 100. Rate for bungalow in 1976 was Rs.325/Sq. m. Plumbing cost/unit was Rs.6000 and electrification cost was Rs.5700/unit as per C.P.W.D. memorandum of 7-7-1979.

Solution

Value of land in 1981

$$650 \text{ Sq. m. @ Rs.}1200/- \text{ Per Sq. m.} = \text{Rs.}7,80,000 \quad (\text{a})$$

Building Replacement Cost as on 1-10-1976

$$\begin{aligned} 280 \text{ Sq.mts @ Rs.}325/\text{Sq. m.} &= \text{Rs. } 91,000 & (\text{b}) \\ \text{Add for plumbing cost} &= \text{Rs. } 6,000 \\ \text{Add for electrification cost} &= \underline{\text{Rs. } 5,700} \\ \text{Total R.C. in 1976} &= \text{Rs.}102,700 \end{aligned}$$

$$\begin{aligned} \text{Replacement cost in 1981} &= 102,700 \times 176/100 \\ &= \text{Rs.}180,752 \quad (\text{b1}) \end{aligned}$$

Allow depreciation for 20 years:

$$0.9 \times 180,752 \times 20/60 = \text{Rs. } 54,225 \quad (\text{b2})$$

$$\begin{aligned} \text{Net present value 1981} &= \text{Rs.}180,752 - \text{Rs.}54,225 \\ &= \text{Rs.}126,527 \quad (\text{b3}) \end{aligned}$$

$$\begin{aligned} \text{Total value of property in 1981} &= \text{Rs.}780,000 + \text{Rs.}126,527 \\ &= \text{Rs.}906,527 \\ \text{Say Rs.}907,000 & \quad (\text{c}) \end{aligned}$$

Example

An R.C.C. framed residential family house was built in year 1969 at Nagpur. Built-up floor area is 200 Sq. m. on ground floor and 100 Sq. m. /floor on each of 1st and 2nd floor. Total plot area is 1200 Sq. m. Calculate sale value of property as in March 1989 if Building Cost Index of Nagpur was 394 in 1989 with Delhi Base year 1-10-1976 as 100. Building cost for base year was Rs.385/Sq. m. and plumbing and electrification costs were Rs.6000/unit and Rs.5700/unit respectively. Prevalent land rate in 1989 was Rs.800/Sq. m. Building is wholly provided with marble floor. Marble cost was Rs.250/Sq. m. and mosaic tile cost was Rs.60/Sq. m. in 1989. Allow depreciation by Sinking Fund Method. Adopt 3% rate of redemption.

Solution

Value of land : 1200 SM @ Rs.800/SM.		= Rs. 960,000 (a)
Replacement cost of building :		
200 S.M.+ 100 + 100 Sm = 400 SM @ Rs.385/SM.	= Rs. 154,000	
Plumbing cost in 1976; 3 x 6000	= Rs. 18,000	
Electrification cost 3 x 5700	= <u>Rs. 17,100</u>	
Replacement cost at Delhi in 1989	= Rs. 189,100	
R.C. at Nagpur in 1989 = 189,100 x 394/100	= Rs. 745,054 ... (b1)	
Add for cost difference of marble and mosaic flooring Rs.250/SM - Rs.60/SM.	= Rs.190/SM.	
Total 400 SM. builtup – 15% = 340 SM. carpet.		
Extra cost = 340 SM @ Rs.190/SM.	= Rs. 64,600 ... (b-2)	
Total building cost = Rs.745,054 + Rs.64,600	= Rs. 809,654	
	Say Rs. 810,000 ... (b-3)	
Depreciation @ 3% for 20 years 0.9 x 810,000 x 0.0061 x 26.87	= Rs119,488 ... (b-4)	
Net Present Value 1989 = 810,000 - 119,488	= Rs. 690,512 ... (b-5)	
Total sale value of property = Rs.960,000 + Rs.690,512 = Rs.1650,512		
	Say Rs.16,51,000/- (c)	

13.5 Limitations of Cost Approach

Valuation by Cost Approach has the following limitations:

- (1) The Cost Approach considers only the supply side and neglects demand side. It is therefore advisable to adopt Cost Approach as a last resort.
- (2) This method is not helpful in estimating values of premises which are rented.

Particularly in India as majority of rented premises have frozen rent i.e. controlled Standard Rent. Value of such property by this method would be many times more than its saleable value. In such a case help of rental method of valuation is required to be taken to estimate its market value.

- (3) Value by land and building method in certain areas is found to be much higher than its actual realisable value in the open market even if it is not tenanted but vacant or owner occupied. Particularly in the less populated deserted region or in area where paying capacity of people in the region is very low, value fetched in market is much lower than its actual cost. In such cases also help of rental method has to be resorted to by the valuer, by estimating probable rental value of such premises.
- (4) Land with building will need adjustment in estimated total value because land married with structure does not fetch same price in market as an open plot of land or virgin land.
- (5) In some cases building valuation is required to be done by quantity survey method which is very time consuming and involves very cumbersome and long procedure.
- (6) The modern design, planning, specification and aesthetics of the building many a time out-weighs age factor or depreciation aspect. This is the reason why good old buildings fetch much less price in the market than its value worked out by cost approach. Even if appropriate depreciation for age of the building is allowed market worth does not correspond to worked out value.
- (7) If the property is not put to highest and best use (full F.S.I. not consumed) sometimes existing building in plot has to be valued at scrap cost instead of depreciated cost, even though its physical and economic life is more.
- (8) Building cost estimated by Cost Index Method is controversial. There are too many adjustments and additions. Again adoption of Delhi based cost index for

all India towns is illogical and improper. The value estimated will be thus quite different than its actual market worth.

- (9) Let us consider a case of RCC building having same specification constructed in Mumbai city, Mumbai suburbs, Thane and Navi Mumbai.

If a building with same specifications is constructed in Sion, Kalbadevi and Girgaon, the cost of construction will not be same on account of following reasons:

- a. In Kalbadevi and Girgaon area heavy vehicles are not permitted during day time.
- b. Arrangement for storage of building material is to be made near to the site.
- c. Labours have to come from long distance for work.

All these factors add to the cost of construction but not more than 30% than the cost of construction in Sion.

The cost of construction of a building with same specification in Sion shall not exceed 10% than the cost of construction in Mumbai suburbs, Thane and Navi Mumbai.

The cost of construction under cost approach to be adopted based on the cost of building material and labour at the site where property is located. Adopting the cost of construction based on cost of construction at Delhi and modifying with cost index for various parts of the country is not a reliable indicator.

14.0 Recapitulation

INTRODUCTION:

It is necessary that a student of valuation (including a practicing valuer who is expected to be a learner all the time) should have crystal clear understanding about the basic principles of valuation and the simple elements of the three approaches to valuation which should be so ingrained in his mind that he should be able to express them in precise words at any point of time. With such clarity of fundamentals and their simple logical application a valuer will be able to successfully deal with any crucial problem in valuation which he may come across in actual practice. No revision of these fundamentals of valuation will ever be enough.

14.1 GENERAL

The entire structure of real estate valuation stands on the foundation of four basic and fundamental concepts of

- Value
- Interest in a property which is the subject matter of valuation
- Benefit
- Security

A valuer must therefore firstly acquire a thorough and crystal clear understanding and grasp of these fundamental concepts, and secondly he must put to use common sense and logical thinking based on the fundamentals.

14.2 Cost, Price, Value and Valuation:

Cost is the price paid for goods or services or the amount required to create or produce the goods or services. When goods or services are referred to its cost is a historical fact. The price paid for producing goods or services becomes its cost to the buyer.

Price is a term used for the amount asked, offered, or paid for goods or services. Sale price is a historical fact, whether it is publicly disclosed or kept confidential. Because of the financial capabilities, motivations, or special interests of a given buyer and/or seller, the price paid for goods or services may or may not have any relation to the value which might be ascribed to the goods or services by others. Price is, however, an indication of a relative value placed upon the goods or services by the particular buyer and/or seller under particular circumstances.

Value is an economic term referring to the price most likely to be concluded by the buyers and sellers of goods or services that is available for purchase. Value is not a fact, but an estimate of the likely price to be paid for goods and services at a given time in accordance with a particular definition of value. The economic concept of value reflects a market view of the benefits that accrue to one who owns the goods or avails himself of services as on effective date on valuation.

In the context of value, it is worthwhile to have an idea of two expressions 'value-in-exchange' and 'value-in-use'.

Value-in-exchange is the price that would tend to prevail in a free, open and competitive market on the basis of an equilibrium set by the forces of demand and supply.

Value-in-use is the worth of an asset to a specific user or set of users. As value-in-use is related to specific user's needs, it is often referred to as subjective value. Bridges, roads, flyovers and other infrastructural assets are generally not exchanged and they have value-in-use and their value depends on benefit derived by the society.

Value of a thing/commodity in terms of other thing/commodity i.e. power of one commodity to command over other commodities in transaction of exchanges, is known as exchange value. When however, an object/commodity is exchanged for and is measured in terms of standard monetary unit i.e. money, it is known as 'Price' of a commodity. Price is determined by the on-the-spot interaction of demand and supply. Price tends to restore the balance between supply and demand and is in fact a mechanism balancing demand (at a price) and supply (at a cost). Price thus takes into consideration both demand schedule and supply schedule. When we say 'market value' it actually refers to market exchange value or 'market price'.

It is note-worthy to mention that in certain countries 'market value' is also known as 'Fair Market Value' and 'Open market value'.

In India unaccounted money plays an important role in real estate transactions and market operates in a peculiar way. International Valuation Standards Committee stresses that a valuer must carefully analyze and reflect the actions and attitudes of market. Due to unaccounted money price not being fully disclosed. IVSC definition of price mentioned earlier covers this aspect of disclosing price fully or partly. Unaccounted money varies from transaction to transaction and unless one is involved in transaction, one would hardly know about it. But it is a fact that unaccounted money is intended to evade taxes.

Therefore there is a misconception in India that Fair Market Value is estimated without consideration of unaccounted money. In fact, valuers in India provide the services with

the limiting condition about unaccounted money and therefore he has to carry out the detailed exercise of identifying genuine transactions.

Calcutta High Court in case of Competent Authority and Others Vs. Smt. Bani Roy Chowdhary and others have held that :-

The untrue statement about the agreed consideration is made only for the purpose of evasion of tax. When the Govt. or any statutory body is a party to the transfer, the question of evasion of tax does not arise. In the instant case, the LIC is the transferor and it is impossible to think that it would allow respondent no.1 to make an untrue statement in the conveyance regarding the consideration as agreed to between them.

A valuer has to create his own data by contacting parties to the transactions, agencies involved in real estate development.

Valuation

Valuation of immovable property utilizes logical processes which are dictated by and justified by the generally established findings of land economics. In order to have a sound valuation technique it is necessary to have some knowledge of the economic background of immovable property values. This is so because the values with the estimation of which the valuation is concerned are the consequence of interacting economic forces.

The valuation process takes into account uses of land, productivity of land, land policies, geography, transportation, natural resources and alike value phenomenon. In the valuation of immovable property, one values "properties". Property refers to certain rights which an individual enjoys by virtue of ownership of wealth. Wealth consists of useful things owned by man. Wealth and property differ. The former is the material thing; the latter is the right to use the things. The valuation technique is concerned with the valuation of the rights of ownership. One who owns wealth possesses certain rights, which are simply the rights to enjoy the benefits of wealth. It is the possession of these rights which constitutes property. These property rights are not material things but are merely abstract relationships and may be included under the term 'ownership'. Since past benefits expire with time, the property consists only of rights to future benefits. Property may be defined as rights to future benefits arising from ownership.

Immovable properties may consist merely of land or of land and improvements. Improvements may be to the land or on the land. Construction of a building on the land is an improvement on the land. Improvements like providing means of access, drainage, services etc. are also improvements to the land.

Land has productive capacity, but not without the application of labour and capital on it. In the case of agricultural land, labour for cultivating it and the working capital in the shape of seeds, fertilizers and water have to be provided before it becomes productive. Labour and capital have similarly to be applied to the urban land before it is productive.

In the combination of these factors (land, labour and capital) economist distinguishes wages, interest and rent. The services of labour are reckoned as wages, and the services of land as economic rent. In this system the product of land, viz., rent, was considered residual quantity remaining only after enough portion of the product had been allocated to wages and interest to satisfy the demands of labour and capital.

In the development of valuation technique there is a practical identity between the elements of the product, except that the return to land is residual in character and the value of land is an appropriate proportion of the joint product which remains after adequate returns to labour and capital.

Land has value because on the application of capital and labour the joint product produces rents or services which are sufficient not only to meet the interest charges on the cost of labour and material, but also leave residual income attributable to land.

Immovable properties have value because they serve mankind and can satisfy their wants. The differences in the quality and advantages of immovable properties are the difference in the utility. These differences of various kinds of properties have brought about competition between individuals in the possession of particular property and recognition of relative worths. Sales, exchange and renting of immovable properties have given them values. The differences in exchange values or prices will be found to be a reflection of difference in potential productivity that is future benefits. These future benefits may be in terms of money income or in terms of amenities.

The method of valuation of immovable property comprises a technique of estimation.

The valuation technique is concerned with valuation of the rights of ownership.

It is the possession of these rights which constitutes property.

Since past benefits are expired the property consists only of rights to future benefits. Property may be defined as rights to future benefits arising from ownership.

It is the failure to recognize this economic principle that produces disagreement between valuers. On the one hand these are those who see in a property a physical thing or an area of land limited by boundaries, a pile of bricks, mortar, steel, cement, timber and with a street address. These men say "there is the thing"; that is what we

are going to value. On the other hand, there are those who see in a property not only its physical features, but its legal and economic characteristics. Such valuers are not valuing the advantages of the ownership of the physical property.

A purchaser of immovable property purchases it on the expectation of future productivity. The price he would pay, i.e. the capital value of the property is proportional to the character, importance and the extent of the future productivity anticipated by him. The degree of certainty attached by him to the future productivity, the period of time for which it will continue, the amount of it, and the tendency to increase or decrease over the years - all reflect into the capital value of the property to him. He first estimates the quantity, quality and duration of anticipated future productivity into a capital sum which is known as capitalization. It will be seen that the anticipated productivity is the primary consideration in the purchase. The capital value is secondary in character and derived from it.

It is now a well-established fact that immovable property market is an integral part of the investment market and therefore, the same factors which influence the investment market will influence the immovable property market.

14.3 INTEREST IN A PROPERTY: SUBJECT MATTER OF VALUATION

General

The subject matter of valuation i.e. what is to be valued is the 'interest' in a property and **NOT** the physical asset comprising of land i.e. soil, morum etc., and building i.e. bricks and mortar, steel, cement etc. 'Interest' is defined as "Right to derive **benefits** by **use** of a property". A person interested is a person who has legal rights of deriving benefits by putting a property to use.

Types of Interests

A person may have legal right as

- (a) An owner or lessor including legal heirs bearing right to derive benefits in perpetuity
- (b) Lessee having right to derive benefit of profit rent (difference between fair market rent and rent reserved (payable) under the lease/sublease or for a limited (short term or long term) period of lease, sublease etc.
- (c) Monthly tenant, protected or unprotected, holding property from month to month i.e. extremely limited period of 30 days and therefore virtually having no right to derive monetary right except as may be provided by law
- (d) Licensee occupying property by specific permission (usually from the owner) to do so at the pleasure of owner (i.e. so long as the owner pleases) and

having no right to derive any benefit except of occupying the property on payment of license fee.

Important Aspects

In estimating fair market value of an interest in a property, three important aspects are required to be considered. These are:-

- 1) **Net Income:** The amount of annual Income that can be legitimately expected to be derived by a person interested by putting property to lawfully permissible use including highest and best permissible use i.e. including potential use. In the case of freehold interest the net income would be gross income at the fair market rent less all types of outgoings including annual taxes annual repairs etc. In the case of lessor, net income will be rent reserved under the lease for the unexpired period of lease and after such period, reversion to net annual income of fair market rent with deduction of all annual outgoings. In the case of lessee, sub-lessee etc. net income would be annual profit rent i.e. fair market rent (or rent reserved under sub-lease) less rent reserved under lease or sublease as the case may be. In the case of a tenant or licensee he is permitted to occupy or enjoy use of property only on payment of rent or license fee and normally he is not legally expected to derive any monetary benefits by transferring or assigning the property.
- 2) **Time Factor or Period:** A free holder can enjoy the net income from a property, in general, in perpetuity. In case of land, net income would be perpetual. In case of building net income can be enjoyed for the future life of the building. If such future life is sixty years or more, it is considered as perpetual and in case the future life is less than 60 years, net annual income can be capitalized for perpetuity allowing deduction of cost of reconstruction of the building deferred for the future life of the building. In the case of lessor he is entitled to receive (i) lease rent for the unexpired period of lease and (ii) fair market rent after the unexpired period of lease i.e. reversion to net income (fair market rent less outgoings) in perpetuity, deferred for unexpired period of lease. In the case of lessee or sublessee the period for which he can enjoy profit rent is the income receivable during unexpired period of lease.
- 3) **Security or Rate of Interest for Capitalization :**

The rate of interest for capitalization of net annual income for the appropriate period should be estimated by the study of the real estate market in the area concerned. Temptation to adopt ad hoc rate of interest should always be resisted.

14.4 BENEFIT

General

Expecting or anticipating benefit is one of the natural instincts of all living creatures. No one acts or takes any action unless there is some benefit existing or anticipated. Benefits can be tangible or/and intangible and are ultimately measured/counted in terms of saving of time and saving of money or conserving or recouping energy.

Gross Rent

In the case of real estate benefit arise out of (a) Safety, design or hygienic conditions including light and ventilation etc. of structure (b) provision of utility services like water supply, sewerage electricity etc. (c) locational advantages like nearness to facilities, amenities, shops and markets, work places etc. which are reflected in fair market rent and net annual income. Better the safety, design and hygienic conditions etc. of structure or better the provision of utility services and better the locational advantages, higher will be the gross rent and vice versa. Fair market rent (gross) of a property is normally estimated by – comparison with properties rented, looked at from the angle of several factors of comparison grouped into seven broad categories viz. land, location, building (including engineering and architectural aspects) services; social, economic and legal aspect and their levels.

Net Annual Income

The benefit accruing due to ownership and occupation is in the form of net annual income and is estimated by deducting all annual outgoings including annual payable, annual cost of maintenance and repairs, services provided if any, debts and vacancies, insurance etc. from the gross annual income from rent and other sources of income from use of a property. In income approach to valuation such net annual income is considered as annual interest on capital invested in buying a property.

14.5 SECURITY

General

Security is also the natural and basic instinct of all human beings. Every one needs safety and minimum risk. Feeling of security is the same as that felt by an infant in the lap of his mother and is universal, irrespective of town, city or country/nation. The protection (safety of self) and assurance of upbringing are the two basic components involved in the security felt by an infant irrespective of whether the mother is a queen or a beggar woman.

Criteria of Security

In the case of all types of investments, including that in real estate, there are five criteria which go on to decide the level of safety of investment (or conversely the risk factor) viz.-

- | | |
|---------------------------------|---|
| 1) Safety of Capital | - Capital invested must be safe. |
| 2) Liquidity of Capital | - Capital invested must be realizable, capable of being recouped at any time. |
| 3) Safety of Income | - Income from the investment must be guaranteed/assured. |
| 4) Regularity of Income | - Income from the investment must be received regularly. |
| 5) Ease of Collection of Income | - Income shall be collected easily spending minimum time, energy and money. |

An Investment where all the five criteria are 100% satisfied is called a 'Gilt Edged Security' as found in investment in long term Government bonds and generally considered as gilt-edged security.

Other criteria affect the security of investment in a qualified manner. For example, **inflation** will have effect on rent, i.e. amount of income only and not on the security of investment. Similarly, divisibility of investment (in the case of property various types of interests which are separable), cost of transaction may increase the price or exchange value but will not have effect on the security of investment. Though security of investment is irrespective of the **amount of income** but it nevertheless depends on the guaranteed regularity of income however high or low it may be.

Rate of Interest

The degree of security gets reflected in the rate of interest for capitalization of net annual income. Higher the security (i.e. lower the risk factor) lower is the rate of interest for capitalization (i.e. higher the Y.P. multiplier) and vice-versa. In other words the rate of interest is inversely proportionate to the degree of security. For estimating the appropriate rate of interest for capitalization of net income it is necessary to ascertain the degree of security of investment by asking questions regarding the safety and liquidity of capital as well as regularity and ease of collection of annual net income. The estimation of fair market value of a property depends on correct estimation as far as possible at the appropriate rate of interest for capitalization. A valuer should therefore get these five aspects of security so ingrained in his mind that he should be able to distinctly reproduce these aspects whenever and wherever asked to do so.

Dual Rate of Interest

Another important basic principle is in respect of use of dual rate of interest for capitalization of net income. The two rates of interest are as follows. **The 'remunerative' rate of interest**, is the remuneration on capital invested and the other is 'accumulative' rate of interest at which the annual sinking fund accumulates, at the end of certain period, to the original capital invested. The pertinent question arise "which dual rate of interest should be used for capitalization of net income". It is evident from the above discussion that there exist two types of interest rates, "in the case of Terminable Annuity or Income". This answer should always be on the tip of the tongue of a valuer who should be able to express it in precise words. Since the purpose of accumulative rate of interest is that the amount of annual sinking fund at the compound rate of interest MUST accumulate to build up the capital invested (which is unavoidable liability) at the end of the term when income ceases/terminates, the accumulative rate of interest should be minimum i.e. 2 ½% to 3% and shall never exceed 3½%. The use of dual rate table (valuation table) automatically takes care of sinking fund element of net income and hence the amount of sinking fund to be kept aside need not be worked out separately. The appropriate remunerative rate of interest which depends on the degree of security offered by investment should be estimated by conducting study of real estate market in the area concerned.

The remunerative rate of interest should never be adopted on adhoc or thumb rule basis. The Rate of Reversion i.e. the rate at which income or capital receivable in future should be deferred is usually the same as the remunerative rate.

CAPITAL EROSION AND CAPITAL APPRECIATION

The market studies conducted by the students of Master of Valuation, Sardar Patel University, Gujarat have revealed that the rates of interests yielded by residential and commercial properties vary from about 4% to 5% and about 6% to 10% respectively which are lower than the rates of interest yielded by the investment in long-term Govt. bonds which is considered as gilt-edged security i.e. 100% secured investment yields interest at the rate of 8.5% to 9%. Any other investment which is less secured than that in Govt. bonds is normally expected to yield interest at the rate of ½% to 1% more than that yielded by Govt. bonds i.e. at 9.5% to 10%. This is true where the rate of inflation is low say 2% to 3% and where the urban areas are more or less saturated and do not expand rapidly. In India, the rate of inflation is usually 5% and above and urban areas are rapidly expanding by size of population and also in geographic area.

When the rate of inflation is high the value or purchasing power of money i.e. rupee decreases with the result that value of any capital invested in the form of money – monetary investment – also decreases in real terms. Such decrease in capital value is known as ‘Capital Erosion’. In the case of investment in real estate when value or purchasing power of rupee goes down the market value – i.e. exchange value or price of the property also increases. Investment in real estate in India is thus guarded against the element of ‘Capital Erosion’.

Further since urban areas in India are expanding rapidly, values of properties in older or earlier developed areas which almost become more or less central or prominent location areas, increase with expansions of urban areas. This value of capital invested in real estate increases i.e. appreciations and is known as ‘Capital Appreciation’

Investments in residential and commercial properties in India yield interest at the rates varying from 4% to 5% and 6% to 9% respectively which are lower than that yielded by Govt. bonds, since investments in real estate enjoy the benefits of Capital appreciation and of guard against capital erosion.

14.6 CHARACTERISTICS OF PROPERTY MARKET

Market

The economic term market refers to a group of buyers and a group of sellers who are in communication with each other for purpose of transaction and both of whom are willing and able to buy and sell at a price. Competition among buyers and sellers acts as mechanism controlling supply and demand and prices. Under conditions of perfect competition in an open market neither buyer nor seller are able to influence prices by their individual decisions as in the case of monopoly. Perfect competition is facilitated due to comparability and possibility of substitution among the products mainly resulting from standardization and possibility of increasing/adjusting supply and demand by various means.

Property Market

Property market differs from market of other commodities in various characteristics due to which conditions of perfect competition are hard to obtain in a property market. These special characteristics are –

1) **Heterogeneity and lack of standardization**

No two properties are identical and differ from each other in many respects which acts as a constraint on comparison and substitution and hence conditions of perfect competition are almost absent.

2) Total supply of land is fixed

Total supply of land in all area is fixed and land cannot be transported from one place to another as in the case of other commodities. Converting use of land say from agriculture to non-agriculture, from residential to commercial etc. may be possible but it is time consuming.

3) Inelasticity of supply

Supply of land/property cannot be increased or decreased easily and quickly to match demand.

4) Effect of various legislations

Various legislations like Rent Control Acts, Town Planning Acts and Development Control Rules, Land Ceiling Acts etc. affect use, quality and intensity of use, occupancy, transferability of landed properties constraining condition of perfect competition.

5) Imperfect and Inadequate Information

Lack of correct and adequate information about transactions contributes to imperfect competition. Such inadequacy of information is mainly due to –

a) Method of conducting transactions: Most of the transactions in the real estate market, except open auctions, are conducted privately and adequate and correct information about transactions is not easily available.

b) Various rights and interests: Various rights and interests, ownerships, tenures, etc. such as freehold, leasehold etc. are being transacted which make comparison difficult.

c) Non-availability of adequate and reliable information : Information available from authentic sources like records of Registrar's and Sub-Registrar's Offices needs to be supplemented by conducting inquiries during site inspection for many reasons, such as obtaining correct information identifying witnesses for proof of transaction in the Court, etc.

The nature of real estate market and its special characteristics have effect on market values of properties and therefore form the primary base for estimating fair market values of properties.

14.7 PROPERTY CLASSIFICATION, VALUE CHARACTERISTICS, VALUE INGREDIENTS AND PRIMARY ELEMENT OF VALUE

Property classification

Value characteristics

Investment property	- Monetary yield to the owner (like interest earned) - Marketability - Recovery of invested capital
Marketable non-Investment property	- Usefulness to the owner without direct monetary yield - Marketability - Non-recovery of original cost in general
Service property	- Usefulness to the owner without direct monetary yield - Non-marketability - Non-recovery of original cost in general

Property classification

Primary element of value

Investment property	- Investment value
Marketable non-investment property	- Market value
Service property	- Owner value

Only in the case of investment property, there is the expectation of recovery of the invested capital. This recovery comes from monetary returns.

Ingredients of investment property :

- * Utility
- * Marketability
- * Self-liquidity

A marketable non-investment property has only two value ingredients

- * Utility and marketability

Service property has only one value ingredient – utility which produces the value to the owner.

The following table gives a total picture:

Investment property	Utility	Owner value
	Marketability	Market value
	Self-liquidity	Investment value*
Marketable non- Investment property	Utility	Owner value
Service property	Marketability	Market value*
	Utility	Owner value*

* Primary element of value

Methods of valuation

A. Investment analysis method of valuation:

Investment analysis method of valuation is used to measure value of investment property. This method consists of forecasting the earning expectancy of the subject property as a series of net monetary returns calculated from the valuation date to the estimated end of life of ownership and working out the present worth of this series at a rate per cent (yield rate) commensurate with the relative risk involved.

B. Sales analysis method of valuation:

The market value of marketable non-investment property is measured by the sales analysis method of valuation (market approach). This method consists of formulating the relationship between the value elements of, and the prices paid for, properties which are identical, equivalent, or otherwise comparable to the subject property, in order to forecast its most probable buy-self price.

C. Cost-summation method of valuation:

In some cases, the 'owner value' of a tangible service property can be measured by the cost-summation method of valuation. This method consists of estimating what the current cost of producing the subject property would be and then applying an appropriate depreciation factor(s).

14.8 Approaches to Valuation: Conclusion

It would be seen that the three approaches to valuation are not exclusive of each other. In income approach fair market rents of similar properties sold and of the property to be valued are estimated by market approach i.e. by comparison. In cost approach fair market value of land is estimated by comparison with similar lands sold i.e. by market approach. It is therefore, considered appropriate to discuss the market approach first, ahead of Income approach and Cost approach.

All the three approaches to valuation involve comparison of various legal, physical, social and economic factors/aspects of comparison, as also of advantages/merits and disadvantages/demerits arising out of these various factors. In order to ensure that none of those factors and their advantages and disadvantages are over looked or lost sight of, it is advisable that a valuer should first step in the shoes of the client and think about the problem i.e. of property and its fair market value from all aspects.

Therefore, he should step in the shoes of the party on the other side and think about the property consider advantages and disadvantages and fair market value of the same property from the other angle of view. Thinking from points of view of both (or all) sides will ensure better and fairer estimation of market value of a property.

Lastly but not the least, since value is an estimate of what price ought to be, fair market value is always 'ESTIMATED' and is never worked out, calculated or arrived at (mathematically) or done, fixed, decided etc. (indicating final decision). Fair market value is always 'estimated'.

15.0 URBAN INFRASTRUCTURE & ITS INFLUENCE ON VALUE OF REAL ESTATE

15.1 INTRODUCTION :

Infrastructure and development projects are of vital importance, especially in developing countries, in view of their impact on economic development. Investment in infrastructure projects and development project acts as a catalytic agent for further economic growth. An infrastructure project, say Konkan Railway not only yields benefits in single direction by promoting and facilitating movement of traffic inducing its growth at different stages there by having accelerator effect in single direction, but it also opens up multiple avenues of economic growth, like development of industrial and other economic activities in the areas served by new railway line, in different directions and at different stages thus producing a multiplier effect. Valuation of benefits in multiple directions at different stages, likely to be yielded in future on economic and social front with reference to cost of investment as well as likely, generation of resources for further development provides sound basis for policy decisions regarding inter-se priorities for such infrastructure and development projects.

Infrastructure sector includes power, bridges, dams, roads and urban infrastructure development. It should give a decent quality of life to its residents, promising clean and sustainable environment by applying smart solutions in the domain of sanitation, waste management, public transport and governance

Meaning - Infrastructure

As defined by The Free Dictionary - An underlying base or foundation especially for an organization or system.

The basic facilities, services and installations needed for the functioning of a community or society such as transportation and communications systems, water and power lines and public institutions including, schools, post-offices, and prisons.

15.2 LEVELS OF INFRASTRUCTURE & DEVELOPMENT PROJECTS :

Infrastructure and development projects can broadly be grouped under two categories, viz. (i) projects at National, State or regional level and (ii) projects at local and area – specific level. Infrastructure projects of new railway lines, new National Highways and Express Highways, Cable Communication Lines, Tele Communications,

Satellite Networking, Port Development, Thermal Power Projects etc. are examples of projects at National or State level. River valley regional development project, irrigation dams and command area development projects, development of large industrial estates, construction of new state highways etc. are infrastructure projects at State or regional level. Projects like Satellite network, Cable communication or telecommunication are open – ended projects. Such multi-dimensional projects with larger potentials open up multiple avenues of economic growth or development possibilities at different stages having a multiplier effect on economy.

New town development projects, Town planning schemes under Town Planning Acts, area development projects, Integrated Urban Development Projects (I.U.D.Ps) Site and Services Schemes, Housing projects, development of commercial areas and shopping centers, water supply projects, sewerage projects etc. are some of the infrastructure projects at local level and are deemed as area – specific projects. Such projects have limited objective of developing economic growth along a single track and their impact on growth at different stages can be computed by Accelerator effect on single track of value addition. Some projects in this category do also often initiate a feeble wave of growth on multiple directions.

15.3 PROJECT APPRAISAL :

Any development project can be appraised in two ways, (i) Financial Appraisal and (ii) Economic Appraisal. Financial appraisal aims at finding out financial viability of a project to meet its financial obligations which mainly include (a) Debt-servicing, or securing return in appropriate installments of the principal loan amount together with annual interest on the amount of loan (or the balance amount of loan) (b) generating funds from internal resources for operation and maintenance and (c) earning reasonable income on its assets and satisfactory contribution to future capital growth. It helps in adjusting the level and structure of prices to be charged to beneficiaries. Financial appraisal is thus concerned with only financial cost-benefit analysis in purely monetary terms to assess viability to the operating agency (i) by working out Internal Rate of Return i.e., annualized rate of return on capital generated or to be generated within an investment and / or (ii) by assessing Net Present Worth i.e. the difference between (a) the present worth of benefits and (b) present worth of costs both discounted on the basis of the derived Internal Rate of Return. The Net Present Worth so worked out should normally be positive and not negative.

Since infrastructure and development projects act as catalytic agent for further economic growth, such projects cannot be evaluated property, merely in terms of cost incurred. Evaluation of a project should help in taking decision regarding desirability of investing public funds which have alternative uses and should not present merely financial benefits but should also consider social benefits.

Economic Appraisal aims at assessing the contribution of the project to the development objective of the society. It is concerned with total return or productivity as well as impact on the whole economy. Economic analysis therefore includes (i) Financial cost – benefit analysis evaluating financial profitability as well as (ii) Social impact analysis evaluating social value assessed by identifying the range of effect of the project on society as a whole. Projects providing Educational and Medical facilities are considered as investment for development of human resources and are now subjected to economic analysis by estimating social benefits. Thus, the economics of education takes into consideration the value of investment in human capital which accounts for ultimate return to the community. Value inputs or investment in health programme is considered in terms of series of expected return to the community in the form of and in terms of healthier man power. Total benefit lies in an estimate of value of improved performance or efficiency, projected to be rendered by the built-up human capital in quantified monetary term since human brain is now capable of quantifying in monetary terms, tangible as well as intangible benefits. But even such cost benefit analysis hardly takes into consideration, subsequent stages of economic growth and likely spread – effect thereof.

15.4 INFLUENCE OF URBAN INFRASTRUCTURE ON REAL ESTATE MARKET AND VALUE OF REAL ESTATE :

GENERAL :

"American roads are not good because America is rich, but America is rich because American roads are good," US President John F Kennedy once said famously. In this context we all know that roads, railways, etc. are very vital in the growth of any country. One of the reasons of USA to come out of great recession of 1930 is construction roads and other infrastructure projects done during that period. All the urban infrastructure projects have positive effect on the real estate market and subsequently on value of the real property. It is also a fact that investment in construction of road, railways etc. would propel overall economic growth of the country. There are certain famous instances where countries came out of recession by just building roads. It has been widely believed that investment of Rs 1 in construction of road would result in spurt in economic activities of Rs 2.5 in the country. Further impetus in real estate market would benefit end users as they are in deciding position as far as pricings are concerned. Buyers and end users have wide range of choices of ongoing as well as completed real estate projects.

OTHER ASPECTS OF URBAN INFRASTRUCTURE PROJECT ON REAL ESTATE MARKET :

Announcement of new urban infrastructure will some times lead to speculative investment in real estate market in anticipation of capital appreciation. There are numerous instances where announcement of metro project, education city, sports stadium, etc. have resulted in tremendous rise in number of projects launched in catchment areas of the respective urban infrastructure projects. These will further lead to rapid and haphazard growth of real estate market with little or no focus on development corresponding amenities required for residential or commercial projects.

As per CII website on Infrastructure, India has made a significant progress in attracting private investments in the infrastructure sector. Over a decade (2002-2012), private sector has invested approximately US\$ 250 billion in various infrastructure projects. More importantly, investment in infrastructure as a percentage of GDP increased from 4.9 per cent in 2002-03 to about 7.2 per cent in 2011 - 12 and is expected to reach 10 per cent of GDP by 2016-17. Going forward in the XII Plan period (2012- 17), the Government is expecting about half of the total investment requirement of US\$ 970 billion in the infrastructure sector to come from private sources, including FDI. Over a decade (2002-2012), private sector has invested approximately US\$ 250 billion in various infrastructure projects. Realizing the massive investment requirements and need for better and competitive infrastructure services, Government of India has adopted a new approach with PPP as the cornerstone of its policy framework. The current policy framework allows 100% FDI in most infrastructure sectors with no restriction on repatriation of profit. Moreover, the Government of India has launched a Viability Gap Funding Scheme to enhance the financial viability of competitively bid infrastructure projects. Through its National Committee on Infrastructure and Sectoral Committees, CII is deeply engaged in building a robust infrastructure sector and in addressing specific policy interventions on behalf of the industry with regard to specific areas of Roads & Highways; Airports & Aviation; Railways; Ports & Shipping; and Urban Infrastructure & Housing. CII Infrastructure Division engages the central & state governments; the industry and other stakeholders to work towards making Public Private Partnerships – PPPs – as the cornerstone for building the state-of-the-art infrastructure in India.

It may here be noted that from the year 2004 to 2014, there are significant increase in the launching of real estate projects in all the major cities of India including tier II and III cities. These investment in these cities are on the anticipation of the huge economic growth expected from the massive investment being made by the Govt. of India. These heavy investment in real estate project has resulted in the slump in the real estate sector after the year 2014. This indicates that the rise in the value of real estate were speculative and against the principle of valuation. Just like water, real estate market is fluid and will find its true level over the period of time. However the time frame may

range between 2 to 5 year, depending upon the characteristic of towns and cities of the states and the political stability of the country.

However, there are other aspect of investment in urban infrastructure also. Mr Sean Ross, a bankruptcy specialist, consultant, broker, financial advisor, and a journalist has published an article titled “ Can Infrastructure spending really stimulate the economy?” on website of <https://www.investopedia.com>. He presented the other aspect of investment in urban infrastructure and concluded by saying that “Economics, as a science, struggles to produce convincing empirical results. It is difficult to find solid, demonstrable evidence about how effective changes in infrastructure spending have been. In a 2014 working paper for the International Monetary Fund (IMF), economist Andrew M. Warner found little evidence that global infrastructure projects produced economic gains. Even when projects received credit for growth, Warner found that the economy was already improving at a similar rate by the time construction began. This paper is written in the context of USA. General effect of investment in urban infrastructure on value of real estate would be same across the globe considering the fact that principle of valuation remains the same irrespective of geographical difference.

There are macro level factors affecting investment in urban infrastructure and its effect on value of real estate. These factors may be summarized as economic condition of the country, financial stability, political stability, long term projections of GDP growth rate, population density/growth rate present as well as projected, policy of Government regarding urban infrastructure such as Foreign Direct Investment, urban rural divide, rate of urbanization, present status of infrastructure and real estate market of the country etc. All these factor directly or indirectly have bearing on urban infrastructure investment and its effect on the real estate valuation. Further more one this is certain that the effect of investment in urban infrastructure on value of real estate will be different for developed, developing and poor countries. You cannot replicate the effect of investment in urban infrastructure from one country to another country. However general effect may be more or less similar.

We all know that market value is estimated based on equilibrium arrived at by considering the effect of demand and supply. Similarly effect of investment on value of real estate should be arrived at by analyzing the aspect such as speculative rise in value due to announcement made, and actual effect after the completion of urban infrastructure project. Following brief of project work done by one of the students of Shivaji University would give glimpse of what has ben said above about the subject.

15.5 Brief of Infrastructure Development of project work undertaken by a student at Shivaji University on “Variation in property values along Vikas Marg in East Delhi, during the period, (a) before development, (b) during development & (c) after commissioning of Dwarka – Vaishali Delhi Metro rail corridor project”

Metro rail connectivity:

Delhi Metro Rail Corporation started operations in Delhi on 25.12.2002 with a small 5 km Line 1 between Shahdara to Tis Hazari courts. Since then metro rail network is expanding continuously in Delhi and extending up to satellite towns of Gurgaon and Ghaziabad and now it has Red Line (Line 1) between Dilshad Garden to Rithala; Yellow line from Jahangirpuri to Gurgaon; Blue Line between Dwarka Sector 21 to Noida City Centre, another blue line from Yamuna Bank to Vaishali; Green line from Inderlok to Mundka; Violet Line from Central Secretariat to Badarpur and Orange Line which is Airport metro line. DMRC, in second phase of its expansion project started operations on blue line from Yamuna Bank to Anand Vihar via Preet Vihar on 06.01.2010 and has later extended it to Vaishali in Ghaziabad. This fast metro rail connectivity has been a boon to the residents and business of the area. Metro rail connectivity has been a positive factor in sharp increase in the property prices in 2010 and thereafter.

Anand Vihar Rail Terminus:

Anand Vihar rail terminus, located on eastern boundary of Delhi and about 3 km from Preet Vihar, is proposed to be mega rail terminal from where east bound trains are proposed to begin and terminate. Anand Vihar rail terminal was officially inaugurated on 19.12.2009, on completion of first phase of its construction, spread over 42 hectare, a few trains for Bihar and eastern UP have been started from AVRT. Once the terminal becomes fully operational, it is expected to cater to 300000 passengers on 272 trains daily. This is a big boost in transport facility for the area of east Delhi including Preet Vihar.

Infrastructure development incidental to Commonwealth games:

The data shows that East Delhi - with a population of 17 lakh, which includes Preet Vihar, Patparganj and Mayur Vihar - does as well or better than Central Delhi - Daryaganj, Paharganj and Karol Bagh – with just 5.8 lakh people and New Delhi district, with just 1 lakh people, on most indicators.

Access to tap water is 92% in East Delhi, taking it a close second behind central Delhi. The rest of Delhi lags far behind, with access to tap water the lowest (71%) in the south district, which includes the Defence Colony, Kalkaji and Hauz Khas areas.

During the last five years there has been a tremendous development in East Delhi, viz. development of Commonwealth games village, used in 2010 for stay of sportspersons,

is now offered to flat owners; network of road flyovers and underpasses; upgradation and widening of roads; development of parks and sports grounds; improvement in public transport by introduction of low floor air conditioned and non AC busses; improvement in power supply; sanitation and amenities like Gym in public parks. The government now proposes to augment public transport system with a proposal to start mono rail services in east Delhi, which will also traverse close to Preet Vihar.

Business infrastructure development is also taking place about 3 km away from our area of study.

Integrated Freight Complex has come up at Gazipur (IFC, Gazipur). The area of total scheme of IFC, Gazipur is 187.21 Ha. And it is in 3 pockets i.e. Pocket .A, Pocket B & Pocket C.

Pocket A (39.42 ha), situated in the Northeast side of NH-24 with direct access from NH-24. Land has been provided for following activities – Allotment to DAMB for Food & Vegetable Market – 16.87 ha., Commercial – 3.2 ha.

Rest of the area is earmarked for facilities, recreational & circulation.

Pocket B (67.59 ha), located in between NH-24 and Hindon cut canal with direct access from NH-24. Land has been provided for following activities –

Allotted to DAMB for Fish Market – 7.0 Ha.

Allotted to DAMB for Poultry Market – 5.0 Ha.

In this pocket 20.53 Ha. land has been earmarked for development of slaughter house in 5 locations by MCD. About 32.54 Ha. Area is being utilized for sanitary landfill site.

Pocket C (80.20 ha.), located to the southeast of the existing Hindan cut canal major approach road to this part is through 45 m. wide road connecting Pocket B and NH-24. Land has been provided for following activities.

The wholesale area in this pocket is earmarked for paper trade. The layout plan providing about 995 plots have been approved. Land earmarked for following activities:-

Commercial - 3.8 Ha.

Facilities like Fire Station,

Police Station etc. - 9.51 Ha.

Truck Terminal - 4.43 Ha

Utilities - 1.34 Ha

All the aforesaid facilities and services have made east Delhi and Preet Vihar a desirable area by businessmen and high end families

Educational facilities :

Since Delhi University is across the River Yamuna, to group higher level educational facilities a university center has been proposed in Facility Centre No.13 near Surajmal Park. This will act as East Delhi Campus and will provide specialized higher level educational facilities. For this purpose 14 Ha. of area has been planned & allotment is being made to Delhi University & I.P.University.

Shopping Malls:

Gone are the days, when residents of Vaishali, Kaushambi, Vasundhara and Indira puram used to go to places like Connaught Place, South Extension and markets of Sector 18 in Noida for purchasing luxurious items or for entertainment. Now, these areas offer high class shopping complexes and entertainment centres such that people from other parts of Delhi and Noida visit for recreation. Over past few years east Delhi, Indirapuram, Vasundhara, Kaushambi and Vaishali have emerged as modern suburbs. A number of malls have already come up. And some are in the development stages.

The main reason for the development of malls in this area is the availability of large amount of land and connectivity to Ghaziabad and Noida. Today, it has malls like V3S mall, Cross River Mall, located within one kilometre distance from Preet Vihar and East Delhi Mall (EDM), Pacific Mall, Ansal Plaza, Galaxy, Waves Kaushambi, Brand Factory, Paradise Arcade, Mahagun Metro and Majestic Arcade, within about 3 – 5 km from Preet Vihar. The Pacific mall has new state-of-the-art I-Max screen the first in North India. Ansal Plaza in Vaishali, North India's first factory outlet mall houses brands like Reebok, Bata, Mega Mart by Arvind Brands, VIP, Hidesign, High Life & Vishal Mega Mart.

The Valuation OF the Infrastructure and Urban Development projects as well as the Valuation FOR such projects from planning point of view both will have relation to benefits arising out of such projects enjoyed by both the individuals and the community.

The method of valuation of infrastructure and urban development projects will, therefore, comprise of (i) estimating values of lands and properties on the assumption that they have been provided all the contemplated physical and social infrastructure and (ii) estimating values of lands and properties in their existing state, i.e. without or with partial or inadequate infrastructure facilities and (iii) estimating difference in two such estimates. This can be called 'after and before' method. This method can be used for estimating value of Area Development Projects, including Sites and Services schemes.

In the case of projects in respect of built-up accommodation, i.e., residential housing projects or commercial complex projects, the value of a project can be estimated by working out difference.

Valuation of projects estimated by the above method would cover the value of benefits accrued to individual beneficiaries and property.

Conclusion of project work undertaken by a student at Shivaji University on “Variation in property values along Vikas Marg in East Delhi, during the period, (a) before development, (b) during development & (c) after commissioning of Dwarka – Vaishali Delhi Metro rail corridor project” :

The Rate of interest yielded by residential properties at Preet Vihar, Delhi varies from 1.62 % to 2.4 % per annum.

The rates of rents varied from Rs. 85 per sq. mt. to Rs. 112 per sq. mt. between May 2005 to December 2006 (prior to metro development),; from Rs 139 to Rs. 166 per sq. mt between January 2008 to December 2009 (during Metro development),and from Rs 166 to Rs 235 per sq. mt. between January 2010 to September 2011 (after development of metro).

The rates of rents increased on an average by 48% during the period of construction of metro rail and increased by about 105% after the completion of DVDMRC.

Further, the rates of rent increased by 33% after completion of metro, as compared to those during the period of construction.

The rate of interest yielded by residential properties at Preet Vihar, Delhi area as under:

- i) During the period from May 2005 to December 2006, (i.e. before Metro rail) varied from 1.9% to 2.4% per annum.
- ii) During the period from January 2007 to December 2009 (during construction of Metro rail) varied from 1.9% to 2.38% per annum.
- iii) After January 2010 to September 2011 (after commissioning of Metro rail) from 1.62% to 2.22% per annum.

The rate of interest yielded by residential properties decreased by 8% to 15%, i.e. Y.P. increased by 10% to 19% after completion and commencement of Metro rail

as compared to those before initiation of DVDMRC. However, there was no variation in rate of interest during the period of implementation.

The market values of residential properties at Preet Vihar, Delhi, increased by 260% to 285% after commencement of Metro rail as compared to those before the initiation of DVDMRC. (Increase in market value is estimated by multiplying increase in Y.P. with increase in the rate of rent; since $CV = NI \times Y.P.$)

15.6 Impact of Kumbh Mela an excerpt from the article published by the Hindu on its website on 21.01.2019

As per article published on the website of the Hindu on 21.01.2019, the mega Kumbh Mela at Prayag Raj, which began on January 15 and will continue till March 4, is expected to generate a revenue of ₹1.2 lakh crore for Uttar Pradesh, according to apex industry body Confederation of Indian Industry. The Kumbh Mela is a single event which is being held in different parts of the country for a short period of time. The Uttar Pradesh government has allocated ₹4,200 crore for the 50-day Kumbh Mela this year. This indicates that if the such a short event can generate revenue of Rs 1.2 Lakhs crores, imagine the impact of infrastructure development which is permeant can generate revenue and corresponding economic impact on the GDP of the country. Around 12 crore people are expected to visit the Kumbh between now and Maha Shivratri on March 4, when the Mela will come to a close on Maha Shivratri day.

The hospitality sector aims at employing 2,50,000 people, airlines and airports around 1,50,000 and tour operators around 45,000. The employment numbers in eco-tourism and medical tourism are being estimated at 85,000, says a CII study.

Apart from this there will be around 55,000 new jobs in the unorganized sector comprising of tour guides, taxi drivers, interpreters, volunteers etc.

This will lead to increase income levels for government agencies and individual traders. Attracting a massive number of foreign tourists from various countries like Australia, UK, Canada, Malaysia, Singapore, South Africa, New Zealand, Mauritius, Zimbabwe and Sri Lanka, the Kumbh is a festival of the world.

The 'mela' is expected to generate a revenue of Rs1,200 billion for Uttar Pradesh, the state where it is being held, while neighbouring states like Rajasthan, Uttarkhand, Punjab and Himachal Pradesh will also benefit from the enhanced revenue generation with a large number of national and foreign tourists expected to explore other destinations.

This event has pushed the rental of hotels, guest houses, residential houses and flats up for the brief period of time thereby making an investment in these areas more attractive.

A separate case studies need to be undertaken in different parts of the country to study the impact of urban infrastructure project on real estate valuation. However, the impact of urban infrastructure project on real estate valuation is in three stages, before, during and after. The actual impact of urban infrastructure on value of real estate shall be the net effect of all the three phases which may be positive, negative or neutral.

15.7 Government Initiative

The Government of India is taking every possible initiative to boost the infrastructure sector. Some of the steps taken in the recent past are being discussed hereafter.

Announcements in Union Budget 2018-19:

- Massive push to the infrastructure sector by allocating Rs 5.97 lakh crore (US\$ 92.22 billion) for the sector.
- Railways received the highest ever budgetary allocation of Rs 1.48 trillion (US\$ 22.86 billion).
- Rs 16,000 crore (US\$2.47 billion) towards Sahaj Bijli Har Ghar Yojana (Saubhagya) scheme. The scheme aims to achieve universal household electrification in the country.
- Rs. 4,200 crore (US\$ 648.75 billion) to increase capacity of Green Energy Corridor Project along with other wind and solar power projects.
- Allocation of Rs 10,000 crore (US\$ 1.55 billion) to boost telecom infrastructure.
- A new committee to lay down standards for metro rail systems was approved in June 2018.
- Rs 2.05 lakh crore (US\$ 31.81 billion) will be invested in the smart cities mission. All 100 cities have been selected as of June 2018.
- The Government of India is working to ensure a good living habitat for the poor in the country and has launched new flagship urban missions like the Pradhan Mantri Awas Yojana (Urban), Atal Mission for Rejuvenation and Urban Transformation (AMRUT), and Swachh Bharat Mission (Urban) under the urban habitat model with an aim to improve the quality of life and attract investments to the City, setting in motion a virtuous cycle of growth and development, the government of India has launched various urban development schemes.

15.7.1 Smart Cities Mission :

It is an urban renewal and retrofitting program by the Government of India with a mission to develop 100 cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'smart' solutions. The focus is on sustainable and inclusive development and the idea is to look at compact areas, create a replicable model which will be an example for other aspiring cities.

The core infrastructure elements in a Smart City would include:

1. Adequate water supply,
2. Assured electricity supply,
3. Sanitation, including solid waste management,
4. Efficient urban mobility and public transport,
5. Affordable housing, especially for the poor,
6. Robust IT connectivity and digitalization,
7. Good governance, especially e-Governance and citizen participation,
8. Sustainable environment,
9. Safety and security of citizens, particularly women, children and the elderly, and
10. Health and education.

The core infrastructural requirement to develop Smart cities can be achieved with Smart solutions like **E-Governance and Citizen Services, Energy Management, Waste Management, Urban Mobility, Water Management** etc. The central Government proposes to give financial support to the Mission to the extent of **USD 7.77 billion** in the next five years (FY2015-16 to FY2019-20). In the first year, Government proposes to give **USD 30.77 million** to each selected Smart City to create a higher initial corpus, followed by **USD 15.38 million** every year for the next three years.

The strategic components of area-based development in the Smart Cities Mission are city improvement (**Retrofitting**), city renewal (**Redevelopment**) and city extension (**Greenfield development**) plus a **Pan-city initiative** in which Smart Solutions are applied covering larger parts of the city. Smart Cities will feature urban development and expansion of housing opportunities under different schemes like Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Pradhan Mantri Awas Yojana and Swachh Bharat Mission.

15.7.2 Atal Mission For Rejuvenation And Urban Transformation (Amrut)

The purpose of (AMRUT) is to:

- Ensure that every household has access to a tap with assured supply of water and a sewerage connection

- Increase the amenity value of cities by developing greenery and well maintained open spaces (e.g. parks)
- Reduce pollution by switching to public transport or constructing facilities for non-motorized transport (e.g. walking and cycling)

The total outlay for AMRUT is **USD 7.77 billion for five years from FY 2015-16 to FY 2019-20** and 500 towns will receive benefits. The scheme based on Public Private Partnership (PPP) model will be integrated with Housing for All by 2022.

15.7.3 Pradhan Mantri Awas Yojana- Housing For All (URBAN):

The Mission is being implemented during 2015-2022 and provides central assistance to Urban Local Bodies (ULBs) and other implementing agencies through States/UTs for:

- In-situ rehabilitation of existing slum dwellers using land as a resource through private participation
- Credit-Linked Subsidy
- Affordable housing in partnership
- Subsidy for beneficiary-led individual house construction/enhancement.

Total housing shortage envisaged to be addressed through the New Mission is **20 million**. This scheme will be implemented across **4041 statutory towns** with the initial focus on **500 Class I cities** in India. **3 phases** of the PMAY will cover **500 cities** around the country by 2022, in **Phase-I (April 2015 – March 2017)**, **100 Cities will be selected from States/UTs, in Phase – II (April 2017–March 2019)** PMAY will be implemented in additional **200 Cities and in Phase-III (April 2019–March 2022)** other remaining cities will be covered. The government has approved **USD 6.7 billion** for the implementation of the scheme.

15.7.4 Swachh Bharat Mission (SBM) Urban:

Key objectives of the scheme are as follows:

- Modern and scientific Municipal Solid Waste Management
- To effect behavioural change regarding healthy sanitation practices
- Generate awareness about sanitation and its linkage with public health
- Capacity Augmentation for Urban Local Bodies (ULBs)
- To create an enabling environment for private sector participation in Capex (capital expenditure) and Opex (operation and maintenance)

With an outlay of **USD 9.54 billion**, it covers **4,041 statutory towns**, close to **8 million households**. A total amount of **USD 433 million** has been sanctioned for 2016-17 under this scheme.

15.8 Foreign Direct Investment (FDI) Policy:

Construction development: Townships, Housing, Built-up Infrastructure Sector –

- 100 % FDI through automatic route is allowed in construction-development projects (which would include development of townships, construction of residential/commercial premises, roads or bridges, hotels, resorts, hospitals, educational institutions, recreational facilities, city and regional level infrastructure, townships)
- Each phase of the construction development project would be considered as a separate project for the purposes of FDI policy. Investment will be subject to the following conditions:
- The investor will be permitted to exit on completion of the project or after development of trunk infrastructure i.e. roads, water supply, street lighting, drainage and sewerage. a foreign investor will be permitted to exit and repatriate foreign investment before the completion of project under automatic route, provided that a lock-in-period of three years.
- The project shall conform to the norms and standards, including land use requirements and provision of community amenities and common facilities, as laid down in the applicable building control regulations, bye-laws, rules, and other regulations of the State Government/Municipal/Local Body concerned.
- The Indian investee company will be permitted to sell only developed plots and shall be responsible for obtaining all necessary approvals.
- The State Government/Municipal/Local Body concerned, which approves the building/development plans, will monitor compliance of the above conditions by the developer.
- No minimum land area requirement in case of development of serviced plots.
- In case of construction-development projects, minimum floor area of 20,000 sq. m.
- 100% FDI is allowed under the automatic route for urban infrastructure areas like urban transport, water supply, sewerage and sewage treatment subject to relevant rules and regulations.

(Note: FDI is not permitted in an entity which is engaged or proposes to engage in real estate business, construction of farm houses and trading in transferable development rights (TDRs). Condition of lock-in period at above will not apply to Hotels & Tourist Resorts, Hospitals, Special Economic Zones (SEZs), Educational Institutions, Old Age Homes and investment by NRIs. It is clarified that 100% FDI under automatic route is permitted in completed projects for operation and management of townships, malls/ shopping complexes and business centres.)

15.9 Incentives In Urban Infrastructure:

Promoting Affordable Housing

- 100% deduction for profits to an undertaking in housing project for flats up to 30 sq. m. in four metro cities and 60 sq. m. in other cities, approved during June 2016 to March 2019 and completed in three years.
- Extend excise duty exemption, presently available to Concrete Mix manufactured at site for use in construction work to Ready Mix Concrete.

National Investment and Infrastructure Fund (NIIF)

- To maximize economic impact mainly through infrastructure development in commercially viable projects, both Greenfield and Brownfield, including stalled projects. The initial authorized corpus of NIIF would be USD 3.08 billion, which may be raised from time to time, as decided by Ministry of Finance.

What it does, what are its effect on real estate and value?

- Sustaining the country's rapid urbanisation has unearthed corresponding infrastructure development.
- Urban infrastructure development particularly urban transport in mega-cities is no debate.
- Unlocks the realty potential in terms of better development prospects
- Brings lot of changes in the Development Control Regulations thereby effecting the urban land scape e.g. introduction of new Development plans / Town Planning Schemes, Land Pooling Schemes, Transit Corridors with higher FSI
- Changes in the land prices, capital values and / or rentals of built spaces with milestones of the progress of an urban transport project like suburban train, metro rail, mono rail, Ring roads, etc.
- Similar is the correlation with projects like new airport and sea port development.
- Along with such developments, Social Infrastructure projects such as hospitals, educational institutes, recreational projects, river-fronts, etc also develop and have positive impact on overall real estate development
- Generally observed impact on the real estate of the influence area/zones of urban infrastructure projects like Airports, Metro Rail, Road projects, Ring Roads can be illustrated as below –
- Office & retail space development happens along the development / transit corridor of Metro Rail / Road Projects. Hospitality and retail space are typically developed at metro stations
- Capital values of residential / commercial space appreciates
- Large scale IT/ITeS projects, plotted developments are seen along the Ring Roads

New Airports comes along with the large real estate along with its development. Mixed-use development, specialised warehousing & Cargo terminals, aero-cities are proposed/ developed.

16.0 VALUATION FOR JOINT VENTURE DEVELOPMENT OF PROPERTY

16.1 What is a Real Estate Joint Venture (JV)?

A person owning a piece of land has various alternatives to get revenues out of it (apart from leasing it out or using it as a commercial property). First alternative is to wait for the price of the land to appreciate and retain it for a good amount of time. Second alternative is to get a building constructed. For that an owner will have to not only arrange for the additional finance required for the construction, but he will also have to get approvals and look after the construction activities. He might not have the requisite expertise, time and money to complete the construction. A builder on the other hand if is willing to construct one, might have to block his funds so as to purchase the piece of land in the first place, because purchasing the land constitutes a large part of the total investment. He might fall short of the funds required for the expenditure that needs to be incurred. The third alternative is a solution to the problems faced by these two entities i.e. A **Joint Development Agreement**. This is an arrangement between an owner of the land and a builder where the land owner contributes the land and the developer undertakes the responsibility of obtaining approvals, property development, launching and marketing the project with the help of his financial resources. As beneficial it is, it's not devoid of any limitations. The landowner in these cases, has to wait for a long time till the construction is complete. During this period, real estate market might suffer changes. The amendments in Income Tax Act impacts the builder and landowner. Prospective buyers have to take due precaution while purchasing flats which are under such form of agreement.

A Real Estate Joint Venture (JV) plays a crucial role in the development and financing of most large real estate projects. A joint venture is a business arrangement in which two or more parties agree to combine their resources in order to accomplish a specific task. In a Real Estate Joint Venture, this specific task is the development of a real estate project. The joint venture allows real estate operators (professionals who are experts in managing and developing real estate projects) to partner with real estate capital providers (individuals or organizations that can provide the capital needed for a real estate project).

Unlike many other business agreements, when the objective is achieved, the joint venture is usually terminated.

16.2 The Different Players in a Real Estate Joint Venture

As mentioned above, most real estate joint ventures consist of two separate entities: the operating member and the capital member. The operating member is usually an

expert on real estate projects and is responsible for the daily operations and management of the real estate project. A typical operating member is usually a highly experienced professional from the real estate industry with the ability to source, acquire, manage, and develop a real estate project. The capital member usually finances a large part of the project or even the entire project.

In a Real Estate Joint Venture, each of the participants is responsible for profits, losses, and costs associated with the joint venture. However, the joint venture is its own entity, separate and apart from the participants' other business interests.

16.3 Structure of a Real Estate Joint Venture

In most cases, the operating member and the capital member of the real estate joint venture set up the Real Estate project as an independent limited liability company (LLC). The two parties sign the joint venture agreement, which lists out the details of the joint venture project such as the objective of the joint venture project, the capital contribution of the capital member, distribution of profits arising from the project among the operating member and the capital member, delegation of management responsibilities for the project, ownership rights of the project, etc.

However, organizational form of a real estate joint venture is not limited to an LLC. Participants in joint ventures may include any combination of individual investors, partnerships, corporations, or trusts. The choice of organizational form used to accommodate the various groups of investors could be a partnership, corporation, Pvt. Ltd, Trust or other business arrangements. Partnerships are frequently the vehicle of choice in real estate joint venture.

The exact structure of the JV determines the relationship between the operator and the capital provider.

16.4 Key Aspects of a Real Estate JV Agreement

Risk-sharing and Combining Expertise with Capital are the two major attributes of a joint venture.

- **Risk sharing:** A single investor may be unwilling to undertake a real estate venture because of its size, location, capital requirements, and/or duration. However, by sharing the risk, two or more parties may be willing to undertake the venture.
- **Combining expertise with capital:** Joint ventures are frequently formed as a way to pool equity capital from one or more sources, as well as a means of bringing parties with different expertise to the venture.

A real estate JV agreement involves the following factors:

1. Distribution of profits

A key consideration while structuring a JV agreement is how members will split the profits that they make from the venture. The members may not be all compensated equally. For example, some parties may be compensated for a greater contribution of their time while passive members may not be compensated as well.

2. Capital contribution

The JV agreement needs to specify the exact amount of capital contribution expected from each member. In addition, it must also specify when this capital is due. For example, a capital owner may agree to contribute 25% of the required capital but only if this contribution is made at the last stage of the development process (last money in).

3. Management and control

The JV agreement is expected to specify in detail the exact structure of the JV and the responsibilities of both parties regarding the management of the Real Estate JV project.

4. Exit mechanism

It is essential for a JV agreement to detail how and when the JV will end. Usually, it is in the best interest of both parties to make the dissolution of the JV as economical as possible (i.e., avoid legal fees, etc.). In addition, the JV agreement must also list out all the events that might allow one or both parties to trigger a premature dissolution of the JV.

16.5 Reasons to form Joint Ventures

A joint venture can take on a number of different partnership forms. The most common is the limited partnership. As is the case with all partnerships, there must be at least one general partner (GP) and any number of limited partners (LP). Generally, in real estate, limited partners are the investors that provide most of the equity capital, while general partners are usually responsible for managing the partnership assets and may contribute a relatively small portion of the required equity capital.

Real estate development partners enter into joint ventures for the following reasons:

1. Complements

GPs bring industry expertise and put time and effort to manage the project, while LPs provide the capital required to fund the equity portion of the project financing.

2. Incentives

GPs are provided with disproportionate returns to keep them motivated to work hard.

3. Structures

Investors possess limited liability and liquidation preference in the case that the assets of the JV are liquidated.

16.6 Joint development models

Developing agreement models are of various types.

- A land owner may come into an agreement with a developer only to develop the land under a fixed consideration which may be in cash or kind. **The developed area is divided into plots and sold as plots only.** Here again the Land owner may be owning the land as 'Capital Asset' or as 'Stock in trade'. Here the developer only gets paid for his services.
- One or more land owners may enter into an agreement with a Developer to construct a **Building and then to share the Built up area in a definite proportion.** Here again the Land owner may be owning the land as 'Capital Asset' or as 'Stock in trade'.
- A land owner may **contribute his land to a partnership firm and then the partnership firm acts as the developer** and develops the land. On the completion of the project, the profits are shared.
-

The variation might be on other grounds too. The nature of the structure may be commercial or residential; the percentage of the benefit of land owner may be different and the time of passing on the benefits or project period may differ. The form of arrangement will decide the statutory obligations arising out of it.

16.7 How the joint development mechanism works

1. Profit sharing and price determination

Depending upon the land price, the joint development ratio is decided among the parties. In most situations, the builder will agree to allot a few flats to the landowner and will pay a token advance. In consideration for this, the landowner will part with a portion of undivided share (UDS) of land in favour of the builder or his nominee and will also allow the builder to construct and sell the agreed number of flats. The developer is given the right to seek prospective buyers and fix sale prices for his share of the flats.

A certain percentage of constructed area is set aside for the owner. Usually he gets a 30-40% share in the total outcome. In the case of sharing revenue from the built-up space, it is the responsibility of the developer to develop the parcel of land jointly with

the land owner and sell or lease the built-up space to third-party purchasers/lessees and share the proceeds in an agreed ratio. Owner is entitled to either dispose off the constructed area or may decide to retain the share of his built up area, or sell it at a later stage. The remaining portion i.e. the flats are sold by the builder as per his interest by entering into separate agreement with the prospective owner on his own capacity and not on the basis of GPA holder of the owner.

Recent trends in India indicates a 1/3rd – 2/3rd rule. 1/3rd of the project outflows going to the landowner and 2/3rd of the project outflows going to the real estate developer.

2. Property ownership and license to construct

The developer himself does not buy the land/property from the owner. The developer is not the transferee or buyer of the flats as per the Transfer of Property Act, 1882 under the Joint Development Agreement. The sole ownership lies with the owner of the land, but the land-owner grants the developer along with development rights, a license to enter the land for the purpose of development but not as a transferee/buyer. The license gives way to the developer to gain approvals from various concerned authorities for construction and raise debt. Once the plan is approved, the owner should get an allocation agreement done recording the constructed area which comprises his share and the area going to the developer. Once the building is ready and the allocation agreement is done, it is better that a deed of declaration is executed recording the constructed area, which would reflect the area constructed for the site owner under the joint development agreement.

3. Continuous co-operation between the owner and the builder

For the purposes of transfer of the constructed space by the builder, the co-operation of the owner is highly essential. Once the construction of the flat is completed and occupancy right is granted by the competent authority to the owner, the owner will himself execute the sale deed in favour of the flat buyers. The developer will have the right for specific performance which shall be specifically enforceable in a court of law if the land owner fails to cooperate with the developer in selling/leasing the built-up space on the land. However, in case of breach of the terms of the development agreement, the land owner would have the right to revoke the power of attorney.

16.8 Joint Development of Realty Projects costlier due to GST

- Joint Development Agreements (JDAs) now attract GST at the rate of 18%.
- Accordingly to the new regime, the landowner renders a 'service' to the development (construction) rights and therefore GST is applicable at the JDA execution stage. This increases the cost of a project.
- There are two common types of JDAs. One is area-sharing JDA under which, the developer pays the landowner a deposit and hands over a certain percentage of

the developed area in the project to secure development rights. Another model is revenue-sharing JDA, where the developer pays the landowner a deposit and a share of the revenues from the project to secure the development rights.

- In the pre-GST era, revenue-sharing JDAs were outside the ambit of service tax, and area-sharing JDAs would attract service tax at the time of approvals for the project, once the apartments/units under the land owner's area share were identified.
- But in the new regime, the GST at the rate of 18% on the market value of the deal has to be paid at the time of execution of the deal itself, which in turn results in cash flow concerns for both parties.
- Suppose a developer is constructing 200 apartments under JDA, with an agreement that 100 apartments would be given back to the landowner after finishing the construction to compensate for the value of land.
- If the cost of each apartment is Rs.1 crore, the deal size would be treated as of Rs.100 crore and a GST of Rs.18 crore would be levied.
- As land costs have increased, JDAs have become a popular and preferred format for real estate development in the country and helped address the need for housing stock in a sustainable manner. However, valuers should take into account the GST payable.

16.9 Issues - Joint Venture

1. What is a joint venture between a landowner and a real estate developer?

Joint ventures are formed by at least two parties with the objective of achieving a specific investment return. Unlike many other business agreements, when the objective is achieved, the joint venture is usually terminated. Following are the attributes of a joint venture.

- Risk sharing: A single investor may be unwilling to undertake a real estate venture because of its size, location, capital requirements, and/or duration. However, by sharing the risk, two or more parties may be willing to undertake the venture.
- Combining expertise with capital: Joint ventures are frequently formed as a way to pool equity capital from one or more sources, as well as a means of bringing parties with different expertise to the venture. A joint venture could also involve purchasing existing properties and operating them. In this case, one of the parties may be responsible for acquisition, leasing, and management, and others may provide capital.
- Speculative objectives

2. Organizational forms

Participants in joint ventures may include any combination of individual investors, partnerships, corporations, or trusts. However, a joint venture in and of itself is not a legal form of organization. In order to specify capital contributions, rights, duties, profit sharing, and the like, a joint venture agreement or a business entity must be created. The choice of organizational form used to accommodate those various groups of investors could be a partnership, corporation, Pvt. Ltd, or trust. Partnerships are frequently the vehicle of choice in real estate joint venture.

3. Profit sharing

Because the parties to a joint venture may contribute different things, and possibly in different proportions, a partnership must be structured such that it provides economic incentives for all parties. Differences in tax status of investors also may affect the way partnerships are structured.

A joint venture can take on a number of different partnership forms. The most common is the limited partnership. As is the case with all partnerships, there must be at least one general partner and any number of limited partners. Generally, in real estate, limited partners are the investors that provide most of the equity capital, while general partners are usually responsible for managing the partnership assets and may contribute a relatively small portion of the required equity capital.

4. Following factors are considered by potential investors for structuring a joint venture.

- How much initial capital will the parties contribute and how will the parties contribute additional capital if needed in the future?
- How will the parties share in the annual cash flows to be produced from operating the property?
- How will the parties share in the cash flow received from sale of the property?
- Will some of the parties receive a preferred return? Will the preferred return be paid from annual cash flows and/or from sale?
- Will taxable income (or losses) and capital gain (or loss) be shared in the same proportion that operating cash flow to be distributed?
- Who will have control over the operation of the property and decisions involving capital improvements, approving leases to tenants, financing and possibly refinancing the property, and when to sell the property?

5. Points you as the owner of the land must keep in mind:

- Check the credentials of the developer. His past record and success in achieving targets.
- Before entering into a joint venture agreement with a builder, register your company and transfer the land on the book of this new entity. You can hold 100% of shares of this new entity or shares can be held by various promoters depending on their claim in the land. The new entity formed should ideally be registered as private limited company under the company's law act of India.
- Now, enter a joint venture agreement with a builder's company. Therefore, the agreement is between two companies. One providing land for the development of the project and other providing capital and expertise to develop the project.
- How often, a landowner enters into a joint venture agreement with a ABC real estate developer Pvt. Ltd. The plot of land measures 20 acres and about 600 housing units would be developed. As a thumb of rule, 200 units should be assigned to landowner and remaining 400 to the builder. For a landowner, this kind of agreement is safe and can result better returns for his/her land as opposed to the agreement wherein builder pays the 1/3rd of the cash inflows to the landowner on the sale of housing units.
- Hire a professional legal company with expertise in real estate joint agreements, and due-diligence.

16.10 EXAMPLES ON JOINT VENTURE DEVELOPMENT

Following examples will explain method of working out share of flats of owner in completed building under joint venture contract.

Example-1 : A land owner desires to enter into joint venture agreement with a developer. Advice on owner's share in ready flats, if plot area is 2500 sq.m. F.S.I. is 1.75. Cost of land is Rs. 30,000/ sq.m. Cost of construction is Rs. 15,000/ sq.m. and sale price of ready flat is Rs. 60,000/ sq.m.

Solution: Total buildable area in plot :

$$2500 \times 1.75 \times 1.10 = 4812 \text{ sq.m. (10\% area is for free balcony area)}$$

By hypothetical building scheme it is seen that a building of stilt + 7 upper floors is possible in plot to consume full F.S.I. Each floor will have an area of 688 sq.m. with 2 staircase and 2 wings. Each wing will have 4 flats/floor. Total 28 flats/wing. Each flat will have salable area of about 86 sq.m. At the rate of Rs. 60,000/ sq.m. each flat will cost = $86 \times 60,000 = \text{Rs. } 51,60,000/-$.

Income	Expenses
<ul style="list-style-type: none"> ▪ Sale of flats 56 x 51,60,000 = Rs. 28,89,60,000 	<ul style="list-style-type: none"> ▪ Building construction cost of stilt area. 688 SM.@ Rs. 9,000/SM. = Rs.61,92,000 Upper floors cost 688 x 7 x 15,000 = Rs. 7,22,40,000
	<ul style="list-style-type: none"> ▪ Finance cost 1 year 18% of 784.32 lacs = Rs. 1,41,17,760
	<ul style="list-style-type: none"> ▪ Developer's profit 20% of 28.90 Crore = Rs. 5,78,00,000
	<ul style="list-style-type: none"> ▪ Architects & Engineers fees at 4% of building cost of Rs.78.32 lacs = Rs.31,37,280
	<ul style="list-style-type: none"> ▪ Value of plot = Rs.*
Total Income= Rs. 28,89,60,000	<ul style="list-style-type: none"> ▪ Total Expenses = Rs. 1592,66,240 + Rs.* (Land cost)

To have exact equal share in the profit, Income and Expense has to be equal.

$$\therefore \begin{aligned} &= \text{Rs. } 28,89,60,000 - \text{Rs. } 15,92,66,240 \\ &= \text{Rs. } 12,96,93,760/- \text{ (Land cost)} \end{aligned}$$

Cost of each flat is Rs. 51,60,000/-

Hence, the number of flats that must be given to owner

$$= 12,96,93,760 / 51,60,000 = 25.13 \text{ number of flats}$$

Say, 25 number of flats each of 86 sq.m. builtup floor area.

The balance 31 flats will go to the developer's share. This gives share of owner at 44.64% in the profit and developer's share works out to 55.36% in the profit.

Example-2 : Joint Venture Development Project is proposed at Kolkata. Area of plot is 12,000 sq.ft with 3,000 sq.ft. bungalow. Permitted FAR on plot is 1.80. Cost of construction is Rs. 650/- per sq.ft. Sale rate of flat is Rs. 1800/- per sq.ft. Find out share of land owner in the new construction to be undertaken on the plot.

Solution: Existing owner occupied bungalow on the plot which will be demolished to make the plot open for the new development.

(A) Total permissible floor area

$$12,000 \times 1.80 \times 1.10 = 23,760 \text{ sq.ft}$$

Total sale value for all the flats is

$$23,760 \text{ sq.ft.} @ \text{ Rs. } 1800/- \text{ per sq.ft.} = \text{Rs. } 427,68,000/ \quad \dots \text{ (a)}$$

(B) Expenses to be incurred by the Developer :

Cost of construction: 23,760 sq.ft.@ Rs. 650/ sq.ft.	= Rs. 154,44,000
14% interest on Rs.154 lacs for 1/2 period i.e. 1 year	= Rs. 21,56,000
Developer's profit at 30% ,only on his investment in cost of Construction & bank interest i.e. 176 lacs.	= Rs. 52,80,000
Administrative & other expenses 5% of 154 lacs	= Rs. 7,70,000
Total expenses	= Rs. 236,50,000

(C) The share of developer in the new building will be in proportion with his likely expenses and total sale proceeds.

∴ Developer share = $236,50,000 \div 427,68,000 \times 100 = 55.29\%$ (b)
Hence developer will get flats having total area = $23,760 \times 0.5529 = 13,136$ Sq.ft.

Balance 44.71% share will go to land owner (flats with 10,623 sq.ft. area).
Land owner is entitled to 44.71 %share in flats i.e. total salable area of 10,623 sq.ft.

Sale value of owner's flats: 10,623 sq.ft.@ Rs. 1800/- per sq.ft.
= Rs. 191,21,400/- (c)

Instead of selling total land of 12,000 sq.ft. outright, we can say that the owner sold 55.29% right in the land (6635 sq.ft. to developer and balance 44.71% right in land (5365 sq.ft.) is sold to owners of flats which came to his share.

For cross verification, we must find out whether owner has received a reasonable price for land sold by him or not.

Sale rate is Rs. 1800/sq.ft.. and cost of building is Rs. 650/sq.ft.

Taking 30% developer's profit land component value is Rs. 610/sq.ft. of sale area.

So, if land owner had directly sold the land instead of joint venture, he would have received a sum = $23,760 \times 610 = \text{Rs. } 1,44,93,600/-$ Where as under joint venture he received Rs. 1,91,21,400/- by way of sale of flats which came to his share. Extra profit earned by the plot owner is Rs. 46,27,800/-

Example-3 : Joint Development Project is proposed by the owner of the plot at Chennai. Area of the plot is 3600 sq.ft. F.S.I. permitted is 1.65. Cost of new construction is Rs. 2200/- per sq.ft. Sale rate of flat in the locality is Rs. 8,000/- per sq.ft. Calculate the amount that could be paid to land owner in addition to 45% share in the flats required by the owner in the new building. Assume developer's profit at 20% and land rate at Rs.3800/- per sq.ft. for F.S.I. 1.00.

Solution:

Total plot	= 3,600 sq.ft.	
Total permissible area = 3600 x 1.65 x 1.10	= 6534 sq.ft.	
Say 6530 sq.ft		
Owner's 45% share in the flats	= 2940 sq.ft.	
Developer's 55% share	= 3590 sq.ft.	(A)
Total sale price for developer's flats :		
3590 sq.ft. @ Rs. 8,000/- per sq.ft.	= Rs. 2,87,20,000/-	.... (a)

(B) Expenses to be incurred by the developer.

Building cost : 6530 sq.ft. @ Rs. 2200/- per sq.ft.	= Rs.143,66,000	
Interest at 15% on 143 lacs for 1 year	= Rs.21,54,900	
Developer's profit 20% of 287 lacs	= Rs.57,40,000	
Other expenses including municipal approval		
Charges : 6530 sq.ft. @ Rs. 600/- per sq.ft.	= Rs.39,18,000	
Total expenses	= Rs.261,78,900	.... (b)

Surplus amount available with developer		
Rs. 287,20,000 - Rs. 261,78,900	= Rs. 25,41,100/-	.... (c)

Developer can therefore offer Rs. 25 lacs to the land owner in cash over and above 45% flats (2940 sq.ft.) in the new construction on the plot.

17.0 VALUATION OF VARIOUS INTERESTS IN A PROEPRTY

17.1 Various Interest in a Property

The interests or rights in land or land and buildings are mainly (1) Freehold, (2) Leasehold, (3) Joint Ownership or Undivided Share in a Property, and (4) Easement Rights. The first three types of interests or rights are “legal estates” which are “good against the whole world” and not restricted as against particular individuals. The fourth right is “equitable” interest or right which is enforceable against some or certain persons/individuals only and not against others.

Transferable Development Right is a peculiar right which is not created by or is not arising out of the provisions of any legislation such as the Transfer of Property Act, Town Planning Acts etc. It is created under the provisions regarding physical planning control or Development Control Rules / Regulations (D.R.C.s) as accompanying a statutory development / master plan and is a conditional right (subject to certain pre-conditions) with the sole object of relieving only a Local Planning Authority of its financial liability in acquiring lands designated in a Development/Master Plan for acquisition by the Local Planning Authority for public purposes.

It should be remembered that in India, in principle, all lands belong to State and are given to individuals for particular use subject to payment of assessment – agricultural or non-agricultural – except in case of lands in Gaothan or Gamta (Village site) as if, (but not actually) rent for particular use of land.

Freehold interest inherently exists in all lands whereas lease-holds and equitable interests are carved out of or superimposed on such ownership.

Freehold

In law, the term freehold has a wider general meaning and extends to entailed interests and life interests. The freeholder is inherently the absolute owner of the property. He is able to do whatever he likes to do with his land i.e. he can hold, enjoy and dispose off subject to general law of the land (especially town planning laws and rules) and subject to the lawful rights of others. In a normal case he can develop it, transfer it or create lesser interests, i.e. lease-hold, life interest etc., without consent of any other private individual. His ownership of the property is perpetual (except if he transfers it absolutely) even though he is mortal Land remains the permanent property of the freeholder and his successors.

The freeholder instead of occupying the property himself often grants or lets the exclusive possession of the property or part of it to another person for a certain fixed period in consideration of the payment of rent e.g. under lease or tenancy. A freeholder who grants leases or tenancies retains the legal right to recover the physical possession of his property when the leases/tenancies come to an end. The freeholder's/landlords such interest in the land is known as "reversion".

Leasehold

A lease-hold interest is a "term of years" which expires at the end of the term specified in a lease deed. It is normally subject to the payment of annual rent i.e. rent reserved under the lease, and also subject to the observance of covenants specified in the lease. The person who grants the lease is called the lessor and one who takes the lease is called the lessee or lease-holder. A lessee has right to occupy the property for unexpired period of lease term and can sub-lease the property to another person for a period less than the unexpired period of his lease. In case the rent reserved under the lease is less than the fair market rent the lessee has the right to enjoy profit rent for the unexpired period of lease. On expiry of the lease period the property reverts to the lessor unless the lease is renewed.

17.2 Valuation of Joint Interest

Joint-Ownership

Land and buildings may be concurrently owned by several persons, either in joint ownership or ownership-in-common. In joint ownership the parties have equal rights to the benefits of the property, but in the case of death of one joint owner his share passes on to the surviving joint owner by survivorship.

In ownership-in-common the shares are "undivided" i.e. there is no physical partition of the property. The undivided shares may or may not be equal i.e. the co-owners may have equal shares or one co-owner may have a half share, another may have a one fourth share and so on. On the death of one of the co-owners his share passes on under his will or intestacy to his heirs. In ownership-in-common not only the enjoyment of the property is shared but the capital value is also shared by the co-owners. Since there is no physical division/partition of the property when one of the co-owners desires to undertake any improvement to the property or to enter into any transaction

in respect of his share obtaining written consent of other co-owners is necessary. Thus the property is subject to divided control.

A share in the property having undivided common ownership is usually valued in two stages. First (i) the interest in the property is valued as a whole and (ii) then it is divided in the appropriate shares e.g. one-half one-fourth, one-tenth etc. and some deductions are made there from on account of divided control. In case there are no major or considerable disadvantages in divided control such deductions will be nominal say 5% to 10% or so. However, if there are major or substantial disadvantages in such divided control the percentage deduction will be proportionate to such disadvantages.

Flat Ownership

It is necessary to distinguish between the ownership-in-common with undivided shares and the flat – ownership in which ownership of individual flat is absolute (like that enjoyed by a freeholder) together with undivided share (usually in proportion of the built-up area of flat) in land and in common areas like passages, staircase, lifts, common facilities, amenities, services etc. A flat owner has legal right to hold, enjoy and dispose off the flat subject to the rules of the Co-operative Society, especially those regarding obtaining consent and payment of transfer charges in respect of transfer by sale or by long lease (except for short lease monthly tenancy or live and license agreement). A “Flat” is defined as “ a separate and self-contained set of premises used or intended to be used for residence or office or show-room or shop or godown or for carrying on any industry or business and includes a garage, the premises forming part of a building and includes an apartment.” : Section 2(a), The Maharashtra Ownership Flats (Regulation of the Promotion of Construction, Sale Management and Transfer) Act 1963. “Apartment” is also defined similarly under Section 3(a) of The Maharashtra Apartment Ownership Act 1970. It is worth to note that a flat or an apartment is a separate, self-contained unit (entity) for independent use, forming part of a building (or in a building).

A flat/apartment owner can thus transfer by sale or lease flat/apartment owned by him as a separate and self-contained unit subject to obtaining consent from the Co-operative Society as may be prescribed by the Rules of the Society duly approved by the Government. Fair Market Value of a flat/apartment is/can be valued by capitalizing, at the appropriate rate of interest, the net income from the fair market rent for future life of a building (with reversion to proportionate land value) or in perpetuity. The outgoings will include municipal taxes and all the service charges

(including sinking fund etc.) payable to the Society together with the cost of internal maintenance and repairs, insurance etc. which are to be incurred by the owner of the flat. The transfer charges to be paid to the Society either by the flat owner or the purchaser do not form part of the fair market value or consideration price, and will add to the consideration or market value as 'cost of transfer' as is the case with registration charges and stamp duty.

17.3 VALUATION OF EASEMENT RIGHTS

Easement Rights

Land may be subject to restrictions regarding its use. Some earlier conveyance of freehold property have imposed easements or restrictive covenants. Similar restrictions are often stipulated in leases.

A covenant is a contractual obligation stipulated in a deed. Restrictive covenants take effect only as property rights in equity. Easements are common law property rights and are thus enforceable against the whole world irrespective of registration or notice. There also can exist equitable easements which are registrable similar as restrictive covenants. Easements are created either by covenants or by virtue of adverse possession.

Easement rights burden particular lands termed as 'Servient' properties/tenements for the benefit of other lands adjacent or nearby, termed as 'Dominant' properties/tenements. Some typical easements are (i) Private rights of way, (ii) Rights of light and ventilation, (iii) right of support etc. Many other varieties of easements such as rights to install and maintain pipelines cables etc. have been upheld from time to time. Further, while right of support of building is an easement right and right to support of land is natural right enjoyed by each and every owner and is not an easement right.

Easements must be granted expressly in a deed so as to be legal estate. But rules have been evolved whereby, for reasons of necessity or otherwise, the grant of easements is often implied in conveyances of land which in fact do not make express mention of easement rights. It is also possible to have presumed grant of an easement right by "prescription" i.e. by long user over the servient property as of right and not by permission given by the owner of servient property.

Valuation of Easement Rights

The market rent and capital value of dominant property increases by virtue of enjoying advantages arising out of easement rights. The easement right to light and ventilation make the accommodation more livable and increases its rent while right of way provides legal access to a property increasing its value. Easement rights at the same time create liability for or put burden on the servient property; for, example easement right of way through servient property/land cause nuisance to and loss of privacy for rooms/accommodation abutting the land over which right of way exists, thereby reducing its income fetching capacity and capital value. The dominant properties enjoying the benefits of easement rights also fetched increase in rents and market value which they would not have fetched in absence of and due to lack of such easement rights. On the other hand servient properties burdened by easement rights experience reduction in rents and in market values. Different types of easement rights will have different effect on rents and market values and no generalized rule or percentage of increase or reduction in rents and market values can be indicated.

In view of these facts the method of valuation is to estimate the market values of dominant property with and without enjoyment of benefits due to easement rights. In the case of servient property also market values with and without the disadvantages due to existence of easement rights can be estimated. The difference in the two values would be market value of easement rights. The method can be termed as **Value Before (easement) and Value After (easement)** method as in the case of estimating compensation for injurious Affection.

17.4 TRANSFERABLE DEVELOPMENT RIGHTS (T.D.R.)

General

It has been stated/pointed out earlier that the Transferable Development Right is not created under any provision of any of the legislations like the Transfer of Property Act or Town Planning Acts. It is created by a provision in the Development Control Regulations (D.C.R.s) forming part of the Development Plans of only some of the Municipal Corporations (e.g. Mumbai) prepared in Maharashtra and sanctioned by the State Government under the provisions of Maharashtra Regional and Town Planning Act 1966. Thus it is not a legal right and being provided under the Development Control Regulations (not a statute) provisions thereof can be modified, altered, withdrawn or rescinded at any time without approval of the State Legislature though after following the procedure for modifications in the provision of a duly sanctioned

Development Plan i.e. inviting and considering suggestions and objections to the proposed modifications from the local population.

Further the origin of the concept of T.D.R. lies in the paucity of funds with the Local Planning Authorities for payment of compensation, for acquisition of lands designated, for acquisition by the Local Planning Authority, for providing utility services, amenities and social facilities to its citizens. The other Acquiring Bodies including the Central and State Governments Companies and Registered Societies etc. who take recourse to acquisition of lands under the Land Acquisition Act 1894 after making provision of funds under their annual budgets for payment of compensation. The provision of T.D.R. is not therefore available for Acquiring Bodies other than the Local Planning Authorities who have incorporated such provisions in their D.C. Rules.

Thirdly the two preconditions for availing T.D.R. by the land owner in lieu of money compensation for acquisition by the Local Planning Authority of his land reserved in the Development Plan are the absolute possession of the land should be handed over by the land owner (1) Free of cost and (2) Free from all encumbrances. Only a freeholder can handover absolute possession of his land and a lessee cannot handover such possession without written consent (though formal in case of perpetual lease) of the freeholder. T.D.R. can, therefore, be availed of in lieu of compensation by a freeholder or by a lessee only with the specific and written consent of the freeholder. Further the option of either of availing of TDR in lieu of compensation or of getting compensation in cash rests with the owner and the Local Planning Authority cannot compel owner to accept T.D.R.

T.D.R. Concept

The T.D.R. concept, which originated in U.S.A., has been adopted in India under Development Plans of cities and towns and in Development Control Rules mainly with a view to enable it. Municipal authority to acquire lands needed for public purposes without payment of monetary compensation (in view of inadequacy of fund), in lieu of which T.D.R. is granted. T.D.R. is the short form of "Transferable Developments Rights." Normally the owner of the plot holds the right of development subject to the provisions of law and Rules and Regulations including the D.C. Rules which is attached to the plot of land owned by him. But under this T.D.R. concept, owner of the plot retains right for development which is detached from the plot owned by him. This right is transferable and it can be attached by sale to the other plots located in prescribed area (Receiving Zone) which may not belong to the owner. The only condition is that the land reserved for public purposes or roads has to be handed over

free of cost and free from encumbrances to the local authority and in lieu of the free surrender of the land, local authority would award T.D.R. rights which are tradable in the open market. Thus owner loses ownership of the land, yet he continues to hold development rights in respect of the surrendered land which are transferable only to lands in receiving zone and thus salable in the market.

This concept was first introduced in America. One of the town authorities wanted to develop certain undeveloped area of the town across the river flowing through the town. The local authority had no funds for acquiring land and for providing infrastructure amenities in said area. Group of builders came forward and suggested that land required for public amenities could be made available free of cost to the local authority, provided special extra incentive is given to the builders in form of extra F.S.I. on their other land. This is how concept of T.D.R. was evolved. This concept was first introduced in India in 1991 in city of Mumbai when new D.C. Rules 1991 came in to force under which T.D.R. is granted in lieu of compensation at the option of the land owner. Now the concept is being introduced in other towns of India also.

Definitions and Explanations of the Terms

Certain terms connected to T.D.R. concept are as under:

1. Originating Plot

The piece of land which is reserved for the public purpose or road under development plan and which is surrendered free of cost and free of any encumbrances, to the local authority, by the owners of the said plot, is called originating plot. The rights for development generated or originates from such surrendered plot and hence such plot is called originating plot. In case where developer carries out development of slum plot as per norms of town authorities, right for development (T.D.R. for Slum) is granted against such originating slum plot. In short, plot of land which generate transferable right for development, is known as originating plot.

2. Receiving Plot

The plot of land on which extra F.S.I. is permitted to be developed, by use of T.D.R. is called "Receiving Plot". The development rights which generate from originating plot gets attached to this receiving plot situated in the prescribed Receiving Zone. T.D.R. generated from originating plot may or may not get

attached to single receiving plot. Normally it gets attached to number of receiving plots due to various norms and restrictions prescribed for use of T.D.R. on receiving plot. Again owner of T.D.R. or development right holder may not wish to sale all rights in a single block. He may choose to sale it in several parts, at different period of time, to derive maximum financial benefit out of such T.D.R.

3. Development Right Certificate (D.R.C.)

Development Right Certificate is the document or instrument issued by the local authority, to the owner of originating plot, in lieu of surrender of the said plot to the local authority for public purpose including roads free of cost and free of encumbrances. This D.R.C. document is negotiable like a share certificate of any public limited company with restriction that T.D.R. can be utilized only on the lands situated in the receiving zones, as prescribed in the D.C. Rules. This certificate is held in the physical form and it shows complete details of originating plot such as plot no., village name, area of plot, user zone in which it was falling (Residential/Commercial/Industrial), F.S.I. that was permitted on said plot and name of owners of said plot. Purpose for which plot was reserved and acquired is also indicated on the D.R. Certificate.

This D.R.C. also has on its reverse side, space to record details of sale or transfer endorsements. All sales of T.D.R. are recorded on reverse side of the certificate indicating how much plot area (T.D.R.) is sold under each sale transaction and the balance remaining. Said endorsement also indicates the plot on which said T.D.R. is proposed to be utilized and name of the purchaser. When full T.D.R. (Total area of originating plot) is sold off to different purchasers, and no surplus area is left, value of D.R.C. becomes Nil and the D.R.C. has to be surrendered back to the local authority. Originally T.D.R. was permitted to be sold in lots of 50 sq. m. only but subsequently odd lots or any areas were permitted to be sold to suit to the requirements of the purchasers i.e. receiving plot owners. This D.R.C. is tradable and transferable in the market, for lands in receiving zone, like any other negotiable instrument and the share certificates (DRC) is held in physical form. Prices of T.D.R. go up or down depending upon supply and demand of T.D.R. in the Real Estate Market.

4. Development Right (D.R.)

When part of the plot is affected by Reservation and Development Rights are used by the same plot owner on his remaining adjacent portion of the said plot,

is called Development Right or D.R. There will be no need for transfer of said right as it could be utilized on the same plot from which T.D.R. is generated. In such case, originating plot and the receiving plot are not different but the same. However, if the owner of the plot does not intend to use said D.R. on his remaining plot, he can obtain D.R.C. after free surrender of the affected land to the local authority. This type of D.R. is found generally in case of plots affected by road widening (set back) lines.

Grant of T.D.R.

T.D.R. is given to the owners of the plots which are reserved or designated for acquisition only by the Local Planning Authority for public purposes under the Development Plan of a town. Reservation may be for Roads, Garden, Playground, School, Market, Hospital, Fire Station, Drama Theatre etc. In lieu of free of cost and free of encumbrances receipt of such plots, local authority grants certificate of development rights (Development Right Certificate) to the owner of the plot who is so dispossessed of such land. The rights under this certificate are Transferable and Tradable in the market. Hence these rights are called Transferable Development Rights i.e. T.D.R.

Types of T.D.R.

Depending upon the user for which originating plot was acquired (surrendered free by T.D.R. holder), T.D.R. are grouped into following four groups.

- (i) **General T.D.R.**
T.D.R. originated out of free surrender of plot reserved for public purposes like Garden, School, Playground etc. is called General T.D.R.
- (ii) **Road T.D.R.**
T.D.R. originated out of free surrender of plot or portion of plot affected by new D.P. Road or road widening of existing municipal road. Such development rights are called Road T.D.R.
- (iii) **Slum T.D.R.**
T.D.R. granted to developers, in lieu of carrying out redevelopment work of "Slum Area" plot as per Government policy and norms is called Slum T.D.R. Strictly speaking, addition F.S.I. granted to developers for redevelopment of slum area in an 'Incentive' F.S.I. and not a Right of Development and should

be used on the same site of slum and should not be transferable as Development Right.

(iv) Heritage T.D.R.

Owner of plot on which “Heritage” building exists and when F.S.I. of such plot is under utilized and when such owner is prevented to use such unutilized F.S.I. on his land, Heritage T.D.R. is granted to owner which corresponds to unutilized F.S.I. in the plot.

Norms for Use of T.D.R.

Development Control Rules of each town prescribes their own norms and regulations for use of T.D.R. on receiving plots. In city of Mumbai following norms are prescribed:

- (i) No T.D.R. is permitted in old town area called “Island City” or main land area comprising of nine wards from Colaba to Mahim/Sion.
- (ii) T.D.R. is usable only on those receiving plots which are towards north side of the originating plot or in the prescribed respective receiving zones.
- (iii) In suburban area, T.D.R. is not permitted to be used in congested areas on either side of the suburban railway lines up to main roads e.g. L.B. Shastri Road (Old Bombay Agra Road) running through Western parts of eastern suburban areas.

T.D.R. thus, in short, originates from congested areas and is receivable in non-congested areas.
- (iv) F.S.I. of originating plot is converted into permissible F.S.I. in receiving zone. If 50 sq.m. of T.D.R. is purchased from plot in 1.33 zone, 66.50 sq.m. F.S.I. would be permitted in the receiving zone having 1.00 F.S.I.
- (v) If originating T.D.R. is from residential zone, it cannot be used on plot in industrial or commercial zone and vice versa.
- (vi) Use of “General T.D.R.” on receiving plot should not exceed 40% of total area of receiving plot. Use of Road T.D.R. should not exceed 40% of plot area. 20% could be in form of Slum T.D.R.

Total use of T.D.R. on receiving plot (in addition to permitted F.S.I.) should not thus exceed 100% of area of receiving plot. However, 100% Slum T.D.R. is permitted to be used on plot and there is no limit of 40% like Road T.D.R. and General T.D.R.

These norms go on changing from time to time as per policy of the Municipal Corporation and the State Government.

Valuation of T.D.R.

Valuation of T.D.R., owned by originating plot owner is very difficult due to different norms and several restrictions. The difficulty also arise due to the fact that rates of land prevalent in originating plot locality is of little help in valuation because T.D.R. is usable on several other plots in different wards and different locality where land values would be quite different and are usually lower than the land values in locality of the originating plot.

There are basically three different persons interested in the T.D.R. value and hence value of T.D.R. has to be divided amongst these three parties.

- (i) Owner of originating plot is interested to receive compensation for loss of development rights for the plot surrendered free of cost to the local authority.
- (ii) The developer is the investor who buys T.D.R. for the development for earning profit. He is an entrepreneur who undertakes the responsibility of investing funds in purchase of T.D.R., finding out suitable receiving plot and pay suitable price to the owner of the receiving plot obtaining from him development permission for use of T.D.R. on the receiving plot for constructing new building or upper floors on existing building and sale it in the market at profit. For all these management works and for taking risk of development project, he would expect considerable share as profit from the use of T.D.R.
- (iii) Third person interested in value of T.D.R. is the owner of receiving plot.

Due to extra development on the plot by use of T.D.R. however there would be more occupants in the property. There would be greater load on water, drainage, electricity and security services. Amenities like lift, garden, play

area, parking facility, swimming pool would also be subjected to congestion and over crowding.

The price paid by a developer to owners of receiving plots is in fact the share in profit of the developer for obtaining permission and N.O.C. for use of T.D.R. on the plot. Looking from any angle, the fact remains that owners of receiving plot are the interested person in the value of T.D.R. Payment made to receiving plot owners is many a times called “Royalty Amount” and not compensation or price.

Due to these three interested persons; valuer has the tough task of assessing share of each one in the value of T.D.R.

The shares of each of these persons in the value does not remain same in every case but differ in every case. The shares are decided considering five aspects –

- (a) Value of land in locality where originating plot is situated.
- (b) Value of land in locality where receiving plot is situated, which is more important.
- (c) The share of profit expected by a developer for undertaking such a development project.
- (d) Bargaining power of the three interested parties.
- (e) Supply of and demand for T.D.R.

17.5 Time-shared Property

The idea of concurrent ownership as nourished in the system of condominiums and co-operatives has been further fine-tuned with the ushering of time-shared property units. With unique nature of occupancy, such property has made appearance in posh hill stations or sea resorts by way of arrangement amongst co-owners who entitle themselves to occupation for weeks or months or seasons as scheduled in the terms of agreement. The rich people used to maintain their own lodge in hill stations or sea resorts. But this became an uneconomic proposition in course of time. Hence the idea of concurrent ownership evolved. The standard warranty deeds generally provide that the person who buys a time-sharing unit in a resort is an owner with full rights of ownership. He can lend his property, sell it, rent it, or give it away during the weeks he owns it. Or he may keep it forever. Such property being transferable items pose valuation considerations unique to itself. The market is the guide.

DEFINITION of 'Time Sharing'

A hybrid form of ownership, a time share is the right to occupy a unit of real estate property, such as a condominium or vacation home, during a specified number of separate time periods. Each time period is for a certain duration, such as one or two weeks. Time-sharing allows multiple purchasers to buy interests in the same real estate.

Fixed vs. Floating Weeks

Traditional timeshare properties typically sell a set week (or weeks) in a property. A buyer selects the dates he or she wants to spend there, and buys the right to use the property during those dates each year.

Some timeshares offer “flexible” or “floating” weeks. This arrangement is less rigid, and allows a buyer to choose a week or weeks without a set date, but within a certain time period (or season). The owner is then entitled to reserve his or her week each year at any time during that time period (subject to availability).

Legal Structure of a Timeshare

What kind of property interest you’ll own if you buy a timeshare depends on the type of timeshare purchased. Timeshares are typically structured either as shared deed ownership or shared leased ownership.

- **Shared Deed Ownership**

With shared deed ownership, each owner is granted a percentage of the real property itself, correlating to the amount of time purchased. The owner receives a deed for his or her percentage of the unit, specifying when the owner can use the property.

This means that with deed ownership, many deeds are issued for each property. For example, a condominium unit sold in one-week timeshare increments will have 52 total deeds when fully sold, one issued to each partial owner.

- **Shared Leased Ownership Interest**

If the timeshare is structured as a shared leased ownership, the developer retains deeded title to the property, and each owner holds a leased interest in the property. Each lease agreement entitles the owner to use a particular property each year for a set week, or a “floating” week during a set of dates.

If you buy a leased ownership timeshare, your interest in the property typically expires after a certain term of years, or at the latest, upon your death. A leased ownership also typically restricts property transfers more than a deeded ownership interest. This means as an owner, you might be restricted from selling or otherwise transferring your timeshare to another. Due to these factors, a leased ownership interest might be purchased for a lower purchase price than a similar deeded timeshare.

BENEFITS	DRAWBACKS
Great way to own a property, without incurring high costs	High purchase price
Comfort of same familiar place	High rates for financing the balance
No hassle of reserving and renting accommodations	They won't qualify for financing at most banks.
Some timeshares offer perks such as the right to use fitness rooms and hot tubs	Annual maintenance fees
Flexible or floating dates provide a nice option	Poor resale potential

18.0 VARIOUS PURPOSES OF VALUATION

18.1 Valuation is required for following fiscal and non-fiscal purposes:

(a) The fiscal purposes are:

Levy of Taxes such as:

- Income-Tax / Capital Gains collected by Govt. of India.
- Stamp Duty collected by State Governments on documents for transfer of properties.
- Municipal Taxes on Land and Buildings collected by Local Self Government.

(b) The non-fiscal purposes are:

- Sale/Purchase, Valuation dispute in court, Probate and Partition
- Award of compensation for compulsory acquisition of property for public purposes.
- Valuation of tangible assets owned by the Govt. of India, State Governments, Public Sector Undertakings and Statutory Bodies like port trusts, for privatization as well as ascertaining return on investment/current value.
- Liquidation of assets for recovery for Commissioner, High Courts and Official Liquidator.
- Rent fixation at the time of leasing of property and subsequent renewal of leases in Government/Semi Government organization.
- Property mortgaged as a security for advances by the Banks and Auction reserve.
- Insurance of immovable and movable property.
- International Financial Reporting Standards (IFRS).

18.2 The purpose for which valuation is required is critical to the selection of an appropriate basis of valuation. Therefore, the Valuer has to be very clear about the purpose of the valuation and therefore the purpose for which the valuation is required shall be clearly stated.

18.3 The basis of valuation for various purposes enumerated above shall be as under:

Fiscal purposes:

(a) Income-Tax

As per the instructions of the client.

If valuation is required for justification of amount spent on construction carried out, then quantity surveying method shall be used to find out cost of construction on the date of valuation Valuer can also carry out Valuation by cost index method. However, while using the cost index method the valuer must be fully aware of limitations and shortcomings of cost index method.

If valuation is required for justification of investment made in acquiring rights in immovable property, then valuation shall be carried out as per definition of market value satisfying 'willing buyer' and 'willing seller' concept.

(b) Capital Gains Tax as on 1.4.2001

Valuation shall be as per definition of market value satisfying 'willing buyer' and 'willing seller' concept.as if instructions were received in 2001.This means condition of property as on 1.4.2001 to be considered.

(c) Stamp Duty collected by State Governments on documents for transfer of properties.

Valuation shall be as per definition given in the Stamp Manual published by the state having jurisdiction on the property or as per rules framed by respective states for the purpose of valuation.

It is note-worthy to mention here that the rules framed by various states Governments for valuation are vague as outlined in Annexure-A of this document and study of the same shall reveal that these rules are requiring immediate improvement.

(d) Municipal Taxes on Land and Buildings collected by Local Self Government.

As per the provisions of relevant Act applicable for levying the property tax. Most of metropolitan cities follow carpet area basis, some follow capital value based on ready reckoner/stamp duty valuation and rental valuation which requires estimation of rent as per provision of relevant act.

Non-fiscal:

- (a) Sale/Purchase, Valuation dispute in court, Probate and Partition

Basis of value shall be as per the definition of market value satisfying 'willing buyer' and 'willing seller' concept.

- (b) Award of compensation for compulsory acquisition of property for public purposes.

Under Section 26 of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013

The basis provided under the Act and the same is non-market base.

- (c) Valuation of tangible assets owned by the Govt. of India, State Governments, Public Sector Undertakings and Statutory Bodies like port trusts, for privatization as well as ascertaining return on investment/current value.

The basis shall be market value as per definition of market value satisfying 'willing buyer' and 'willing seller' concept.

- (d) Liquidation of assets for recovery for Commissioner, High Courts and Official Liquidator.

The approach to valuation in such cases will depend up on the instructions from the clients. If instructions are such that they do not satisfy the conceptual frame work of definition of market value like- seller is not willing to sell, purchaser purchases with the knowledge that seller is compelled to sell, and marketing time is less. Then in that case basis of valuation basis shall be other than market value. But if instructions are to carry out the valuation as per definition of market value satisfying 'willing buyer' and 'willing seller' concept. then basis shall be market value.

- (e) Rent fixation at the time of leasing of property and subsequent renewal of leases in Government/Semi Government organization.

Computation of rent for the purpose of taking premises on lease/rent, comparison of premises recently given on lease to the lessee/occupants who are not protected under the rent act to be made with premises to be given on lease with following major factors:

- Rent of the rental instance

- Location of rental instance with respect to main roads and other amenities and the floor on which it is located
 - Time factor i.e. date on which rental instance is leased and date on which premises is to be rented. Any increase or decrease in the rent to be taken into consideration.
 - Size of the premises to be rented and size of rental instances
 - Type of construction
 - Age
 - Maintenance
 - Special factor – e.g., party has taken premises on lease at the rent prevalent in the locality and within 3-4 months he has taken an adjoining premise having same area and shape on lease. The rent of adjoining premises is higher rent than the rent of premises taken on lease 3-4 months back and therefore while using the rental instance of adjoining premises it is to be examined whether rent paid for adjoining premises is a market rent or not.
 - Any other relevant factors based on the facts and circumstances of the case
- (f) Property mortgaged as a security for advances by the Banks and Auction reserve.
- (i) Property mortgaged as a security

Valuation for security against loan must satisfy S.5(n) of Banking Regulation Act, 1949.

Secured loan or advance has been precisely defined in clause (n) of Section 5 of Banking Regulation Act, 1949 as:

“a loan or advance made on the security of the assets the market value of which is not at any time less than the amount of such loan or advance.”

Therefore, the basis of valuation as per S.5 (n) of Banking Regulation Act, 1948 which is Market Value.

From the point of view of bankers, the security offered must be sufficient to recover principal amount with interest in the event of default by the borrower.

Therefore, periodical review of security from the angle of market

value is required. Each review has to be made by keeping in mind the definition of secured loan or advance given above. Because even in review bank is interested in knowing the loan is properly secure or not.

The following input by valuers on risk analysis is essential to the bankers:

Market Risk Rating:

- 1 = Low,
- 2 = Low to Medium
- 3 = Medium to High,
- 4 = Medium to High
- And
- 5 = High

The Valuer shall not provide any other basis of valuation such as Forced Sale Value unless precisely demanded by the financial institutions. In such instances, the valuation shall be based on sale instances which have been taken place under these conditions i.e. forced sale. In the event of non-availability of such sale instances valuers shall fully disclose the basis on which how the value has been worked out.

(ii) Auction Reserve

The basis shall be as per the definition of market value satisfying 'willing buyer' and 'willing seller' concept with a range of prices.

(g) Insurance of immovable and movable property.

The basis of valuation shall be depending on the type of policy; Reinstatement Cost New or indemnity basis or such other basis as is identified in a fire insurance contract or policy as per the specific instructions from clients.

(h) International Financial Reporting Standards (IFRS).

The basis of valuation shall be as instructed by the auditors/financial advisors or Chief Financial Officer of the company.

18.4 Valuation of properties for Bank Finance / Loan purpose

"Secured loan or advance" means a loan or advance made on the security of assets the market value of which is not at any time less than the amount of such loan or advance;

and "unsecured loan or advance" means a loan or advance not backed by any collateral and is based on the creditworthiness of the borrower.

From the point of view of bankers, the security/collateral offered must be sufficient to recover principal amount with interest in the event of default by the borrower.

Therefore, periodical review of security from the angle of market value is required. Even if there is a repeat job of the same property, the input required from valuer remains same in each valuation.

The following inputs by valuers on risk analysis will be helpful to the bankers:

Market Risk Rating: 1 = Low
2 = Low to Medium
3 = Medium to High
4 = High

Valuer shall give his opinion on - Recent Market Direction
- Market Volatility
- Local economy impact

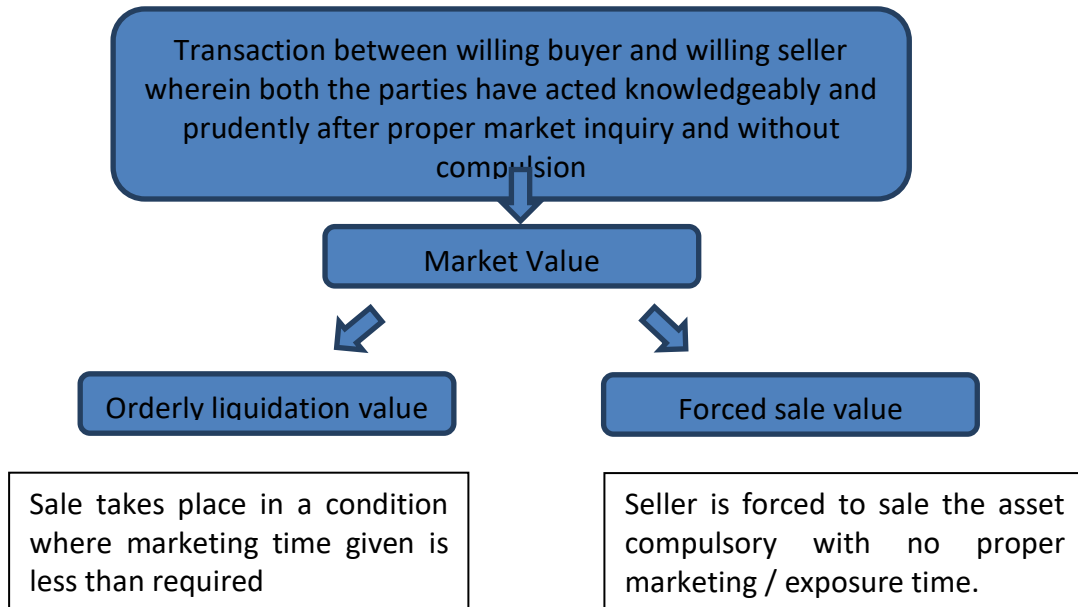
(a) Liquidation value

By Auction sale

Where the auction sale is by banks or financial institutions, courts, etc., to recover dues, there is an element of distress, a cloud regarding title, and a chance of litigation, which have the effect of dampening the enthusiasm of bidders and making them cautious, thereby depressing the price.

On the other hand when purchasers start bidding, an element of competition enters into the auction. Human ego, and desire to do better and excel other competitors, leads to competitive bidding, each trying to outbid the others. Thus in a well-advertised auction sale, where a large number of bidders participate, there is a tendency of the price of the auctioned property to go up.

Chart showing difference amongst market value, orderly liquidation value, and forced sale value.



(a) Orderly liquidation value is an estimate of the gross amount that the tangible assets would fetch in an auction-style liquidation with the seller needing to sell the assets on an as-is, where-is basis. The term “orderly” implies that the liquidation would allow for a reasonable time to identify buyers, and the seller would have control of the sale process. The marketing time is less than required for a sale as per market value definition and more than required under forced sale condition.

(b) Forced Sale Value is an estimate of the gross amount that the tangible assets would fetch when the seller is forced to sell the assets compulsorily without proper marketing time/exposure time. There is an urgency to sell and the seller does not have control of sale process (generally the banks/ courts/ receivers, etc.).

The price realized under orderly liquidation scenario and under forced sale scenario are subjective and therefore instead of terms orderly liquidation value and forced sale value, the terms price realized under orderly liquidation condition and price realized under forced sale condition are appropriate.

(c) The banks need to ensure that valuation report covers the following vital issues:

1. Relation between borrower and owner of the property to be mortgaged.
2. Site plan indicating location with land marks.
3. Details of property to be financed including description of locality and availability of infrastructure facilities (detailed specification and location of property vis-à-vis school, markets, bus station, railway station, central business district, etc.).

4. Basis of valuation approach adopted with justification and explanation.
5. Sale statistics/statement/instances and plan showing property in question and sales statistics with land marks.
6. Logical report, which shows comparison of sale instances with property in the question with regard to relative merits and demerits as mentioned in the guidelines when market approach is adopted.
7. Logical report, which shows analysis of income and outgoings as mentioned in the guidelines when market approach is adopted.
8. Logical report of the built-up properties valued by cost approach showing computation of -
 - Land value as per market approach indicating above.
 - Depreciated Replacement cost by considering the following factors -
 - Reproduction cost or Replacement cost new as the case may be
 - Physical wear and tear (Depreciation)
 - Technological Functional and Economic obsolescence if any.
9. Approved plans of existing building/s.
10. In case of proposed new development, project report with attested copy of approved building plans or attested copy of plan submitted for approval.
11. Marketability of the property.

18.5 Valuation of properties for Auction Reserve purpose

The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002, authorises banks to auction mortgaged properties in case of a payment defaults by borrowers. To make the process more transparent, banks have started selling such properties through e-auction, which also helps them cater to a wider section of people.

- Generally, the price tag on an auction property is much lower than that in a regular market due to the element of distress, a cloud regarding title, and a chance of litigation, which have the effect of dampening the enthusiasm of bidders and making them cautious, thereby depressing the price.
- When the bank seizes the property from a defaulter, the valuation of the property is conducted by an independent chartered surveyor/valuer.
- The main objective of a bank in a distress sale is recovering dues, not making profit. As even if a property is sold for a profit, the bank has to return the extra amount to property owner after deducting principal, interest, penalty, charges, etc.
- Two values are computed, a market value and a distress sale value. A minimum bidding price or what is known as a reserve price is fixed at the distress price level.
- The price can go up to any extent depending on the property's condition, maintenance, and its location. The prices are usually 10-20 per cent lower as

compared to market price at that moment in accordance with the property location, age of the building locality, and many other factors.

- While valuing the property under auction, we should take into account expenses such as overdue payments to the municipality, tax department, co-operative society, and electricity bills. And keep in mind that the property will be on auction on as is where is basis.
- Banks are most likely to offer a discount because of the problems associated with non-performing assets (NPA). Though they do their own due-diligence, often the property might have some liabilities which may have gone unnoticed.
- If the borrower defaults on his loan for six continuous months, he is given a 60-day notice period but if he still fails to repay, banks issue another 30-day notice period. In case the borrower does not pay even during this period, his loan is declared as a part of the bank's non-performing asset (NPA). These properties are auctioned to recover losses under the Sarfaesi Act (Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002).
- Properties are valued by a professional valuer before the auction. The valuation is generally conservative as banks only try to recover the amount that is outstanding.

18.6 Valuation of properties for Building Insurance purpose

- The property valuation for insurance is insured for indemnity value instead of replacement value.
- The difference between a market valuation and an insurance valuation is that market valuations provide an indication on an amount a property might be expected to realise when offered for sale. It is based on what is happening in the current property market and includes the sales price of similar properties available for sale. A market valuation is not suitable for estimating the cost to rebuild a property, as these are not based on rebuild costs, and will also include the value of the land, whereas the Insurance valuations estimate the cost of reinstating the property with a new modern equivalent for insurance purposes. The factors considered in establishing the replacement or reinstatement cost will typically include:
 - (i) Specific materials used in the building o Location factors (remote or rural sites versus metropolitan)
 - (ii) Design of building including soil type, special footing, etc.
 - (iii) Demolition costs and removal of debris
 - (iv) Fees associated with reconstruction, architects, survey and engineering
 - (v) Inflationary Provisions: The cost to reinstate assumes an individual event and does not reflect a wide spread or natural disaster impacting on the cost or availability of materials and labour.

18.7 Assessing the Indemnity Value:

In placing the insurance cover, the insured may elect to insure on an indemnity value basis. If the basis of insurance under the policy is indemnity value, or, in the event of a loss, if the insured elects not to replace/reinstate or repair the asset, then the insurer may make a payment on the basis of the indemnity value of the asset(s) at the time of the loss.

Indemnity value is typically defined as follows: The cost necessary to replace, repair and or rebuild the asset insured to a condition and extent substantially equal to but not better or more extensive than its condition and extent at the time that the damage occurred, taking into consideration the age, condition and remaining useful life of the asset.

Reinstatement cost is referred to as the cost of reinstating an asset to an as new condition or new for old. The reinstatement cost notionally assumes a total loss. In the case of a partial loss, reinstatement cost also covers the cost of repairing the property insured to its condition when new. The extent of damage and therefore the cost of repairs cannot be anticipated prior to an actual loss occurring. The cost of repairs may be than the reinstatement cost of the property insured. To the extent the estimated cost of repairs is greater than the estimated cost to completely replace or reinstate the property insured, it is to be assumed that the insurer would seek to completely replace or reinstate rather than repair the property insured. In any case, the assessment of repair costs is typically within the area of expertise of a loss adjustor or loss assessor and can only be completed after a loss has occurred. It can be seen therefore, that seeking to estimate the costs of repair is neither possible nor relevant when doing valuations for setting the amount of cover. In doing valuations on the basis of reinstatement cost a valuer should consider the following items –

- b) **Reinstatement Cost Estimates**: There are a number of ways of providing an estimate of reinstatement cost for buildings, structures and site improvements.
- c) Two of the more common approaches are:
 - An estimate based on building cost guides;
 - An estimate based on elemental costs.

In the former the estimate of reinstatement cost is based on construction rates (typically, but not always, rates per square metre) published in building cost guides and/or construction contract rates. This is commonly used method and is intended to provide indicative cost estimates.

Elemental building cost estimates determine the construction cost of a building, structure or site improvement by reference to the estimated cost of the individual components or elements of that building, structure or site improvement. The

application of such an approach requires specific training and knowledge. Members who are qualified to complete elemental cost estimates typically obtain detailed building plans and specifications or gather such information from a physical inspection of the site to assist in the accuracy of the determination. Where information is available, recent constructions of a similar nature may assist to determine the appropriate cost for each element.

Consideration should be given to the reliability of evidence available and the information assessed in terms of comparability to the subject asset. All other things being equal, an elemental cost estimate is likely to produce a more robust cost estimate than an estimate based on building cost guides as is evidenced by the statement that the latter is intended to provide an indicative cost estimate. In applying the selected method(s), Members should have regard to the following factors (if quantifiable) like Specific materials used in the building (e.g. mixture of stone, brick, plasterboard, etc.), Location factors (e.g. remote or rural sites or metropolitan), Design of building including soil type, special footings, etc.,

External dimensions of a building (some cost guides relate only to internal building measurements), All fees associated with reconstruction including architects, survey and engineering fees, Cost increases/decreases between the date of issue of published cost guides and / or the date of construction contracts, and the date of valuation. Valuations undertaken in non-metropolitan and remote areas would usually reflect regional costs associated with availability of labour and materials. It may be possible to estimate the location factor by investigating local construction costs and/or by examining a sample of costs and relating them to known costs.

In respect of common householder policies, unless specifically excluded, the following items are required to be included in the determination of the insured value for buildings: Building shells and services, Fixtures, Walls, Gates and fencing, Paving, External signs and lighting , Radio and television masts and antennae, Other improvements, Underground tanks, Services and connections including supply mains and meters. In the case of industrial premises, items such as masts, antennae, underground tanks and other similar items of equipment are more commonly included as part of the insured value of plant and equipment. Unless specifically excluded under the terms of the policy or other legal requirement all site improvements should be specified and included in the sums insured. Where there is plant and equipment and/or other services associated with a building, or where various components of the buildings, plant, equipment and other services are being assessed separately by different valuation specialists, it may be necessary for the different valuation specialists to confer to ensure that no components are either missed or double counted.

The reinstatement cost for plant and equipment should be based on the replacement cost of currently available equipment, including costs of fees, engineering, procurement and construction management (EPCM) costs and non-recoverable taxes and duties. Design, EPCM and other similar costs should be considered from the point of view of the reconstruction of a complete facility, rather than the cost of the original assets. Members should be aware that the insurance basis for Heritage Assets may require a reproduction or replication-based assessment.

The common definition of indemnity established in case law is the loss that would be suffered by the insured in the event the asset was destroyed. This can be, but is not necessarily, the market value of the asset destroyed or damaged. The measure of loss in the event an asset is destroyed can be estimated using either a market comparison approach or a depreciated replacement cost approach, depending on the nature of the asset, client instructions and the circumstances. It is recognised that a single insurance valuation which covers multiple assets (for example, plant and equipment valuations may include both specialised and non-specialised assets) may require both types of approach to assessing indemnity value.

Equally, Members may be requested to undertake a market-based estimate of indemnity value and/or a depreciated replacement cost estimate of indemnity value. However, the indemnity value assessment should take into consideration the age, condition and remaining useful life of the asset. In the case of insurance, useful life is not synonymous with economic life, but rather only reflects physical life.

The insured is entitled to insure the remaining physical life of an asset, even though the economic life may have expired. Therefore, the determination of indemnity value using a depreciated replacement cost approach requires in the first instance, the assessment of reinstatement cost and then an assessment of the likely physical life of the asset and the life expired. The expected physical life of an asset is assessed on the basis that reasonable maintenance is carried out to preserve the existing use. Members should consider the expected life of assets in the location of the valuation and elsewhere as appropriate. It is common practice to apply a straight-line method of depreciation when determining indemnity value, (especially in respect of specialised buildings, structures, plant and equipment) which assumes that the remaining service potential of the asset is used up at a constant rate assuming reasonable maintenance. However, there are types of plant and equipment, particularly those that experience rapid technological and functional obsolescence, for which other methods including the diminishing value method, are more appropriate.

To the extent plant and equipment is valued on the basis of indemnity value using a market comparison approach, the indemnity value may comprise two components, depending on the nature of the asset. The first component is the cost of acquiring a comparable item of equipment from the second-hand market to which is added to the

(un-depreciated) cost of installing and commissioning that item. Members should include reference within their report/ covering letter that a depreciated replacement cost-based indemnity value may not be the same as one determined using a market comparison approach, and in some cases, the difference might be material. As for any other valuation, valuers should fully explain any assumptions, the methodology adopted and the reasoning that supports their conclusion as required by IVS-3. This will invariably require information, which should be included in the insurance valuation report or covering letter.

18.8 Valuation of properties for sale/ purchase purpose

A valuation for sale/ purchase purpose will be required by a client with respect to his/her own occupation/use. Such a valuation will be called for, usually before buying/ selling a property. The data should be incorporated and taken into consideration by assuming that the client does not have any idea/ information regarding the said property and hence, would like to know everything regarding the property like description of the property, structural quality and specifications, accommodation, state of repairs, its potentialities, defects etc. and the price to be offered. A valuation report should give detailed information especially on the following points –

1. Identification of the concerned property, tenure and title.
2. General situation and description of the locality in which it is situated.
3. Site, Shape, Level and Access.
4. Situation with regards to amenities, social facilities like education and health, traffic and transport and communication facilities etc.
5. Type of construction, specifications and materials used, design, accommodation, arrangement of rooms, light and ventilation etc.
6. Utility services type and quality of plumbing: water supply, drainage, sewerage and sanitation, electric supply, etc.
7. Condition of repairs observed by most careful inspection, immediate repairs, if required and cost thereof.
8. Open spaces within the property and its use like parking, garden, and children's play areas, etc.
9. Common facilities provided, if any.
10. Analysis of potentiality, and defects – latent and patent defects investigated carefully and statement of everything likely to influence price or desirability to purchase.
11. Planning proposals in a development plan, T.P. scheme etc. affecting or benefiting the property.
12. Valuation – Discussion of instances of sales and / or rentals.

13. Estimation of Fair market value by –

- a) Income approach – Estimation of fair market rent, gross and net income, outgoings etc. of the properties sold/available for sale and the property to be valued.
- b) Market approach – Comparison of properties sold and the property to be valued and estimation of fair market value of the property.
- c) Cost approach –
 - (i) Comparison of land sold with the land in which the building is standing and estimating value of land.
 - (ii) Estimating depreciated cost of construction of building(s) erected on the property.

14. Analysis of instances of sale and estimation of rate of interest for capitalization in case of Income Approach.

15. Conclusion regarding estimation of fair market value and advice in the case of Own/self occupation/use.

18.9 Valuation of properties for Valuation Disputes in court purpose

In case of dispute arising between the parties i.e. the client and the valuer, the court seeks opinion of another government registered valuer and if the value of the subject property falls within a range of 10% of the value originally given by the first valuer, the court will rule in favour of the valuer. However, if the value of the 2nd valuer goes beyond the range of 10%, the court shall seek opinion of another valuer (i.e. a 3rd valuer) and adopt the final market value of the subject property as per the minimum difference in value of any 2 valuers and will decide upon any value ranging between those two values as mutually agreed between the two parties.

18.10 Valuation of properties for probate purpose

Probate is the legal process of dealing with someone's assets after they die – this is usually conducted by the executors who carry out the wishes of the deceased person, as stipulated in the will. A Grant of Representation allows the executor to gain access to all the information they need to establish the value of the deceased's assets. These can include money in bank accounts, stocks and shares, vehicles, jewellery, works of art, and probably the largest asset anyone will hold, property. A probate valuation takes into account the genuineness of the will, terms and conditions specified in the will, members involved in the will and the details of the property.

18.11 Valuation of properties for partition purpose

A partition is a division of property held jointly by several persons, so that each person gets his/her share and becomes the owner of the share allotted to him/her. It is done by dividing the property (in monetary terms) according to the shares to which each of the parties is entitled to in law as applicable to them.

Valuation is done for the asset in order to achieve the market value, further dividing the property according to the individual shares of the co-owners. Each divided property gets a new title and each shareholder gives up his/her interest in the property in favour of other shareholders.

18.12 Valuation of properties for rent fixation purpose

The rent of building is fixed upon the basis of certain percentage of annual interest on the capital cost and all possible annual expenditure on outgoings.

The capital cost includes the cost of construction of the building, the cost of sanitary and water supply work and the cost of electric installation and alteration if any.

The cost of construction also includes the expenditures on the following:

- 1) Raising, levelling and dressing of site
- 2) Construction of compound wall, fences and gates
- 3) Storm water drainage
- 4) Approach roads and other roads within the compound

Net return is worked out based on Capital cost/ Year's purchase. If the capital cost is not known, this may be worked out by any method of valuation.

The owner expects about 2% higher than the prevalent interest to cover up the risk of his investment.

To this net return, all possible expenditures on outgoings are added to get gross annual rent.

$$\text{Gross rent} = \text{net rent} + \text{outgoings}$$

18.13 Valuation of properties for Stamp Duty purpose

Stamp duty is a tax which is levied by all the state or territory government on the purchase of a property which is paid by purchasers and usually need to be paid before the settlement date of property.

Market value in relation to any property which is the subject matter of an instrument of transfer means the price which such property would have fetched if sold in the open market on the date of execution of such instrument.

It is worth noting here that the stamp duty is charged on the transaction amount of the property which should not be less the Guideline Value i.e. value based on Government Guideline Rate (Often termed as Circle Rate) i.e. the minimum rate on which the property should be transacted.

If sold in the open market, it does not contemplate actual sale or actual state of market but only enjoins that it should be assumed that there is an open market and property can be sold in such a market.

“If sold, creates a fictional position which the Tax Officer must assume. It is a hypothetical case which is contemplated by these words. Let the price be determined by economic forces – sale to be open to competition. Adequate publicity or advertisement prior to sale, are given as criteria to open market.”

Effecting factors:

- 1) Area of construction
- 2) Floor space Index
- 3) Type of structure
- 4) Year of Construction
- 5) Kind of material used
- 6) Locality in which constructed
- 7) Rate of depreciation

These factors form part of physical/ technical aspects of valuation.

18.14 Valuation of properties for Capital Gains Tax purpose

When a property is sold, an investor makes capital gains on his capital investment in an immovable property.

The capital gains tax is virtually a tax on unearned increment on the property value by market forces and not by the endeavour of the investor.

Provisions of CGT, in case of a sale of various types of assets, have changed over the years as per the Government policy, which is reflected in the budget, presented every year. Tax provisions for relevant year are, therefore, important and have to be taken into consideration as per relevant year in which the transaction is taking place.

Sections 45 to 55 A of Income Tax Act-1961, are for charging capital gains tax on sale of assets. Norms for tax for the short-term capital gains and long-term capital gains are different and such gains are taxed in a different manner.

In order to obtain the amount of capital gain on sale of a capital asset, from the sale proceeds the expenses on transfer are to be reduced. From the balance amount the indexed cost of acquisition and indexed cost of improvement are to be deducted to get the amount of taxable capital gains or capital loss.

Indexed cost for acquisition means the cost of acquisition of the capital asset indexed by the cost inflation index of the year of sale divided by the cost inflation index of the year of acquisition. The central government notifies index number for each previous year having regards to the consumer price index for urban non-manual employees in each year.

18.15 Valuation of properties for lease/ mortgage purpose

When valuing a property for its lease or sale, the total rent payable by a tenant (net rent and all expenses to the tenant) is of importance. Accordingly, the gross rent would provide sufficient information on the total costs incurred (including the costs of using the property such as heating, air-conditioning, water, electricity, gas, waste, security and cleaning costs etc.). Estimating such total costs is problematic, however, as they are usually subject to great inaccuracy as a result of those the cost elements – in particular heating costs - that are heavily dependent upon consumption. Therefore, the gross or net rents offer a reliable starting point for the purposes of estimating the mortgage value, as the largely consumption-related elements are reduced or excluded. The aim is to determine the amount of sustainable net profit. This can be done on the basis of both the gross rent and the net rent.

- Using the gross rent as a starting point yields realistic income figures, if the amount of the operating expenses deducted corresponds to the sum of the apportionable (borne by the tenant) operating expenses plus the non-apportionable (borne by the property owner) operating expenses to be deducted from the net rent.
- The net rent can be derived directly from the available market data, thus giving realistic and objective opportunities for comparison. As a transparent basic rental variable, the sustainable net rent should therefore become established in mortgage value estimation.

The major factors of influence for the property rates are

- Land Use: Residential, commercial, industrial use
- Location: Micro- and macro-location, local environment
- Rental rate: Typical for local market? Sustainability, potential for increases
- Building attractiveness: Appearance, design, cost-effectiveness
- Market situation: Supply and demand, development perspectives
- Economic situation/stability: Actual situation, forecast, general mood
- Interest rate level: The rate of interest on capital in India has relatively little effect on the return from real estate.

The capitalisation rate must be fixed separately in each individual case in accordance with the local market situation, taking into account property, location and demand criteria and the potential for alternative uses.

The capitalisation rates used to estimate the mortgage value are not based upon current short-term market activity. They must be derived from long-term market developments.

18.16 Valuation Of Reserve Price For Auction

A valuation for the purpose of fixing the reserve price to be placed on a property at a sale by auction should, as a rule, approximate to the fair market value of the property. But this basis may have to be modified, according to circumstances.

For instance, the vendor may wish to sell at short notice or may want to sell property because the local authority has served notices of repair on him and he does not want the trouble of complying with them. In such circumstances, the valurer may be justified in advising a reserve rather less than his estimate of what the property might fetch on a sale by private transaction.

In estimating value of this kind at examination, the student should carefully consider the facts of the case as stated in the question and should mention in his answer any special circumstances which have influenced him in fixing his figure of reserve price.

18.17 Valuation Of Shares In A Property

Land is often held in shares by several persons either by way of "Joint ownership" or "Joint undivided shares".

A joint owner is entitled to share all the benefits of ownership, such as participation in the rents and profits and a share of the capital value which may be realized by sale of the property.

A share in property is normally less attractive to an investor than absolute ownership due to the fact that control over the property is divided. The usual method of valuing a share in an interest in a property is to value the interest as a whole and then to divide it by the appropriate share, **e.g.** one-half, one-third etc. If there are no disadvantages in the divided control, as in the case with a share in freehold rents with distant reversions, this will be the value of the share in the interest less, perhaps, a very small percentage. If, however, there are substantial disadvantages in the divided control, as might be the case with freehold ground rents where the ground leases are to expire shortly and important decisions are required be made about redevelopment, the percentage deduction might be substantial.

18.18 Valuation For Mortgage

Valuation Under Section 5(n) of Banking Regulation Act 1949

Secured Loan or Advance has been precisely defined in clause (n) of Section 5 of Banking Regulation Act 1949 as “a loan or advance made on the security of the assets, the market value of which is not at any time, less than the amount of such loan or advance.”

Basis of Valuation

Generally speaking, the basis of a mortgage valuation should be the fair market value of the property at the time the valuation is made, subject to the following special considerations –

- (i) The valuer should exclude from his valuation any part of the mortgagor’s interest which cannot be transferred to the mortgagee **e.g.** goodwill in connection with business premises – also things on land, such as sand, gravel, timber, etc. which can readily be sold or removed by the mortgagor.
- (ii) Possible future increases in value of a speculative nature should be disregarded.
- (iii) On the other hand, careful consideration should be given to the possibility of any decrease in value in the future.
- (iv) Allowance should be made for any capital expenditure which may be necessary in the future.
- (v) If the buildings are in bad repair, the cost of the necessary work should be deducted. Alternatively, they might be valued as in good repair, subject to an express undertaking by the mortgagor to put them in repair forthwith.

- (vi) Information as to the price paid for the property by the mortgagor or as to the cost of construction of buildings, should be treated with the utmost caution.
- (vii) The valuer should compare the estimated net income from the property with the amount of annual interest on the proposed loan.

Amount of Advance

The normal advance is two-thirds the estimated value of the property. But a smaller advance, possibly three-fifths or half, may be recommended if there is a possibility of the market value depreciating in the future, or if there is doubt as to what the property would realize if brought to a forced sale at any time. Consideration must also be given to the relation between the net income and the interest on any suggested advance.

On the other hand, banks or financial institutions may advance in excess of two-third on dwelling houses, if the periodic payments by the borrower include both interest and a proportion of the principal, the whole mortgage debt being repaid within a fixed term of years.

Rate of Interest

The rate of interest on a sound mortgage security may be lower. Higher rates will, of course, be required where the security is doubtful.

Advice on Policy

Some properties are considered as being doubtful securities for a mortgage advance **e.g.** poor class housing. The value of these is liable to depreciate heavily, and it is by no means easy to get a fair price for them in the event of a forced sale. If the mortgagee has to go into possession, he will be involved in a considerable amount of work; worry and responsibility in managing the property, complying with the requirements of local authorities, and endeavouring to make the net income from the property meet the interest on the mortgage loan. There is always the risk; too, of the property being included in a slum clearance scheme in which case the compensation may be less than the principal sum advanced.

Second or Subsequent Mortgages

When a property has already been mortgaged and a further loan on the property is desired, a valuer should be careful to advice that such further loan together with the

original one (or first mortgage) does not exceed two-thirds the estimated value of the property.

For instance, supposing that a property is worth Rs.90,000/- and Rs.50,000/- has already been advanced on first mortgage – in order to keep the total advance within two-thirds, only Rs.10,000/- can be advanced on second mortgage.

Advances on Several Properties

In preparing a valuation of a number of properties for the purpose of an advance by one mortgagee, the advance recommended in respect of each separate property should be shown as well as the valuation of each property.

Example

Value the following properties for mortgage purposes, stating the advance to be recommended in each case and mention any conditions which should be imposed. Interest on the mortgage is 6%.

A freehold shop in a first class position let to multiple on a 21 year full repairing and insuring lease granted 16 years ago at a rent of Rs.1,00,000/- p.a. exclusive. The present rental value on the same terms is Rs.5,00,000/- p.a.

Solution

Valuation

Rent reserved	Rs.1,00,000/- p.a.	
Y.P. 5 years at 5½% (5 times secured)	4.27	
	-----	Rs. 4,27,000/-
Reversion to rental value	Rs.5,00,000/- p.a.	
Y.P. in perpetuity at 6½% deferred		
5 years	11.23	
	-----	Rs.56,15,000/-

		Rs.60,42,000/-
Value, Say		Rs.60,00,000/-
		=====
2/3rds of Rs.60,00,000/-		Rs.40,00,000/-
Interest at 6%		0.06

		Rs. 2,40,000/- p.a.
		=====

Since the current income is only Rs.1,00,000/- p.a. the mortgage should be limited to Rs.16,50,000/- so that the interest can be met out of income.

∴ Recommended Advance = Rs.16,50,000/-
 =====

Note: This property forms a first class security for mortgage purposes but the advance is limited to Rs.16,50,000/- in order that the present rent covers the interest charges. When the full rental value becomes payable the advance could be increased to 2/3rds of the full market value.

Mortgage as a Source of Credit

The mortgage is probably the most important single source of credit for property transactions. The property market is therefore highly dependent upon a continuous demand for mortgage outlets for investment funds.

The mortgage is often granted to purchasers of house property for occupation. The funds for such mortgages are usually provided by banks and financial institutions. Since the majority of the purchasers depend on obtaining a mortgage for the purchase of a property, the amount of the mortgage determines the price they can afford to pay, and it follows that the prices of such houses are considerably affected by the funds that can be made available.

18.19 Valuation For Insurance

The main contingency against which the property owner must cover himself by insurance is damage to, or destruction of, the fabric of his buildings by some accidental cause, such as fire, explosion, earthquake, lightning, storm, riot, bursting water pipes, overflowing tanks, accidents involving civilian vehicles etc.

The subject of insurance against damage or total destruction by fire will be discussed hereunder. Since the principles involved in such a case are common to the other types of insurance and a valuation for purposes of fire insurance will serve as a basis for other cases also.

Principles of Insurance

Policies of insurance against damage by fire and other accidental causes are based on the principle of indemnity, i.e. compensation will be paid on proof of loss, but only to the extent of the loss actually suffered. The purpose of the insurance is to put the

claimant, as nearly as possible in the same financial position after the loss as he was before.

A building which is incapable of reinstatement in the same condition as it was before damage, owing to statutory requirements and/or modifications in Development Control Regulation and Building Byelaw introduced since the construction of the original building, for instance modification in F.S.I. permissible, minimum size or height of rooms, etc. in modified D.C. Rules, should be should be adequately insured to cover the extra cost involved, if any.

In order to avoid petty claims, it is a practice to prescribe 'cover' for insurance, 'Deductible Franchise' in the insurance policy/contract whereby the insured has to bear all losses up to the amount of cover.

The important variations which flow from the Insurer's Reinstatement Value (R.I.V.) clause compared to the Market Value (Depreciated Reinstatement Value) policy are set out hereafter.

Damaged / destroyed / irreparable property to be replaced by new property of "the same kind or type but not superior to or more extensive than the insured property" and the monetary claim to be **allowed on value as new basis without deducting depreciation.**

For damage to repairable property, the full cost of repairs including replacement of parts would be payable without deduction of any depreciation, subject to the repairs / replacement of parts are of the "same kind or type."

To get full advantage of maintaining an undisturbed cash flow and of getting a new asset against the old asset destroyed, it is abundantly clear that full insurance on RIV basis is absolutely essential.

Reinstatement Value means – the amount payable under the policy to be calculated shall be cost of replacing or reinstating on the same site or any other site with property of the same kind or type but not superior to or more extensive than the insured property when new as on date of the loss.

If the assets are not insured on Reinstatement Value basis to save the premium, in the event of any damage, financial loss will outweigh the saving in premium which will be evident from following example.

Let us consider a case of a property having R.I.V. Rs.800 lakhs (as on date of taking policy) and its value after depreciation is Rs.560 lakhs. Its premium at 65 paise per Rs.1,000/- (50 paise basic + 10 paise for earthquake + 8% service tax on 60 paise) on

R.I.V. and market value works out to Rs.52,000/- and Rs.36,400/- respectively. There is a saving on premium of rs.15,600/-, if the building is insured on market value basis. In case of any event the building is totally damaged and the cost at time of reinstatement is say Rs.900 lakhs. The claim amount will be Rs.560 lakhs resulting in a loss of Rs.340 lakhs (Rs. 900 – Rs. 560). Had it been insured for Rs.800 lakhs then additional premium would have been Rs.15,600/- and claim amount would have been increased by Rs.240 lakhs.

Now let us consider that above property is partially damaged and cost of repairs is Rs.100 lakhs. The claim amount would be as under on R.I.V. as well as market value basis.

$$\begin{aligned}
 \text{Claim amount under R.I.V. basis} &= \frac{800}{900} \times 100 \text{ lakhs} \\
 &= 88.88 \text{ lakhs} \\
 \\
 \text{Claim amount under market value basis} &= \frac{560}{900} \times 100 \text{ lakhs} \\
 &= 62.22 \text{ lakhs}
 \end{aligned}$$

From above discussions, it is abundantly clear that in order to safeguard the interest of Clients against any damage, the insurance on R.I.V. is essential.

Methods of Valuation

It is evident that a valuer, who is called upon to advice as to the insurance of new building, or as to the adequacy of the cover on existing one, must direct his mind to the maximum loss likely to be suffered in the event of the destruction.

In the majority of cases the appropriate sum will be the cost of reinstatement at the maximum figure to which building costs are likely to rise during the year of insurance. If further rises in the future are probable, the valuer may increase his figure, to be on the safe side, or may advise in his report an early review of the insurance policy.

In the case of new building, figures of actual cost of construction may be available. In other cases the valuer will have to estimate the probable cost of reinstatement.

The methods of estimating approximate cost of construction of a building have been explained in the Unit – 6. The cubing method described is sometimes adopted, but it is becoming increasingly common to estimate costs on square foot basis. For present

costs per cubic foot or per square foot for building the student should refer to the latest schedule of rates applicable in the region.

The payment of architect's and surveyor's fees should be specifically mentioned in the policy and should be added to the estimated cost of reinstatement.

Consequential Loss

It must always be remembered that a fire insurance policy does not extend to items of consequential loss, such as loss of rent or expenses of temporary alternative accommodation, unless these are specifically mentioned. In many cases, their inclusion in the policy will be important. For example, in some leases a rent abatement clause is inserted which provides that the lessee will not be liable for payment of rent whilst the building is out of use due to fire damage.

18.20 Valuation For Probate

Generally

Probate valuations are required to determine the amount of duty payable to Government while taking the probate of a Will on death. It is charged on the whole of the real and personal property passing or deemed to pass on the occasion of a death.

Each portion of the estate – stocks and shares, furniture, personal effects, real property and leaseholds, must be valued, and these values added together to give the total capital value of the whole estate.

The rate at which duty is payable varies from State to State according to the capital value of the estate as a whole.

Basis of Valuation

The capital value (or "principal value" as it is called) of real property and leaseholds for estate duty purposes is the price which the property would fetch if sold in the open market as on the date of death.

In making the valuation all ordinary outgoings shall be taken into account, but obviously no allowances may be made for possible expenses of sale, since the property is not actually sold.

In dealing with undivided shares in a property, the customary deduction of 10% or possibly more in some cases is usually allowed.

In estimating the open market value as on the date of death, it must be assumed that the property is being placed on the open market in the most advantageous way. For instance, a large estate comprising mansion and large agricultural land, would probably fetch a better price if put up for sale in separate lots than if offered as a whole, the reason of course being that there are probably very few people who, at any given time, wish to purchase the whole of a big estate, whereas there may be a considerable number ready to compete for individual moderate sized lots.

In estimating fair market value, it must therefore be assumed that the property is divided into suitable lots in the manner most likely to attract purchasers. Although one is required to assume that the whole of the deceased's property is being sold in the open market in a lots as on the date of death, no allowance may be made in the valuation for the fact that such a course, if carried out in practice, might result in a "flooded market" and reduced prices.

Where, in exceptional cases, the value of property is depreciated by the death of the deceased, this fact may be taken into account.

Where, shortly after death, property is sold at a higher figure than that returned for purposes of probate, Government may claim payment of additional duty, unless it can be proved that the higher price was due to a rise in value subsequent to the death. Similarly, a sale at a lower figure may give rise to a claim for refund of duty, unless due to a fall in value since the death. The point is – does the sale fairly represent the value as on the date of death, or has the price been affected by circumstances arising after that date.

19.0 Issues to be considered in a Hotel Valuation

19.1 Introduction

The hotels fall under the category of 'Investment Property': because any one buying the hotel is mainly concerned with the earning potential and therefore their value need to be estimated by income approach. The exceptions are valuation for insurance, property tax, etc.

Three steps involved in the income capitalization technique are:

- (i) Estimating the net income
- (ii) Selecting an appropriate rate of capitalization.
- (iii) Applying the capitalization rate to the net income for estimating value.

19.2 Elementary considerations

'Valuation of a Real Property' is not the valuation of mere physical asset (i.e. land and buildings), but it is valuation of the interests in the asset considering all the legal rights and interests attached to the asset i.e. right to derive the maximum benefit by use of the asset.

The term 'Hotel' is a property of wide spectrum, which includes, units having 15 rooms or less to larger units having 1500 rooms or more. This ranges from wayside inns to modern units of latest design. The services offered may be restricted to letting out rooms or a wide range of facilities such as restaurants, bars, conference and banquet rooms, leisure clubs, golf courses, business centres, swimming pool, etc.

Hotels are fully operational businesses at prices based directly on the trading potential for their existing use. While adopting an appropriate approach for valuation of property that is normally sold as fully operational business units like hotels, the following points need to be considered:

- (a) Valuation of the operational entity includes
 - (i) Land and buildings;
 - (ii) Trade fixtures, fittings, furniture, plant, machinery and equipment. (The items which are not owned like taken on lease must be clearly mentioned and must be shown separately based on terms of the lease);
 - (iii) The market's perception of the trading potential excluding personal goodwill, assumed ability to renew existing licences, consents, certificates and permits.
- (b) The valuation method adopted by a valuer should reflect the approach generally used by the market for the particular type of property. Different methods,

including Earning Multiple method, Discounted Cash Flow (DCF) method,(predominantly used for under development projects) analysis of comparable transactions, or a combination of these may be appropriate for different types and sizes of property.

- (c) In estimating valuation, a valuer should consider the following points:
- Analytical review of the trading accounts for the current, past and future years
 - The economic adaptability of the property
 - A perception of the market
 - Maintainability of the profit
 - Future profitability that can be achieved by an average operator of the business
 - Capitalization rate

Inspection

For inspection, the following points are to be considered:

The location of the hotel

1. Check the location of the hotel from the point of view of income generating capacity. The economic prosperity of the surrounding locality, accessibility to the sources of business, the target market sector and the transport modes have to be taken into consideration.
2. The age, type and quality of construction, the fair annual cost of repairs and maintenance etc. are all to be considered.
3. Even the supply of gas, electricity, water and drainage should be decided looking at the nature and extent of heating systems, air-conditioning etc.
4. The rooms are generally the main and most profitable source of income. It is not necessary to measure all the rooms, but a valuer must know the total number of available rooms; its size, specifications and various categories i.e. doubles, singles, suites. The facilities provided in the rooms etc. should also be noted. A certain degree of noise may be expected in city centres for instance, but this can be greatly alleviated by the provision of secondary or double-glazing acoustic materials and air-conditioning. Some hotels may charge higher tariffs for rooms with attractive views, like sea, mountain or valley facing. The advertised room rates should be noted, but with the knowledge that these will likely differ significantly from the actual achieved room rates. Whether lift is installed.

The net internal floor areas of bars, restaurants, banqueting and conference rooms are also to be considered, but more important in estimating potential revenue are factors such as capacities of the facilities, their general layout and

location within the hotel, their flexibility and ease of use, modernity and character/ambience, etc. For instance, a bar or restaurant with direct access to the street may attract a good level of non-resident trade, whereas it can be extremely difficult to attract such trade facilities above ground floor level. Public rooms situated on more than one floor may necessitate the staffing and management of two kitchens whereas in other circumstances one would easily be able to cope with the same level of trade. Far greater use can be made of large conference rooms that are capable of being subdivided than those that are not. Again, the general comfort of the rooms should be noted in terms of natural light, heating, air conditioning, etc. Record should be made not only of the facilities offered but also of the type of product and services available, functions catered for and pricing structures.

Many hotels now seem to establish viable clubs for hotel guest on additional payment. Equipment are constantly being updated and advertising the facilities offered, their quality, etc. is important to determine the level of market demand. It is essential to take a note of factors like separate membership scheme, entrance fees, annual membership fees, the number of such members and whether there is a waiting list or not. A valuer will also need to confirm whether the leisure club is operated directly by the hotel or by a separate operator under a franchise or lease arrangement.

5. The availability of car parking controlled by the hotel is another factor. Golf course hotels have become a separate category with the growing demand.
6. The management and administration of offices, kitchens, stores, plant rooms, cellars, staff accommodation etc. are equally important.
7. A valuer should also keep in mind the items leased or hired. He should also confirm the existence and validity of all necessary licences and certificates which may include a liquor licence, restaurant licence, and public entertainment licence. The Fire certificate should be checked, and confirmation of no outstanding statutory notices is to be sought.
8. A copy of the hotel brochure is also essential.
9. A discussion with the manager or proprietor of the hotel is essential to discuss its trading performance and potential to ascertain potential income. He should be questioned about various factors like occupancy levels achieved, room tariffs; the main sources of business, the principal business generators (the frequent visitors) with their reasons for preference and steps being taken to satisfy them so that they continue to come for average length of stay, trading profile, reasons for past fluctuations in trade, trade outlook, and other known factors likely to affect the hotel's future trading prospects including new competition. Any proposal or possibilities of additions and improvements in facilities and services provided which may add to revenue, their cost, any measures to increase efficiency in working etc. should also be discussed with the General Manager and

also with the owner of the hotel. Tenure must be confirmed together with details of any sub-lettings.

10. Any proposal or possibilities of additions and improvements on the facilities and services provided which may add to the revenue, their cost etc. should also be discussed with the General Manager.

From the inspection and discussions with the responsible staff, a valuer will be able to give consideration to the style and class of the hotel, its adaptability to the market sector at which it is aimed, and set in motion to make an assessment of its potential income and security and the necessary costs involved in running the hotel to achieve that potential.

The next stage, after a complete inspection of a particular hotel is the investigation of the market sector, demand and competition, a valuer needs to understand and appreciate the economic profile of the surrounding locality, the sources and the nature and level of their demand.

Trading potential

After a thorough inspection of the property, a valuer will be able to give a reasonable estimate of the trading potential of the hotel.

Goodwill

This has two forms:

Goodwill which attaches to and passes with the property. **e.g.** a newly built hotel is likely to have a lower value than the one, with a proven trading history.

This is differentiated from personal goodwill which is attributed to the personal skill, expertise and reputation of the present owner.

Accounts

The actual accounts may be in different formats, but a valuer must ensure that, not only all the income as shown, but potential income and also all the necessary potential and relevant items of expenses are included.

Other sources of income

After considering the potential room revenue, the valuer should turn to other sources of income like sightseeing, gymnasium, hall rent for conferences, seminars, etc. which will vary considerably depending upon the type of hotel.

19.3 Valuation

The factors to be taken into consideration by the valuer:

- the interest being valued
- the nature and purpose
- the appropriate method of valuation to be adopted
- the valuation method adopted by a valuer should reflect the approach used by the market for the particular type of property

Hotels fall under the category of the property which change hands in the open market as fully operational businesses at prices generally based directly on their potential income for their existing use.

The whole principle of valuation is therefore based upon potential Operational Profit from the Property and the return on capital required by prospective purchasers bidding against each other in the market.

The primary approach of valuation is by capitalization of net profit, the two methods are:

- (i) Earnings Multiple Method (ii) Discounted Cash Flow (DCF) Method

(i) Earnings Multiple Method

This method is historically known as the "accounts" or "profits" method of valuation. A valuer formulates his opinion on the maintainable level of net profit after giving due consideration for all items of income and expenses (excluding finance costs) and taking into account all factors which will have direct bearing on future levels of profitability. The Operational profit Earning Before Interest Depreciation, Taxes and Amortization (EBIDTA) is then capitalized by a multiplier to estimate the property's capital value including all trade fixtures, fittings, furnishings and equipment, statutory consents, licences and permits, but excluding stock in trade and any leased or badged items, some of which may be subject to a separate valuation or agreement.

The multiplier to be applied is derived from the rate of return or yield which a hotel operator would require in order to purchase the property taking into account the security and growth prospects of the income. A valuer must assess how the market would view the risk or security associated with the particular hotel and its potential income and establish the level of the multiplier by his experience as well as regular contact with operators supported by analysis of any market transactions of comparable properties. The multiplier in each of the transactions is derived by dividing consideration price fetched by the operational profit of the hotel sold and the rate of interest yielded is found out by single rate or dual rate tables as the case may be.

Other way can be to arrive at multiplier based on the listed hotel companies. One can calculate the Equity value from the share price (performance based) and number of

shares of the company. (Equity value = Share Price X number of fully paid shares issues) By adding debt outstanding we arrive at Enterprise Value (EV = Equity Value + Debt). The multiple is arrived on dividing EV by EBIDTA / operational profit of the company. In similar way one can tabulate multiplier of different companies and use the average / appropriate multiple based on the most comparable hotels.

This approach represents a "mature" situation, and is based upon the maintainable level of operational profit in the normal stabilized year of trading.

(ii) Discounted Cash Flow (DCF) Method

Discounted Cash Flow is a well recognized financial model used extensively in investment valuation. Its basic principle is the "time value of money" i.e. income receivable in the short term is more valuable than that receivable in the longer term. It is a particularly appropriate method in the consideration of new projects or where a property is to be extensively refurbished, extended or improved. It is also a suitable technique to take into account major changes in the market or in the economy as a whole.

DCF involves creating a cash-flow model of a property's projected financial performance over a time scale of typically 5-10 years which is then capitalized by a discount rate that reflects the rate of return an investor would require given the inherent risk attached to the projected cash-flow and the alternative investment possibilities available. The residual value is added to the same where appropriate. The approach simulates a series of cash-flows representing the anticipated receipts, expenses and operating performance of a property together with any required capital expenditure and the effects of inflation.

The discount rate adopted contains three elements:

- (i) Compensation for the effects of inflation.
- (ii) A risk free rate of return.
- (iii) A premium compensating for the inherent risk associated with the industry and the individual property.

In normal circumstances, the minimum level of return an investor will expect is the yield obtained from long-term government bonds. The discount rate is, therefore, built-up considering the current risk-free rate of return, i.e. the yield on long-term gilt-edged securities as basis. It is however better to establish the rate of interest by analysis of sale transactions of comparable hotels.

Valuation Parameters: DCF Methodology

- The Discounted Cash Flow ('DCF') methodology is the primary valuation analysis methodology used for valuing the hotel.

- Free cash flows ('FCF') are projected after taking into account various business assumptions as explained earlier.
- Determination of free cash flows is as set out below:

EBITDA (cash) (Earning Before Interest, Tax, Depreciation and Amortization)

Less:

- (i) Effective tax payments
- (ii) Incremental working capital
- (iii) Capital expenditure

- Cash flows are discounted at the Weighted Average Cost of Capital ('WACC') to estimate present value of the business:

$$WACC = \frac{\text{Cost of equity} + \text{After tax cost of debt} \times \text{Debt} - \text{Equity ratio}}{1 + \text{Debt} - \text{Equity ratio}}$$

Explanation of terms used for calculation of WACC

- The DCF methodology is based on the Capital Asset Pricing Model ('CAPM') theory.

The CAPM technique is suggestive of the fact that the return on an asset is a function of some risk free rate of return plus a premium for risk. This in turn is a function of amount of risk associated with asset or investment. The risk premium is a function of the volatility of the price of the asset in the market place over time, relative to volatility of prices in the market place as a whole over the same period.

Cost of Equity

- Calculated as the Risk Free Return + Risk Premium = $R_f + \beta \times (R_m - R_f)$

Risk Free Rate of Return (Rf)

- Defined as the rate of return currently expected from a risk-free investment.
- The return from the Government of India securities forms the base for a risk-free rate of return.

Market Rate of Return (Rm)

- Defined as the expected rate of return that the security market is expected to generate in India.

- It is based on Bombay Stock Exchange Sensitivity Index (BSE Sensex).

Terminal Growth Rate (g)

- Assumed perpetuity growth rate for the company/business being valued i.e. the growth rate at which the business would continue to grow to perpetuity.
- The assumption of the terminal growth rate is based on the expected growth in hotel business.
- Terminal value is computed as under:

$$\text{Terminal value} = \frac{\text{FCF in last year of projection} \times (1 + g)}{(WACC - g)}$$

- The terminal value is further discounted by the WACC to arrive at the present value
- Beta (β)

$$\begin{aligned} \text{Beta} &= \text{Sensitivity of stock return to market return.} \\ &= \frac{\text{Covariance of stock with market returns}}{\text{Variance of the market return}} \end{aligned}$$

Beta is defined as the measure of the volatility of the subject investment's return relative to the volatility of returns in the market place as a whole. Beta for hotel is to be estimated by an econometric procedure using historical share price data of hotel companies.

Evidence of Open Market Transactions

For most property types, valuations are generally based on evidence of open market transactions in similar properties. Valuers must not ignore the evidence of the market. Valuation is an exercise of judgment and should represent the valuer's opinion on the price, which would have been obtained if the property had been sold as on the valuation date on the terms of the appropriate basis of valuation. A valuer is not bound to follow evidence of market transactions unquestioningly, but should take account of trends in value and the market evidence available to him, thereby, adjusting such evidence as appropriate and attaching more weight to some pieces of evidence than others. In a rapidly rising or falling market, undue weight age should not be given to historic evidence, which may have become outdated, but care is needed where acquisitions may be based purely on speculation and hope value. It is essential that a valuer has the relevant skill and experience to analyze transactions correctly.

For hotels in particular, market knowledge is generally imperfect. The parties to a transaction normally treat the relevant details upon which the sale is based as

confidential and very often, sales take place through corporate transfers.

Comparison may be made on physical factors, most commonly a price per room. This does allow an analysis to be carried out on information that is readily available, but in adopting such an approach, it is essential that the property being analyzed is truly comparable in all respects. This method may be appropriate when considering the valuation of certain categories of hotel such as terraces of privately owned small hotels/guest houses often found in seaside resorts and not necessarily always operated to maximize profits. However, unless all relevant factors are known, care has to be taken because comparison on physical aspects alone can be misleading and unreliable.

In a depressed market, a significant proportion of sales may be by vendors who are obliged to sell, such as liquidators and receivers. A valuer should establish whether or not these sales took place after proper marketing for a reasonable period. Liquidators and receivers are normally under a duty to obtain the best price and their sales may then be regarded as genuine open market transactions. However, there can be a stigma attached to such transactions which can depress the values achieved and they are therefore, not always reliable evidence.

In other instances a purchaser may pay a seemingly high price for a "trophy" property or for a property which will improve the profile of a portfolio as a whole. An operator may be especially keen to gain a presence in a particular locality and be prepared to pay in excess of what might be considered the norm to secure that presence. Particular care is needed to identify such purchases when analyzing transactions.

Often a portfolio of properties may be sold, and when attempting an analysis of such a transaction, it must be remembered that the acquisition may comprise, in broad terms, four elements of value:

- the aggregate of the individual existing use values of the properties.
- a premium reflecting the ability of the purchaser to make a single purchase of a large portfolio of properties with much reduced acquisition costs and a significantly shorter period within which the global acquisition would be earning enhancing.
- reduced head office costs and possible improvements in buying power having absorbed the acquisition into the estate.
- the acquisition of a strong brand which enables the purchaser to reposition a large part of its existing estate.

Life Cycle of the Hotel

The expected flow of net income must be assessed to select the appropriate discounting procedure.

All real estate investments have specific life cycles that reflect the rise and fall of net income over the property's economic life. Most income producing properties reach their full economic potential relatively quickly. This level may then be maintained for a number of years and then gradually decline as various forms of depreciation erode the property's income.

It generally takes some time for hotel facilities to achieve their maximum level of income. A typical hotel will experience slowly rising occupancy in its first two to four years of operation; net income may not cover the debt service during this period. A stabilized level of income normally is reached sometime between the second and fifth year of operation; this stabilized level represents the property's average net income. The income will usually rise above the stabilized level for a few years, and then gradually start to decline between seventh and twelfth years because of physical deterioration and/or functional and external obsolescence. This decline continues over the remaining economic life of the property.

The life cycle of a hotel is not predetermined, however it can be lengthened or shortened depending upon the extent of maintenance and periodic up gradation the owner is willing to do.

By estimating a property's position in the life cycle (age), a valuer can project balance economic life by adequate market data.

A study conducted in USA reveals that the adequate life cycle of the hotel is 40 years.

Selection of Capitalization Rate

Capitalization rate is used to convert expected future income into an indication of value.

At this juncture, it is necessary to understand some similar terminologies which have different meanings. They are (i) Return on investment, (ii) Yield and (iii) Overall rate of capitalization.

- (i) Return on investment is the return achieved by an investor on its original investment amount;
- (ii) Yield is the return achieved with respect to the Present Market Value of the property;
- and
- (iii) Overall rate of capitalization is the rate of capitalization at which the net income is capitalized to arrive at the fair value figure, considering potential profitability, rise / fall in profit and resale price.

While selecting overall rate of capitalization, following factors should also be considered apart from the rate of interest yielded by analysis of sale transactions of similar hotel properties.

Potential Disadvantages of a Hotel Investment:

- Competency of Management (maximize long-term revenues, minimize long-term expenditures).
- Long start-up periods.
- Food and beverage risks (high risk, low profit).
- Rapid functional obsolescence (design, construction material, inadequate parking facilities etc.).
- Risk factor in the form of weekly/monthly variation in occupancy.
- Susceptibility to external obsolescence (Economic)
 - Recession in the market
 - Fast traveling facilities
 - Fast communication facilities
 - Competition from new accommodations

- Illiquidity (a few buyers)

Advantages of a Hotel Investment:

- Favourable Tax Treatment
 - much of the property is depreciated over a shorter period of time
 - tax shelter benefits, if any.
- Potential for Large Profit
 - once the income from lodging facility reaches the break-even point, profit tends to increase rapidly.
 - large portion of expenses are fixed and do not vary with occupancy significantly.
 - thus, profit increases with occupancy.

Capitalization

Ideally, net profit should be capitalized for the estimated balance economic life at dual rate, and present value of resale proceeds should be added. Alternatively, if balance economic life is of relatively a longer period and estimation of resale proceeds is difficult, net profit capitalized for perpetuity would serve the purpose.

If economic life ends, building is (i) pulled down or (ii) suitably altered to best alternative use.

In case one (i) - deferred value of land should be considered.

In case two (ii) - deferred capital value for alternative use less deferred cost of alteration should be considered

Relation between (a) present value of all assets and investments and fair interest on this present value should be found out. (b) net income from establishment should also be found out which should be more than (a). If not (i) improvement in management and restructuring or (ii) better utilization / disposal of surplus assets, if any, should be advised.

Conclusion

Hotels are a specialist class of property which normally change hands in the open market as fully operational businesses at prices based on the trading potential for their existing use. It is essential to undertake a full study of trading accounts whenever possible and it is necessary to acquire/have fair and correct knowledge of the hotel trade and market.

Brief Checklist for Valuation of Hotels

Operating Income

A. Tariff

- (a) Number of rooms - single, double, suites
Number of rooms booked average per day
Less – occupied by staff, guests and for repairs
Rooms available (net)
Actual income, potential income
- (b) Shops – Various categories, area, gross rents
Any other commercial premises let out and gross rent from the same
- (c) Banquet – Rents, income per year

B. Food - income

- (a) Restaurant, Coffee Shop, Room Service, Banquet, etc.
 - (i) Breakfast
 - (ii) Lunch
 - (iii) Tea and Coffee
 - (iv) Dinner

C. Beverages - income

- (a) Indian liquor
- (b) Foreign liquor
- (c) Mineral water
- (d) Cold drinks
- (e) Hot drinks

D. Minor Departments –income from

- (a) Telephone, Telex, Fax
- (b) Laundry
- (c) Advertisement
- (d) Internet facility

Expenses

A. Salary, wages, retirement benefits and staff welfare for-

1. Managerial staff at reception, housekeeping etc.

2. Food and beverages

(a) Kitchen

- Chefs
- Cooks
- Assistant cooks
- Helpers
- Dishwashers
- Any other not covered above

(b) Restaurants and coffee shop

- Captains
- Waiters
- Cleaners
- Any other not covered above

(c) Bakers

- Pantry men
- Any other not covered above

(d) Others

- Cashiers
- Storekeepers
- Purchasers
- General cleaning
- Any other not covered above

3. Minor Departments

- Telephone operators
- Laundry men
- Health club
- Any other not covered above

4. Property maintenance

- A.C. operators
- Electricians
- Carpenters
- Plumbers
- Gardeners
- Any other not covered above

5. Administration

- Receptionists
- Stenographers
- Typists
- Clerks
- Marketing staff
- Any other not covered above

B. Repairs and Renewals

- Building
- Curtain and draperies
- Electrical / mechanical including A.C., central heating, etc.
- Elevators
- Engineering supplies
- Floor covering / carpets
- Furniture
- Landscaping
- Operating supplies
- Painting and interior decoration
- Fire fighting system
- D.G. sets
- Refrigeration supplies
- Waste removal
- Maintenance and operation of facilities / amenities provided like TV Telephone – general
- Swimming pool, garden, etc.
- Any other not covered above

C. Energy

- Electricity
- Gas
- Solar energy
- Charcoal
- Steam
- Water
 - Public supply
 - Private purchase

D. Fire Charges and other licence fees

E. Miscellaneous Operating Costs

F. Administrative Expenses

- Traveling and conveyance
- Communication
- Printing
- Books and periodicals
- Professional charges
- Insurance
- Any other not covered above

G. Marketing Expenses

- Advertising
- Other sales promotion
- Entertainment
- Market research
- Bad debts
- Discounts and commissions
- Any other not covered above

Some subjective factors which should be considered are as follows:

1. Amenities

- Facilities provided in the rooms, suits etc.
- Facilities / amenities provided in general, e.g. swimming pool, entertainment room, club etc.

2. Economic activities in the city / town / urban area

- Rate of growth of economic activities
- Foreseeable potential increase in economic activities – government policies, new development project etc.

3. Floating population

- Trend - past 5 to 10 years
- Projected future

4. Increase or decrease in competition (with reasons)

20.0 Valuation of a Petrol Pump (Petrol Filling Station)

20.1 Property classification and valuation approaches

For the purpose of valuation, properties can be classified in three broad categories like –

- (i) Investment property
- (ii) Marketable non-investment property
- (iii) Non-marketable, non-investment property

The value ingredients and elements of value of property falling in above categories are under:

Property classification	Value ingredients	Elements of value
Investment property	Utility Marketability Self-liquidity	Owner's value Market value Investment value
Marketable non-investment property	Utility Marketability	Owner's value Market value
Non-marketable, non-investment property (service property)	Utility	Owner's value

The value ingredients are utility, marketability and self-liquidity for the investment property whereas the elements of value are owner's value, market value and investment value for the investment property.

The investment value is the primary element of value in case of investment property.

The value ingredients and elements of value for the marketable – non-investment property are utility and marketability and owner's value, market value respectively whereas the primary element of value is market value.

The value ingredient and the element of value for the non-marketable non-investment property (service property) are utility and owner value.

The appropriate approach to valuation of investment property is income approach, market approach for marketable non-investment property and cost approach for the non-marketable non-investment (service) property.

Any asset which is acquired and held with an intention to derive benefit from it by way of carrying on business and generate profit out of it - is termed as investment property and the interest of the owner of the property is not limited to owning the physical land and/or building but it extends his right to derive maximum profit out of it. Therefore, the correct approach to value such property will be **income approach** i.e. finding out capitalized value of the net income receivable by virtue of possessing that asset.

Petrol pump, hotel, motel, cinema hall will fall under the category of 'Investment Property' and their value should be ideally estimated for general purposes of acquisition, financial reporting, mortgage, sale, purchase by capitalizing the net income generated from them (except for the specialized purposes such as insurance, capital gain etc.).

20.2 Let's discuss the petrol pump as an investment property and its valuation by an income approach.

General description of Petrol Pump Business Environment

- Petrol pump business is the business of distribution and retailing of petroleum products like petrol, diesel, lubricants and oils. In India, the petroleum refining and distribution was so far a Government controlled sector, petroleum being a scarce and imported product, its distribution was handled by Government companies only. The Government companies involved in the marketing and distribution of petroleum products are Indian Oil Corporation Ltd; Hindustan Petroleum Corporation Ltd; Bharat Petroleum Corporation Ltd; and IBP Company Ltd. These companies were formed by merging various domestic and multinational oil companies at the time of nationalization of petroleum business. However, now private players like Reliance Petroleum Ltd. and Essar are coming up in crude refining and distribution business. The Government's policy of decontrolling petroleum products and making it as open market i.e. without standard controlled retail prices from the year 2002 is already in an era of free pricing.
- The Government oil companies are facing stiff competition from these private players. Private players are less bureaucratic, quicker and their petroleum refining and distribution costs are lower due to economies of scale. Reliance has successfully commissioned world's largest petroleum refinery at Jamnagar, Gujarat. Reliance has already established distribution network for liquefied petroleum gas (LPG) and petrol pump retail outlets.
- India for the first time since its independence has come in a situation where it can export petroleum products. As such due to reduced Government controls and growing competition, this sector is witnessing high level of activity, transactions and changes.

- So far, the business of petrol pump was of a monopoly product with demand always exceeding the supply, with virtually no competition. As such this business was regarded as very lucrative and safe.

High profits, high demand and controlled supply also lead to rampant adulteration. There are large number of reports in media, many cases/charge sheets have been filed in judiciary which prove the existence of an 'adulteration syndicate' operating within the industry.

- The petrol pumps were so far allotted / distributed by the oil companies as per the allotment policy of Government – allotment as per reservation (defence quota, handicapped quota). But now this allotment policy has been relaxed and allotments are being made by open offers on the basis of merit of site and business potential.

There are four types of petrol pump ownership structure in this industry

- (a) Company owned
- (b) Dealer owned
- (c) Dealer leased
- (d) Company leased

Company owned

Where land and building are owned by the oil company. The management of petrol pump is either in the hands of oil company or it is entrusted to private licensees.

Dealer owned

Where the land and building are owned by the dealer. The dealer also has the licence/dealership to sell petroleum products.

Dealer leased

Where the land and building are owned by the dealer but given on long term lease to oil company. The dealer normally gets the licence / dealership to sell petroleum products, as the management of pump is in his hands.

Company leased

Where the land and building are owned by the oil company but given on long term lease to the dealer. The dealer also has the licence/dealership to sell petroleum products.

It may be noted that whatever be the ownership structure – the Petrol Dispensers, Pumps and Oil Tanks are ALWAYS OWNED BY THE OIL COMPANY. (The dictionary meaning of Dispenser is Distribution).

- For opening and running a petrol pump retail outlet following Government clearances are required:
 - (a) No Objection Certificate (NOC) is required from the District Collector.
 - (b) The NOC is issued by the District Collector after receiving individual NOC's from
 - The Superintendent of Police
 - The Superintendent Engineer, P.W.D.
 - The District Magistrate
 - The Administrator of Nagar Parishad or Nagar Nigam
 - The Town Planning Department

Apart from above, licence is required from the Explosives Department and The Petroleum Department for storage and sale of petroleum product.

20.3 Legal factors which have a bearing on Petrol Pump sites are –

Plenty of legislations govern this sector and the lines of responsibility are often not clear. Every state of India has its own acts that govern the selection of Petrol Pump site.

The petrol pump sites in rural area (agricultural land) are governed by the Land Revenue (Conversion of Agricultural Land for Non-agricultural purposes in Rural Area) Rules,. Certain sections of Land Revenue (Allotment, Conversion and Regularization of Agricultural Land for Construction of Cinema, Hotels and Petrol Pumps) Rules, are also applicable.

In urban area the rules and regulations of the respective Area Development Authority are applicable.

The general terms and conditions under which the land for petrol pumps have been allotted are:

- The land for petrol pumps is normally allotted on lease for a period of 15, 25 or 99 years.
- The terms of lease may / may not be silent as regards the option of renewal of lease is considered.
- The lease rent shall be 5% per year of the market value of land at the time of allotment of petrol pump.
- The land shall be reserved for use as a petrol pump only and no other use shall be permitted.
- The lessee shall be responsible and liable to pay all the rates, taxes etc. levied on the land from time to time.

20.4 Factors affecting the security offered by Petrol Pump

The security and regularity of income from petrol pump business is governed by various factors, all of which are not fully quantifiable. Some of the factors having an impact on the profitability, security of income and regularity of income from petrol pump business are discussed below:

- Demand for petrol / diesel from a given retail outlet. This demand would depend upon factors like -
 - Existence of competitive petrol pumps in the vicinity.
 - Traffic count of the road on which petrol pump abuts.
 - Vehicle population and vehicle density in the vicinity of petrol pump.
 - General demand for transport fuel, growth in vehicle population.
 - Types of surrounding area – whether agricultural or urban?
 - Is there any large scale development in agriculture?
 - Demand for power and fluctuations in the supply of power – need for DG sets?

- **Competition**
 - Is better quality petrol available elsewhere in the vicinity?
 - Reputation of dealer as regards adulteration.
 - Is the petrol at any other retail outlets cheaper? With decontrolled prices of petroleum products, this factor shall become more and more important.
 - Growth in density and number of petrol pumps for a given area as compared to growth of vehicle population in that area.
 - Decontrol of petroleum products and industry would also lead to increased competition, advertisement and reduced margin.

- **Alternative fuels**
 - The emergence of Liquefied Petroleum Gas and Compressed Natural Gas as substitute fuels.
 - Emergence of alternative renewable fuels e.g. Solar Cars.
 - Trend and Development in automobile industry towards electric and battery driven automobiles which are environment friendly too.

- **Supply side**
 - Over capacity of refineries. Dumping of petroleum products due to over capacity.
 - Worldwide fluctuations in crude prices.

- **Newer trends**

- Consumer shift towards better public transportation system.
- Reduced need of travelling and reduced distances due to the growth of communications and information technology.
- What other facilities are available at the petrol pump site?

e.g. Small bazaar containing routine items, gift items, cards, chocolates, ice-creams, restaurant, service station, rest room etc.

The impact of all these factors on the security aspects of petrol pump business can be summarized as follows :

Safety of capital

The capital invested in petrol pump is safe, a major investment is involved in land, which is quite safe.

Liquidity of capital

The capital invested is however not liquid as –

- Petrol pumps are run by franchisees, which cannot be sold without the permission of oil companies.
- Petrol pump sites are reserved sites with special status and special lease provisions. Any usage other than as a petrol pump is not permitted, so only those people who have a petrol pump dealership can acquire it – so it has a very small market, limited marketability, but at the same time number of sites reserved for Petrol Pump are also less in number.

Security of income

The income is partially secured at present but the future is uncertain. The industry is under a phase of transition and radical changes – Government policies of decontrolling petroleum product and industry.

Regularity of income

The income is partially regular. With competitive petrol pumps and aggressive marketing, regularity of income is suffering.

Ease of collection of income

The collection of income is not very easy. The whole business is to be organized, controlled and run to earn the income – everywhere – or – at every stage legal commission is fixed or royalty is fixed.

The Government of India has also issued directives to oil companies that any new petrol pump can be opened at a site only if the projected internal rate of return is **8.0% or more.**

Even for analysis of existing petrol pumps, an internal rate of return of 8.0% is being used as a benchmark.

20.5 Methodology

There are four major steps involved in the Income Approach. They are –

- (i) Workout the ingredients of income
- (ii) Forecast net income for a specified number of years
- (iii) Select on appropriate capitalization rate
- (iv) Apply the capitalization rate/ years' purchase (Y.P.) to the net income.

These four important steps can be well explained as under:

- Identify the petrol pumps, which have been recently sold.
- Find out the terms and conditions under which these petrol pumps have been sold.
- Collect financial data regarding –
 - (a) Revenue data i.e. sale of petrol, sale of diesel, sale of oil and lubricants, revenue / income from service station, bazaar, restaurant etc.
 - (b) Expenditure data i.e. cost of goods sold (including taxes), salaries to pump attendants, supervisor, other administrative staff, proprietors, electricity charges, water charges, telephone, postage, printing, stationary, repairs and maintenance, interest on loan (working capital), lease rent of petrol pump site, advertisement expenses, air station expenses, travelling and miscellaneous expenses.
- Find out net income (Gross Revenue – Gross Expenditure).

Data collection

- Traffic count on the roads on which petrol pumps are situated.
- General business environment, number of petrol pumps in the vicinity.
- Vehicle population growth rate, population growth rate of the city, residential property growth rate.
- Sale and rental instances of the petrol pumps in the vicinity of the petrol pump under study. Assign the weightages to various factors, which have a bearing on the valuation. Estimate the final weightage score of all the instances of sales and rental.

- Financial data of all the instances of sales and rental. Calculate net profit of each instance.

Estimation of rate of capitalization

- Estimate the security offered by investment in petrol pump by considering all the factors affecting security.
- Security offered by investment in bank and risk involved in the petrol pump business.

20.6 Life cycle of the petrol pump

Generally, the life of the petrol pump depends on the lease period, terms and conditions of the lease agreement, renewal options, growth of vehicle population, growth of population of the area, growth of residential, commercial and especially educational institution in nearby area. Land does not depreciate physically, the structures required for petrol pump depreciate but at a very slower rate and compared to overall investment in petrol pump, the investment in building is less, whereas, pumps, petrol dispensers, storage tanks are owned by the oil company hence the physical depreciation of these equipment will be looked after by the oil companies. The common lease period is 15, 25 or 99 years.

In short, life of buildings and petrol pump (equipments required) does not affect the economic life of the petrol pump.

20.8 Valuation

In valuation exercise, what we are valuing is the right/interest of an individual in a property.

In case of a petrol pump, dealer runs the business as a licensee and when sale of petrol pump takes place, generally licensee sells his rights in the petrol pump. His rights comprise of earning income by sale of petrol, diesel and other allied products.

Therefore, for valuation of a petrol pump, the income and expenditure are to be estimated by taking into consideration all the items falling under these two categories (income and expenditure).

The estimation of throughput is very important. The valuer may be assisted by information about sales in past but he has to form his own estimate of future sales. While examining the records of past sales, it needs to be born in mind that price adjustments have a disproportionate effect on throughput. While estimating future sales, it is important to bear in mind volume of traffic flow, location and density of local population.

If the figures of current traffic flow are not available then the valuer must carry out his own traffic count for estimating purposes and a specialized technique of observation is recommended.

A method of estimation of potential sales related to car population and average kilometer rather than traffic flow, or both, must be resorted to. However, these methods are rule of thumb and to be used with discretion.

In India, the system of operation of the petrol pumps is as under:

- a. The petroleum company takes a land on lease from the dealer who wants to establish a petrol pump.
- b. The owner of the land, i.e. the dealer gets rent for the land at the rate of 5% of market value per annum at the time of allotment.
- c. The dealer takes all the required permissions from various authorities to establish the petrol pump.
- d. The petroleum company provides machinery and other infrastructure for installation of petrol pump.
- e. The profit from the sale of the products is shared between the dealer and the petroleum company at the agreed rate.

Case study of a petrol pump having revenue from petrol twice the revenue of diesel located in the heart of a city.

Period of lease of land is 70 years from October 2008.

Ground rent paid per annum by the petroleum company for land taken on lease from the dealer is ₹ 4,20,000/- i.e. ₹ 35,000/- per month.

The profit sharing between the dealer and the petroleum company is in the ratio of 50:50.

Commencement of business	:	October, 2008
Date as on which valuation is made	:	31 st October 2011
Market value of land owned by the dealer	:	₹ 84,00,000
Ground Rent at 5% per annum works out to	=	84,00,000 x 0.05
	=	₹ 4,20,000/-
		i.e. ₹ 35,000 per month

Other assets to carry on the business of petrol filling is provided by the petroleum company at monthly rent of ₹ 20,000/-.

Income and expenditure statement of the petrol pump for dealer

A. Income per month

Sale of petrol (45,000 L @ ₹ 71 per Lit.)	31,95,000
Sale of diesel (22,500 L @ ₹ 50 per Lit.)	11,25,000
Sale of oil and lubricants	3,45,000

Total revenue (per month) 46,65,000 (a)

B. Expenditure per month

I Ground rent for land and rent for other assets	55,000
II Cost of goods sold (including taxes)	42,50,000
III Salaries :	
1. Pump attendants – 4 nos. @ ₹ 5,000/- per month	20,000
2. Supervisor	8,000
3. Other administrative staff	6,000
4. Proprietor's salary	40,000

IV Administrative and other expenses

Telephone, postage, printing, stationary	5,000
Electricity charges	15,000
Water charges	500
Repairs and maintenance	10,000
Traveling and miscellaneous expenses	4,000

Total expenditure (per month) 44,13,500 (b)

Gross profits (per month) **2,51,500 (c)**

**Interest on loan (working capital)
(₹ 10 Lakhs privately arranged) 15,000 (d)**

Net monthly profit (c - d) 2,36,500

Net annual profit 28,38,000

The profit is to be shared in the ratio of 50:50.

We are estimating the dealer's interest which consists of :

- (i) Net yearly profit in the hands of the dealer
- (ii) Dealer's leasehold interest in the land

Capitalized value of net yearly profit in the hands of the dealer:

Net annual profit to the dealer is 50% of ₹ 28,38,000/- i.e. ₹ 14,19,000/-

Estimation of rate of capitalization

1. The local inquiry revealed that recently the dealer's interest in a petrol pump under similar conditions are sold as under:

Petrol Pump	Net Income (₹)	Sale Price (₹)	YP	Rate of Interest
A	13,00,000	1,00,00,000	7.69	13.00
B	17,00,000	1,40,00,000	8.23	12.15

2. Inquiry with the owners of petrol pump in near by area revealed that return is 11 to 12%.
3. The banks are offering 9 to 10 % interest on deposits, which is secured, whereas petroleum business is risky compared to fixed deposits on account of various factors explained earlier.

In view of facts mentioned above, the rate of capitalization is adopted at 12%.

$$\begin{aligned}
 \text{Capitalized value of dealer's net profit} &= \text{Net Income} \times \text{YP} \\
 &= 14,19,000 \times \frac{100}{12} \\
 &= ₹ 1,18,25,000/- \quad (\text{x})
 \end{aligned}$$

Add to above, capitalised value of ground rent received by the dealer for land given on lease to petroleum company.

$$\text{Net ground rent per annum} = ₹ 4,20,000/-$$

This ground rent is secured and hence rate of return is considered at 7%.

$$\begin{aligned}
 \text{Capitalized value of ground rent/value} \\
 \text{of dealer's right in land given on lease} &= 4,20,000 \times \frac{100}{7} \\
 &= ₹ 60,00,000/- \quad (\text{y})
 \end{aligned}$$

$$\begin{aligned}
 \text{Value of dealer's interest} &= (\text{x}) + (\text{y}) \\
 &= ₹ 1,78,25,000/-
 \end{aligned}$$

Note:

1. Single rate YP table is used as the unexpired period of lease is more than 60 years.

2. Investment in land in October 2008 is ₹ 84,00,000/- whereas value of dealer's (lessor's) interest in land as on date of valuation (31st October 2011) is ₹ 60,00,000/-. The difference is because of change of tenure from freehold to leasehold.
3. In case where there is a short lease period of less than 50 years, dual rate YP, table to be used.

Moral of the Story

All the factors affecting income generation need to be properly considered. Moreover, in a petrol pump, there is more than one interest. Based on the interest is to be valued and period for which income is available are vital factors; because use of single rate or dual rate valuation table will depend upon the period for which income is available.

21.0 Valuation of a Cinema Hall

21.1 The Concept of the Cinema Business

With increasing number of nuclear families and changed perception of life, people are stepping out of their homes to have a good leisure time.

There has been a considerable change in Indian's attitude towards entertainment and leisure over the last few years due to a gradual increase in purchasing power. There has been a surge in leisure activity in the field of amusement and fun parks and video arcades as well as launching of bowling alleys in Delhi and Mumbai.

The Prospects of Cinema Business

The local business has the potential to attract investments in cinema industry as it being the sunrise industry and being city centric.

The main reasons for investors to come forward and invest in this industry are:

- repeat customers/high repeat purchase
- all collections are in cash
- multiple revenue sources/profit centers
- equipment used have long life

As per the study made by ITCIT, about 150 million people fall in an income bracket, which have enough money to visit cinema on a regular basis. With increasing "stress and strain" in early life, leisure travel is no longer considered hedonistic.

It is seen that movie and entertainment account for 3% of the total consumer spending.

Manner in which Cinema Business can be conducted:

- (a) Owner himself runs the Cinema.
- (b) Owner gives on Conducting agreement to a conductor with dual control of the owner and the conductor.
- (c) Film Exhibition Contract in which Owner of Cinema theatre gives on Conducting agreement to conductor with owner retaining control over the Cinema and the conductor is given rights to exhibit films.
- (d) Combination of owner running Cinema himself for part of the year and for part of the year giving on conducting agreement.

If the owner runs the Cinema himself or gives on conducting agreement, the Profit Method of Valuation revolves round the Capitalization of net profit at appropriate rate of return.

However, in each case value of right of owner/conductor is estimated.

21.2 Multiplexes and Film Industry Overview

In spite of cut throat competition from various other indoor and outdoor channels of entertainment, movies have retained their sheen and glamour.

Cinemas have always for decades enjoyed excellent popularity in India.

The current status of cinema however leaves a lot to be desired. The number of cinema halls in India are in a completely dilapidated state and the number of cinemas per million are very less compared to USA and other advanced countries.

The study by UNESCO on cinemas suggests that there is a need for at least 20,000 screens in India as against the current 12,900. Higher the number of screens, greater the visibility to the film and longer the filming time, thus generating higher revenues for the exhibitor/distributor. Good theatres equipped with latest technology, good sound effect and facilities will encourage people to view films in theatres rather than at homes through cables/video.

Pressures on the bottom line had forced exhibitors to keep a close eye on tickets. In addition, as soon as the initial allure of a movie starts wearing off, it is without getting a chance to exploit the full potential of the film, to accommodate some other film awaiting release.

A multiplex embodies the luxurious amenities of modern day cinema – the multiple screen choices, state of the art technology, ergonomic seating, eye catching architecture, and top of the line cafes and food courts. FICCI report on entertainment reveals that the only way to pull people back to the theatres is to make theatre attractive, comfortable and equipped with the latest amenities, thereby offering the audiences quality enjoyment at affordable prices. Since more than one movie is screened in a multiplex at any given time, a potential viewer rarely goes home without seeing a movie, which may not be the one he came to view in the first instance.

Multiplexes are the latest concept in the movie exhibition industry and the tremendous potential offered by them can alter the way people in India watch films. Now with various state governments announcing tax holidays for Cineplex's (multiple movie theatres), more investments are likely to flow into the infrastructural setup. Gujarat, Rajasthan and other state governments have announced a five-year tax holiday for such projects.

21.3 Capacity to generate the revenue

Typically, the possible income generating channels in multiplex are:

1. The collections from sale of tickets through box office

2. Income from -

- rent received from display systems
- sale of food and beverages
- product launch rentals
- promotion from companies seeking to promote consumer goods.

Multiplexes earn more from other sources than the box office collections. Multiplexes often command higher collections and space efficiencies in a screen to screen analysis, though they are much smaller than traditional theatre due to the following reasons:

- i. The wide choice of movies available to the customers;
- ii. Possibility of premium pricing due to the total entertainment platform;
- iii. Multiple revenue streams

21.4 Major Hurdles in Movie Exhibition Industry

Lack of modern and viable infrastructure

The admissions in countries such as England, Germany and Australia considerably increase with the advent and growth of multiplexes. In India, on the other hand, the multiplex development is yet to grow to its full potential.

Entertainment tax structure

As a result of the high incidence of entertainment tax, a large portion of the cinema ticket receipts go towards tax instead of being channeled towards cinema developments. The Indian cinema exhibition industry has therefore not been able to leapfrog in terms of building and operating excellent facilities. The prevailing entertainment tax duties in other Asian countries vary from 3% to 33%.

21.5 Market value of a Cinema Theatre

It is important at the outset to understand the distinction between Value of Cinema business as a fully operational entity which is a Business Valuation gives value of net current assets, net fixed assets and intangible assets and Valuation of Real Property (land and buildings) of a Cinema. Many times real property are given on rental.

In valuation of Cinema Theatre as Business, the Net Income derived from the Business is capitalized to achieve the Total Business Value.

In case of valuation of a Real Property it is the Net Rent paid for land and building by the exhibitor to the owner and the income generated from car parking are capitalized to achieve the value of Real Property.

It is a market practice that plant and machinery, viz. projector, sound system, seats, cafeteria, etc are a cost to the exhibitor and owner only lets out bare shell property to the exhibitor. The Cinema Industry comprises of a four tier structure comprising

- Producer,
- Distributor,
- Exhibitor
- Theatre owner (i.e. owner of land and building).

The Producer bears the entire Cost of Production for making the movie and sells the movie to the distributors of various territories. The distributor further gives it on rental basis to the exhibitor keeping a percentage of profit on the returns from the sale of tickets. The other part is taken by the exhibitor. The exhibitor is allowed to screen movies in cinema theatre by paying a rent to the theatre owner. Thus, the exhibitor acts as a link between the theatre owner and distributor.

Market value of real property of the cinema theatre can be estimated by the 'Rental Method' wherein rent paid by the exhibitor to the owner of theatre is ascertained either based on the rents of nearby theatres or comparables in the locality.

In case of value of cinema as a fully operational entity- Profit Method (income approach) is adopted for the total income derived as a fully operational entity to estimate the value.

Factors affecting the security offered by Cinema Theatres

The security and regularity of income from cinema theatre business is governed by numerous factors. All of which are not fully quantifiable. Some of the factors that have an impact on profit, security of income and regularity of income from cinema theatre business are discussed in the following paragraphs.

Demand for a particular cinema theatre would depend upon the following factors:

- Existence of other cinema theatres in the vicinity.
- The quality of movies being screened in cinema theatre
- The demographic features of the area in which cinema theatre is located.
- The type of surrounding area whether an urban or an underdeveloped area.
- The demand for power and fluctuation in supply of power.
- The need of D.G. sets.

Income Capitalization (Income Approach)

Rate of Interest

Gross Income:

Gross Annual Income is calculated from estimated monthly Fair Market Rent.

Outgoings:

Outgoings include municipal taxes, repairs and maintenance expenses, rent collection and management expenses shown in sale statement.

Net Income:

Gross Income – Outgoings

Year's Purchase (YP) :

Using the Net Income as estimated above and the evidence of Market Value (Sale Consideration Amount), the Year's Purchase is calculated by dividing Market Value by Net Income.

21.6 Rate of Capitalization

Capitalization is a mode to express the viewpoint of a prudent purchaser as regards to the amount he should pay for future rights to income and therefore, before he decides the same, he has to consider the following:

- Security of capital
- Rate of return and how it compares with the return available in general investment market
- Certainty of realization of capital and income
- Capital appreciation
- Liquidity of investment within a short time and at low cost.
- Burden of management of investment
- Raising loan at low cost
- Tax benefits

The Rate of Capitalization is estimated from Sale Instance of a Multiplex:

Sale price excluding sound system and projector	=	₹ 40,00,00,000/-
Cost of projection system	=	₹ 30,00,000/-
Cost of sound system	=	₹ 30,00,000/-
Grand total	=	₹ 40,60,00,000/-

1.	No. of seats per auditorium in a multiplex:		
	a. Auditorium – 1	400	
	b. Auditorium – 2	400	
	c. Auditorium – 3	400	
	d. Auditorium – 4	400	
	e. Auditorium – 5	400	
2.	Total no. of seats in the multiplex	=	2,000
3.	Total built-up area of the multiplex	=	40,000 sq. ft.
4.	Area per seat	=	20 sq. ft.
5.	Purchase cost	=	₹ 40,60,00,000/-

Computation of Revenue

6.	Price per ticket	=	₹ 130
7.	Occupancy (%)	=	50
8.	Revenue from ticket sale per person	=	Total seats x No. of shows x Price per ticket x Occupancy x 365 days
		=	2,000 x 4 x 130 x 0.50 x 365
		=	₹ 18,98,00,000/-
9.	Net revenue from canteen at 30% margin	=	60,00,000 x 0.3
		=	₹ 18,00,000/-
10.	No. of cars per show	=	100
11.	Car parking charges per car	=	₹ 15/-
12.	Revenue from car parking per year	=	100 x 4 x 15 x 365
		=	₹ 21,90,000/-
13.	Revenue from advertisements	=	₹ 15,00,000/-
14.	Total revenue per year (8+9+12+13)	=	₹ 19,52,90,000/- (I)

Computation of Expenses

15.	Electricity charges	=	₹ 75,00,000/-
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16.	Insurance	=	₹ 8,00,000/-	
17.	Miscellaneous expenses (Telephone, stationery, building maintenance etc.)	=	₹ 50,00,000/-	
18.	Property tax	=	₹ 10,00,000/-	
19.	Entertainment tax at 40% of the price of ticket (inclusive of service tax)	=	0.4 x (Sr. no.8)	
		=	0.4 x 18,98,00,000	
		=	₹ 7,59,20,000/-	
20.	Distributor's profit @ 30% of the collections	=	0.3 x (Sr. no.8)	
		=	₹ 5,69,40,000/-	
21.	Depreciation on building, plant & machinery	=	₹ 50,00,000/-	
22.	Total expenses per annum (Sr. No. 15 to 21)	=	₹ 15,21,60,000/-	(II)
23.	Net income per year	=	(I) – (II)	
		=	19,52,90,000 – 15,21,60,000	
		=	₹ 4,31,30,000/-	
	Net income per year + Depn.	=	4,31,30,000 + 50,00,000	
		=	4,81,30,000	
24.	Return on investment per annum	=	$\frac{40,60,00,000}{4,81,30,000}$	
		=	8.43	
			Say 8.5%	
25.	Years Purchase in perpetuity	=	$\frac{100}{8.5}$	
		=	11.76	
			Say 12	

21.7 Case Study on Valuation of a Multiplex by adopting rate of capitalization from above sale instance.

Let us consider a case of Multiplex in Kolkata city comprising of 3 screens. The details are provided below:

Profit Method

Details

1. No. of Seats

Screen – 1	Class - A	-	250
	Class - B	-	75
	Class - C	-	10
Screen – 2	Class - A	-	150
	Class - B	-	60
	Class - C	-	10
Screen – 3	Class - A	-	260
	Class - B	-	90
	Class - C	-	15

2. Total nos. of seats - 920

3. No. of shows per day - 5

4. Average occupancy of theatre- 60%

5. Average no. of seats

Occupied per day = 920 seats x 5 shows x 60%
= 2,760 seats

6. Average price per ticket = ₹ 140/-

Gross Yearly Revenue

= Average no. of seats occupied per day x Rate x No. of days in a year
= 2,760 x 140 x 365
= ₹ 14,10,36,000/-

Calculation of Outgoings

Total expenses towards direct expenses = ₹ 8,25,00,000/-

Employee remuneration and benefit, Advertising marketing and promotion, Property tax etc. = ₹ 2,00,00,000/-

Depreciation on equipment = ₹ 50,00,000/-

Total Outgoings = ₹ 10,75,00,000/-

$$\begin{aligned}\text{Net Profit} &= \text{Gross profit} - \text{Total outgoing} \\ &= ₹ 14,10,36,000/- - ₹ 10,75,00,000/- \\ &= ₹ 3,35,36,000/- \\ &\text{Say } ₹ 3.35 \text{ crores}\end{aligned}$$

Capitalizing the Net Income at 7.0%, value of the property works out to -

$$3.35 \times \frac{100}{7.0} = 47.85 \text{ crores}$$

Note:

Value of the multiplex under case study is having a capacity about 50% of the sale instance but its value is about 15% higher than the sale instance; this is mainly due to income generation capacity of multiplex is more. Not only that it has a potential to increase the income as occupancy is 60% and therefore YP is adopted at 7.0% against 8.5% for sale instance.

22.0 Issues to be Considered for Valuation of Green Building

22.1 Introduction

Green building (also known as green construction or sustainable building) refers to both a structure and the application of processes that are environmentally responsible and resource-efficient throughout a building's life-cycle: from planning to design, construction, operation, maintenance, renovation, and demolition. This requires close cooperation of the contractor, the architects, the engineers, and the client at all project stages. The Green Building practice expands and complements the classical building design concerns of economy, utility, durability, and comfort.

Leadership in Energy and Environmental Design (LEED) is a set of rating systems for the design, construction, operation, and maintenance of green buildings which was developed by the U.S. Green Building Council. Other certificates system that confirms the sustainability of buildings is the British BREEAM (Building Research Establishment Environmental Assessment Method) for buildings and large-scale developments. Currently, World Green Building Council is conducting research on the effects of green buildings on the health and productivity of their users and is working with World Bank to promote Green Buildings in Emerging Markets through EDGE (Excellence in Design for Greater Efficiencies) Market Transformation Program and certification. There are also other tools such as Green Star in Australia and the Green Building Index (GBI) predominantly used in Malaysia.

Although new technologies are constantly being developed to complement current practices in creating greener structures, the common objective of green buildings is to reduce the overall impact of the built environment on human health and the natural environment by:

- Efficiently using energy, water, and other resources
- Protecting occupant health and improving employee productivity (see healthy building)
- Reducing waste, pollution and environmental degradation

A similar concept is natural building, which is usually on a smaller scale and tends to focus on the use of natural materials that are available locally. Other related topics include sustainable design and green architecture. Sustainability may be defined as meeting the needs of present generations without compromising the ability of future generations to meet their needs. Although some green building programs don't address the issue of the retrofitting existing homes, others do, especially through

public schemes for energy efficient refurbishment. Green construction principles can easily be applied to retrofit work as well as new construction.

A 2009 report by the U.S. General Services Administration found 12 sustainably-designed buildings that cost less to operate and have excellent energy performance. In addition, occupants were overall more satisfied with the building than those in typical commercial buildings. These are eco-friendly buildings.

22.2 Goals of Green Building:

The concept of sustainable development can be traced to the energy (especially fossil oil) crisis and environmental pollution concerns of the 1960s and 1970s. The Rachel Carson book, "Silent Spring", published in 1962, is considered to be one of the first initial efforts to describe sustainable development as related to green building. The green building movement in the U.S. originated from the need and desire for more energy efficient and environmentally friendly construction practices. There are a number of motives for building green, including environmental, economic, and social benefits. However, modern sustainability initiatives call for an integrated and synergistic design to both new construction and in the retrofitting of existing structures. Also known as sustainable design, this approach integrates the building life-cycle with each green practice employed with a design-purpose to create a synergy among the practices used.

Green building brings together a vast array of practices, techniques, and skills to reduce and ultimately eliminate the impacts of buildings on the environment and human health. It often emphasizes taking advantage of renewable resources, e.g., using sunlight through passive solar, active solar, and photovoltaic equipment, and using plants and trees through green roofs, rain gardens, and reduction of rainwater run-off. Many other techniques are used, such as using low-impact building materials or using packed gravel or permeable concrete instead of conventional concrete or asphalt to enhance replenishment of ground water.

While the practices or technologies employed in green building are constantly evolving and may differ from region to region, fundamental principles persist from which the method is derived: siting and structure design efficiency, energy efficiency, water efficiency, materials efficiency, indoor environmental quality enhancement, operations and maintenance optimization and waste and toxics reduction. The essence of green building is an optimization of one or more of these principles. Also, with the proper synergistic design, individual green building technologies may work together to produce a greater cumulative effect.

On the aesthetic side of green architecture or sustainable design is the philosophy of designing a building that is in harmony with the natural features and resources

surrounding the site. There are several key steps in designing sustainable buildings: specify 'green' building materials from local sources, reduce loads, optimize systems, and generate on-site renewable energy.

22.3 Cost and Payback:

The most criticized issue about constructing environmentally friendly buildings is the price. Modern technologies tend to cost more money. Though a scientific study has not been carried out in India on this aspect, we have data available in other countries. Most green buildings cost a premium of approximately 2%, but yield 10 times as much over the entire life of the building. In regards to the financial benefits of green building, "Over 20 years, the financial payback typically exceeds the additional cost of greening by a factor of 4-6 times. And broader benefits, such as reductions in greenhouse gases (GHGs) and other pollutants have large positive impacts on surrounding communities and on the planet." The stigma is between the knowledge of up-front cost vs. life-cycle cost. The savings in money come from more efficient use of utilities which result in decreased energy bills. It is projected that different sectors could save \$130 billion on energy bills. Also, higher worker or student productivity can be factored into savings and cost deductions.

Numerous studies have shown the measurable benefit of green building initiatives on worker productivity. In general it has been found that, "there is a direct correlation between increased productivity and employees who love being in their work space." Specifically, worker productivity can be significantly impacted by certain aspects of green building design such as improved lighting, reduction of pollutants, advanced ventilation systems and the use of non-toxic building materials. In "The Business Case for Green Building", the U.S. Green Building Council gives another specific example of how commercial energy retrofits increase worker health and thus productivity, "People in the U.S. spend about 90% of their time indoors. EPA studies indicate indoor levels of pollutants may be up to ten times higher than outdoor levels. LEED-certified buildings are designed to have healthier, cleaner indoor environmental quality, which means health benefits for occupants.

Studies have shown over a 20-year life period, some green buildings have yielded \$53 to \$71 per square foot back on investment.[56] Confirming the rentability of green building investments, further studies of the commercial real estate market have found that LEED and Energy Star certified buildings achieve significantly higher rents, sale prices and occupancy rates as well as lower capitalization rates potentially reflecting lower investment risk.

22.4 Indian Context:

Indian Green Building Council (IGBC):

The Indian Green Building Council (IGBC) was formed by the Confederation of Indian Industry (CII) in 2001. The council is based out of the CII Green Business Centre, Hyderabad which is India's 1st Platinum rated green building. The vision of the council is to enable 'Sustainable built environment for all.

IGBC is the country's premier body for green building certification and allied services. Today, with strong support from various stakeholders, we have achieved the following significant milestones:

5,000+ projects registered with IGBC from various parts of India and abroad, amounting to a total footprint of 4.72 billion sq. ft. 25 IGBC green building ratings to cover all typologies of projects - residential, commercial, industrial, healthcare, etc.

- 2,100+ IGBC Member Organizations comprising developers, corporates, architects, consultants, institutes, government, etc.
- 3,400+ qualified IGBC Accredited Green Building Professionals ; more than 30,000 stakeholders have been trained by IGBC till date. IGBC certifies the green projects which are conceptualized, designed, constructed and operated as per IGBC Ratings. Till date, more than 1,250 projects (approx 400 million sq. ft.) have been rated by IGBC. These IGBC-rated projects, as compared to conventional structures, have demonstrated tremendous savings to the extent of up to:
 - 15,000 MWh of Energy per million sq ft. per annum
 - 45,000 KL of Water per million sq ft. per annum
 - Installation of 100 MW of Renewable Energy in IGBC certified projects
 - Reduced CO₂ emissions by 12,000 tons per million sq ft. per annum
 - Diverted 500 Tons of construction waste from landfill per million sq ft.

22.5 Valuation Issues:

Valuers should consider the effects of green building design and construction on the value of a property. It is the Valuer's job to determine whether a building with green features is more valuable in its market than a conventional building. A valuer should ask whether the market recognizes the value of a sustainable building. This is currently a challenge valuers, because this field is relatively new, and market data on this topic is limited in India.

There is evidence, at least in some markets, that sustainable design does indeed increase value. However, valuers require hard data, and at this point there is only

anecdotal evidence that green features increase the value of a building. A major problem in gathering hard data is that many green buildings are public-sector properties and not built for investment purposes. Even within the realm of green investment properties, few of these buildings have yet to change hands, and owners/developers are reluctant to share financial data on these properties. In addition, some of the benefits of green building may accrue solely to the occupier rather than the owner or developer, which presents another valuation challenge. Valuers may need to adjust and fine-tune the methods they use to address these new issues. The Valuer must understand the specific characteristics of green buildings and be able to assess the impact of these characteristics on asset value.

22.6 Approaches to Value:

If a subject property is identified as having green elements, this will have an effect on the three traditional approaches to value. The Market approach is appropriate for valuing a green building, but comparable properties may be difficult to find, as it will be difficult to identify whether the transacted property is a Green building or not from the transaction deeds. Adding to the challenge is the fact that a building may have many green design features, or it may incorporate only a few. Moreover, a structure that has not been officially certified as green may still have many green features. Adjustments will have to be made to account for the differences between the subject and other green properties, just as adjustments are made for other property characteristics.

The Cost Approach may also be used to assign market value to a green building. Valuers can determine the reproduction or replacement cost of a green building, and then estimate depreciation. However, certain forms of accrued depreciation may be lower for green improvements than for conventional ones. Green buildings are built with more durable, low-maintenance materials, and therefore may have longer economic lives.

Another point Valuers should consider when using the cost approach is the possibility of the super adequacy of green construction. Buyers in some markets may not be willing to pay the full cost of green amenities that already exist in a building. In this case, an adjustment would have to be made. A major drawback to using the cost approach in valuing green buildings is that this approach may ignore the benefits of green building features and the effects these benefits have on asset value.

The Income Approach provides a logical framework for valuing a green commercial building. Green design features may reduce operating costs such as energy costs, maintenance and repairs, water costs, and legal and insurance costs. These cost reductions increase net operating income. More controversial is the effect of green design on market rent and vacancies. In some markets, green spaces may rent or sell

quicker and/or at higher rates than spaces in conventional structures. Capitalization rates may also be affected. A major challenge in utilizing this approach is that rent components and market data may be difficult to find, due to the low number of green investment properties and the reluctance of owners/developers to share financial data.

Some believe that green buildings are different enough to be considered a semi-specialized class, like hotels or golf courses. When the availability of green comparable is limited, it may be appropriate for valuers to employ the methods they use for other specialty property types.

The Valuer has to consider following points while valuing the Green Buildings.

- Identify the relevant components of a sustainable property
- Discover green buildings resources
- Evaluate construction costs in the context of long-term benefit, capital and operating costs, and relative to net income from operations and reversion;
- Analyze the relevance of green features in the marketplace;
- Assess market and investment risks relative to potential rewards;
- Identify who pays the costs and who receives the benefits for the sustainable elements incorporated in green construction; and provide a competent and reliable estimate of market value in the context of available data.

Approach	Positive Considerations	Potential Green Downside Risk
INCOME CAPITALIZATION The best option for high-performance buildings due to the relatively low number of comparable properties	MARKET PROFILE <ul style="list-style-type: none"> • Do the best tenants in market prefer green or efficient buildings? • Are tenants looking for certifications? TENANCY FROM LEASE-UP TO TURNOVER: <ul style="list-style-type: none"> • Does market show a premium for Lease-up/ Absorption; Vacancy and Retention, Downtime; Collection Losses? LEASE STRUCTURE; <ul style="list-style-type: none"> • Does lease structure benefit tenants or owner? • Recoveries, TI, Maintenance, Expense Sharing UTILITY COSTS; <ul style="list-style-type: none"> • Has the building been commissioned? 	<ul style="list-style-type: none"> • Is the asset in a market that does not value green buildings? Does the third party commissioning or auditing firm have a track record? What is their realization rate on projected savings? Is the building an early adopter of any unproven green technologies?

	<ul style="list-style-type: none"> • Are energy audits/historical use data credible? • Do low energy costs convey competitive advantage? <p>INCOME AND EXPENSES ANALYSIS</p> <ul style="list-style-type: none"> • Potential Rent and Vacancy premiums? • Do green practices (daytime cleaning) or materials (durability, lower reserves) reduce expenses? • Are insurance rates lower? <p>INVESTMENT TRENDS AND RISK</p> <ul style="list-style-type: none"> • Do likely buyers display a preference for green assets and will this lower reversion risk? 	<ul style="list-style-type: none"> • Is there an additional demand on property managers, engineers to understand green systems? • Do managers make tenants partners in optimizing building performance? <p>Potential for smaller, less experienced owners of green buildings to have a higher risk profile vs. institutional players</p>
<p>COST Weighs the value of the green features against any premium</p>	<p>When construction cost estimates are available from architects or estimators, do offsetting incentives, reductions to cost of other components, and long-run benefits offset premiums? Can these be supported by life-cycle or cost-benefit analysis?</p>	<ul style="list-style-type: none"> • Is the green premium for a project too high to offset benefits? <ul style="list-style-type: none"> • Is there a risk of over-improvement or super adequacy?
<p>SALES COMPARISON Provides an opportunity to weigh the asset against green and conventional peers</p>	<p>PHYSICAL CHARACTERISTICS</p> <ul style="list-style-type: none"> • Is the property of higher quality? • Does it need the green features just to stay competitive or to avoid obsolescence? <p>ECONOMIC CHARACTERISTICS</p> <ul style="list-style-type: none"> • Is the property more marketable than its peers? • Would the market consider the asset less risky? 	<ul style="list-style-type: none"> • If the property doesn't have green features does it lose a class ranking for instance from Class A to Class B?

23.0 Discounted Cash Flow and Internal Rate of Return

23.1 Capital Budgeting

Capital budgeting is concerned with investment decisions from which returns are realizable over future periods of time. Examples are investments in real estate, plant and machinery or in new projects. An investment proposal will prove successful if it provides a return equal to or more than that required by the investor. Cash flow refers to the periodic inflow or outflow of cash in an investment proposal. Discounted cash flow acknowledges that a rupee today is worth more than a rupee received at a future date. Since the flow of cash is progressive over a period, some discounting is necessary to calculate its present value.

In the evaluation of investment projects the discounted cash flow method can provide a useful means of testing financial feasibility. The discount rate will generally be the minimum rate of return required by the investor over the period of the cash flow. If the total of the discounted cash flow over the period is zero or a positive figure, then the proposal will be acceptable. If a negative discount flow value results, the proposal will be unacceptable.

In order to undertake any project, it is essential to ascertain its financial viability. Any project involves cash inflow in the form of expenditure, cost or investment and cash outflow in the form of returns, income or benefits.

In a long term project like say Irrigation project, costs are required to be incurred during long periods and benefits also continue to accrue over longer periods or even perpetual. In such a long-term development project, its financial viability is ascertained by a ratio of benefits to costs without discounting, by a technique known as 'Cost Benefit Analysis' (C.B.A.), which is mainly a concern of financial as well as physical planners.

In a comparatively short term project like development/construction of a residential or commercial building or a complex, each of the items of expenditure (investment or cash inflow into a project) is incurred at a predetermined or anticipated time and similarly each of the item of receipts or income is received or accrued at determined or reasonably anticipated time. Since the time of incurring expenditure or accruing of income is determined or known (and is comparatively short), each of the items of expenditure as well as receipts is discounted at certain percentage for the relevant period (years/months) in order to find out their present values and the present values of all the items of expenditures (investments) are summed up as also the present values of all the items of receipts (income). The excess of the summation of P.Vs. of income (benefits) over the summation of P.Vs. of expenditure (investment) indicates

that the project is financially viable. This is known as 'Discounted Cash Flow Technique'.

This technique is not new to Real Estate Valuers. It is used in determining land value by 'Hypothetical Layout/Development Method' with the only difference that instead of discounting each and every item of expenditure and income separately the total expenditure and total gross income (except immediate expenditure & receipts) are discounted or deferred for the average periods. By Hypothetical/Building method, similar to estimating land value, the developer's profit or the rate of sale of plots/flats can also be determined if all other things are known.

Using the net present value approach all cash flows are discounted to present value using the required rate of return which is the minimum investors require on their investment.

The discounted cash flow technique is used to determine the investment proposal of a project. The valuer may consider various alternatives. For example, whether it is worth buying an office development for rental return and capital appreciation, or the purchase of land for future subdivision. The discounted cash flow can be used to arrive at the present value of a project at a given rate of return and subsequently to provide an answer to the alternatives before the valuer.

Two major methods of discounted cash flow techniques have emerged:

1. Net Present Value (NPV) method.
2. Internal Rate of Return (IRR) method.

23.2 Net Present Value Method

In this method the present value of all future receipts from a proposed investment is compared with all future expenditure/outgoings. If the present value of receipts exceeds the present value of expenditure/outgoings then the investment is beneficial/viable. Applying the same calculations to alternative investment options/possibilities, the investment which gives greatest excess of P.Vs. of receipts over P.Vs. of expenditure is the most profitable investment, thus enabling to take decision about better alternative investment.

To calculate the present value of a cash flow the following information is necessary:

1. Net cash flow during each period, i.e., estimated cash inflow or outflow.
2. Discount factors for each period – this can be calculated by using the expression

$$\frac{1}{(1 + R)^n}$$

Where, R = Rate of return per period (expressed as a decimal), and
 n = Number of periods

Multiplication of the anticipated future cash flow by the appropriate discount factor gives the present value.

3. Rate of return required.

4. Number of periods.

Example 1

Make an investment flow acceptability study of an investment project with a desired earning rate of 20% per annum proposed to last six months where the cash flow is as follows:

Month	0	1	2	3	4	5	6
Cash flow (Rs.)	- 1000	- 1000	- 1000	-	-	+ 1500	+ 4000

(The negative sign in the cash flow indicates outgoing and the positive sign indicates income)

Solution

Month	Cash flow (C) (Rs.)	R	n	Discount factor (D) $D = \frac{1}{(1+R)^n}$	Present value $P = CD$ (Rs.)
0	- 1,000	.01667	0	1	- 1,000
1	- 1,000	.01667	1	.98360	- 983.60
2	- 1,000	.01667	2	.96748	- 967.48
3	-	.01667	3	.95162	-
4	-	.01667	4	.93602	-
5	+ 1,500	.01667	5	.92068	+ 1,381.02
6	+ 4,000	.01667	6	.90558	+ 3,622.32
	+ 2,500				+ 2,052.26

Note: In the above, $R = 20\%$ per annum, i.e., 0.20 per annum or $\frac{0.20}{12} = 0.01667$ per month. Since the period is in months, the rate R must also be indicated in months.

Since the discounted cash flow over the six months presents a positive present value, an earning rate of more than 20% per annum could be supported and would be acceptable as an investment proposal.

Example 2

In the following investment proposal, the investor would like to know the minimum sale price X . You are requested to advise him.

Cost of ready-made house	Rs.2,00,000
Improvements	Rs.1,50,000
Rent per year for consecutive 5 years (Payable at the end of each year)	Rs. 30,000
Sale price at the end of 5 years	Rs. X
Capital gains tax to be paid at the time of sale	Rs. 60,000
Target rate (rate of interest expected)	12%

Solution

<i>Time (Years)</i>	<i>Details</i>	<i>Cash flow (C) - = Outgoing + = Incoming (Rs.)</i>	<i>R % per annum</i>	<i>n years</i>	<i>Discount Factor (D) $D = \frac{1}{(1+R)^n}$</i>	<i>Present value $P = C \times D$ (Rs.)</i>
0	Cost of house	- 2,00,000	.12	0	1	- 2,00,000
0	Improvements	- 1,50,000	.12	0	1	- 1,50,000
1	Rent year 1	+ 30,000	.12	1	.89286	+ 26,786
2	Rent year 2	+ 30,000	.12	2	.79719	+ 23,916
3	Rent year 3	+ 30,000	.12	3	.71178	+ 21,353
4	Rent year 4	+ 30,000	.12	4	.63552	+ 19,066
5	Rent year 5	+ 30,000	.12	5	.56743	+ 17,023
5	Sale value	+ X	.12	5	.56743	+ 0.56743 X
5	Capital gains tax	- 60,000	.12	5	.56743	- 34,046
Net present value						- 2,75,902 + 0.56743 X

The premium sale price X of the house will be obtained when the total present value P as calculated above is zero so that a 12% target rate is maintained.

$$\therefore -2,75,902 + 0.56743 X = 0$$

$$\text{or } X = \text{Rs.4,86,231}$$

$$\text{Ans: } X = \text{Rs.4,86,231}$$

23.3 Internal Rate of Return method

As an alternative to the N.P.V. method, an analysis can be carried out which discounts all the future receipts and outgoings/expenditure of a project at a discount rate whereby discounted receipts equal the discounted outgoings/payments. This discount rate, found by trial and error method will show the actual rate of return on the capital investment – the Internal Rate of Return – and the N.P.V. will then be nil.

The N.P.V. method compares the future costs and future receipts on a discounted present capital value basis while the I.R.R. method shows the rates of return earned on investments, which can be compared to decide about better alternative investment.

Here the internal rate of return, i.e., R , is to be calculated so that all future discounted receipts and discounted payments are equal. At this point the net present value will be zero.

The above can be done by trial and error and by interpolation. This is best demonstrated by an example.

Example 3

The following data is given regarding purchase and sale of a flat.

31.12.1987	Purchase of one flat	1,50,000	-
31.12.1987	<i>Salami</i> and rental income received in advance for two years, i.e., for 1988 and 1989	-	18,000
31.12.1989	Repairs of flat	10,000	-
31.12.1989	Rental income for one year, i.e., 1990 received in advance	-	5,000
31.12.1990	Rental income for two years 1991 and 1992 received in advance	-	10,000
31.12.1990	Renovation of flat	9,000	-
31.12.1992	Rental income for one year, i.e., 1993	-	6,000
31.12.1993	Sale of flat	-	1,90,000

Calculate the average earning rate on the above flat per annum.

Solution

Try a rate of 15%

<i>Date</i>	<i>Time Years (n)</i>	<i>Cash flow (C) - = Outgoing + = Incoming (Rs.)</i>	<i>R % per annum</i>	$D = \frac{1}{(1+R)^n}$	<i>Present value (P) P = CD (Rs.)</i>
31.12.87	0	- 1,32,000	.15	1	- 1,32,000
31.12.89	2	- 5,000	.15	.7561	- 3,780
31.12.90	3	+ 1,000	.15	.6575	+ 657
31.12.92	5	+ 6,000	.15	.4972	+ 2,983
31.12.93	6	+ 1,90,000	.15	.4323	+ 82,137
Net present value					- 50,003

A negative sign indicates that a rate of 15% will not be maintained.

The benefit/cost ratio is found by dividing the income by the outgoing.

In this case benefit / cost ratio = $\frac{85,777}{1,35,780} = 0.6317$ which is less than 1

indicating higher expenses than income. A close look at the figures indicates that the contribution at year six should be much more. Try a rate of 10%.

<i>Date</i>	<i>Time Years (n)</i>	<i>Cash flow (C) - = Outgoing + = Incoming (Rs.)</i>	<i>R % per annum</i>	$D = \frac{1}{(1+R)^n}$	<i>P = CD (Rs.)</i>
31.12.87	0	- 1,32,000	.10	1	- 1,32,000
31.12.89	2	- 5,000	.10	.8264	- 4,132
31.12.90	3	+ 1,000	.10	.7513	+ 751
31.12.92	5	+ 6,000	.10	.6209	+ 3,725
31.12.93	6	+ 1,90,000	.10	.5644	+ 1,07,236
Net present value					- 24,420

This again indicates that even a 10% rate will not be maintained. Try a 7% rate.

<i>Date</i>	<i>Time Years (n)</i>	<i>Cash flow (C) - = Outgoing + = Incoming (Rs.)</i>	<i>R % per annum</i>	$D = \frac{1}{(1+R)^n}$	<i>P = CD (Rs.)</i>
31.12.87	0	- 1,32,000	.07	1	- 1,32,000
31.12.89	2	- 5,000	.07	.8734	- 4,367
31.12.90	3	+ 1,000	.07	.8163	+ 816
31.12.92	5	+ 6,000	.07	.7130	+ 4,278
31.12.93	6	+ 1,90,000	.07	.6663	+ 1,26,597
Net present value					- 4,676

Try a 6% rate

<i>Date</i>	<i>Time Years (n)</i>	<i>Cash flow (C) - = Outgoing + = Incoming (Rs.)</i>	<i>R % per annum</i>	$D = \frac{1}{(1+R)^n}$	<i>P = CD (Rs.)</i>
31.12.87	0	- 1,32,000	.06	1	- 1,32,000
31.12.89	2	- 5,000	.06	.8900	- 4,450
31.12.90	3	+ 1,000	.06	.8396	+ 840
31.12.92	5	+ 6,000	.06	.7473	+ 4,484
31.12.93	6	+ 1,90,000	.06	.7050	+ 1,33,950
Net present value					+ 2,824

It is now evident that the rate of return lies somewhere between 6% and 7% and closer to 6%. An estimate can be made by interpolation assuming a uniform rate of change although this assumption is not correct as the discount rate varies geometrically rather than linearly. However, a sufficient accurate rate of return can be determined by using the linear interpolation formula:

$$R = R_1 + \left\{ (R_2 - R_1) \times \frac{N_1}{(N_1 + N_2)} \right\}$$

Where,

R	=	Actual rate of return
R_1	=	Lower rate of return
R_2	=	Higher rate of return
N_1	=	Lower net present value
N_2	=	Higher net present value (without the sign)

In the above,

$$\begin{aligned} R &= 6 + \left\{ (7 - 6) \times \frac{2824}{(2824 + 4676)} \right\} \\ &= 6.3765\% \end{aligned}$$

Ans: ~ 6.38%

23.4 Conclusion

Discounted cash flow has many applications in valuation. It can be used to make investment decisions or to choose between alternatives. In the case of a development project, say between two alternative proposals, a decision may be made with the help of this technique. For example, an owner of a land may be constructing 240 flats over four years or constructing 100 bungalows over a period of two years. An analysis will show him how profitable each proposal is.

However, the technique is not one which is very popular as many assumptions are to be made and these may lead to errors. Despite this drawback, the technique is useful in real estate investment proposals, if properly used.

24.0 CONCEPTS UNDER GENERAL STANDARDS OF INTERNATIONAL VALUATION STANDARDS 2017*

As such, the concept of market value evolved in an early court decision in *Spencer vs. The Commonwealth of Australia (1907)*. In this case, the Commonwealth had compulsorily acquired land for a fort at North Fremantle in Western Australia.

In discussing the concept of market value, Griffith CJ commented (page 432) that:

... the test of value of land is to be determined, not by inquiring what price a man desiring to sell could have obtained for it on a given day, i.e. whether there was, in fact, on that day a willing buyer, but by inquiring: What would a man desiring to buy the land have had to pay for it on that day to a vendor willing to sell it for a fair price but not desirous to sell?

Isaacs J subsequently expanded on the concept (page 441):

... to arrive at the value of the land at that date, we have ... to suppose it sold then, not by means of a forced sale, but by voluntary bargaining between the plaintiff and a purchaser willing to trade, but neither of them so anxious to do so that he would overlook any ordinary business consideration. We must further suppose both to be perfectly acquainted with the land and cognisant of all circumstances which might affect its value, either advantageously or prejudicially, including its situation, character, quality, proximity to conveniences or inconveniences, its surrounding features, the then present demand for land, and the likelihood as then appearing to persons best capable of forming an opinion, of a rise or fall for what reasons so ever in the amount which one would otherwise be willing to fix as to the value of the property.

In this case, the High Court recognised the principles of:

- the willing but not anxious vendor and purchaser
- a hypothetical market
- the parties being fully informed of the advantages and disadvantages associated with the asset being valued (in the specific case, land)
- both parties being aware of current market conditions.

1. EVOLUTION OF VALUATION STANDARDS

Subsequent to the debacle of property crash in UK in the year 1974, the valuation standards evolved through Europe when RICS published the first version of Guidance Notes (RedBook) on valuation in 1976. Thereafter, following the stock market crash of 1987 and the global downturn of the early 1990s, the necessity of valuation standards was felt across the world. As a result, the international conglomeration of valuers formed the International Valuation Standards Committee which formulated the first set of International Valuation Standards (IVS) in March 1994 at Scottsdale, Arizona, USA. Since then the standards are revised, re-written and circulated amongst the professionals.

* An Article By Jigesh Mehta, Practicing Valuer, Surat, Gujarat

The burgeoning trans-border businesses in the era of globalization have minimized the restrictions posed by national and political borders while on the other hand, it has increased the significance of economic integration.

The interconnectedness and hence the vulnerability of major economies of the world became evident during the Global Financial Crisis between the years 2007 to 2010 when the problems in the US property, banking and finance markets had a cascading effect on economies of other countries.

Concurrent with globalisation, the IFRS were designed over the last decade to provide a common basis of measurement to encourage international business. Simultaneously, with the increasing global flow of capital and cross-border secured lending, there is need to have a common basis of value measurement for real property assets.

IVS provide the common basis and are now prevalent in many of the world's major economies offering standardization of concepts and terminology while leaving scope for flexibility in methodology and applicability to suit differing countries and differing circumstances.¹

This paper deals with the definition and characteristics of standard(s), recognition of IVSC and IVS, major changes in IVS 2017 as compared to IVS 2013, Framework of IVS 2017 comprising of General Standards and Asset Standards, but with **specific emphasis on foundational concepts in General Standards** which are extremely important for valuers to decipher.

2. STANDARD(S)

2.1 Definition of 'Standard'²

In some dictionary it is defined as – '*A Standard is a widely accepted and approved example of something (e.g. a weight, measure or description); something to which another thing conforms or by which the accuracy or quality of another thing is judged or measured.*'

American Heritage Dictionary defines 'Standard' as 'an acknowledged measure of comparison for quantitative or qualitative value : a criterion or a degree or level of requirement, excellence or attainment.' Thus, standard is intended to serve as a widely recognized model of authority or excellence for reference work.

In other words, 'standard' may be defined as – Coherent and consistent, documented, sanctioned or approved agreements. They are developed by a recognized body, often in response to community or industry needs, through a process which involves consensus and public consultation with stakeholders. These documents have a reference status, i.e. they serve as examples giving precise criteria for consistent use, as rules or guidelines, to ensure that any given material, product or service fulfils its purpose effectively.

¹ David Parker, *International Valuation Standards – A Guide to the Valuation of Real Property Assets*, Wiley Blackwell, UK, 2016.

² Amish S. Patel, *Valuation Standards, 4th International Conference on Valuation of Plant-Machinery & Equipment*, Hong Kong, November 2005.

2.2 Characteristics of Standards²

Standards are varied in character, subject and medium. They -

- ***cover several disciplines:*** dealing with all technical, economic and social aspects of human activity and covering all basic disciplines and issues arising out of the disciplines;
- ***are coherent and consistent:*** standards are developed by technical committees which are coordinated by a specialized body, and ensure that barriers between different areas of activity are overcome;
- ***result from participation:*** standards reflect the results of joint work involving all competent parties concerned and are validated by consensus to represent all relevant interests: producers, users, public authorities, consumers, clientele, etc.;
- ***are a living process:*** standards are based on actual experience and lead to material results in practice (products – both goods and services, test methods, etc.); they establish a compromise between the state of the art and the economic constraints of the time;
- ***are up to date:*** standards are reviewed periodically or as dictated by circumstance to ensure their currency, and therefore evolve together with technological and social progress;
- ***have a reference status:*** in commercial contracts and in court in the event of a dispute;
- ***have national or international recognition:*** standards are documents which are recognized as valid – nationally, regionally or internationally, as appropriate;
- ***are available to everyone:*** standards may be consulted and purchased without restriction.

2.3 'Ingredients' of Standards²

- (i) The contents of a standard may prescribe authentic definition for different expressions used in the relevant discipline.
- (ii) It may introduce the basic concepts and principles relevant for the subject matter.
- (iii) The types of property may have to be categorized for exploring the fields of applicability.
- (iv) The vital part is detailing of the standards of performance expected of a participant to the discipline, whether in professional capacity or as stakeholders or in any other capacity and prescribing the appropriate methodology for various purposes.
- (v) It may delineate an appropriate code of conduct including ethics and competence.
- (vi) A very important aspect in fixing standard is to spell out all the assumptions, limiting conditions and disclosure of caveats relevant to the subject matter and in carrying out the assignment.

- (vii) Writing of reports followed by certification and the art of communication lies at the terminal end of the prescribed standards for professional purposes.

2.4 Type of Standards²

As a general rule, standards are not mandatory, but are for voluntary application. In certain cases, implementation may be obligatory (in relation to professional practice, public contracts, etc.).

Standards fall into a number of groups or categories which may be broadly grouped into Regulatory or Mandatory Standards and Voluntary Standards.

(1) Mandatory

Mandatory (or Regulatory) Standards are usually created by government departments or agencies and are imposed by legislation, which ensures they are adhered to.

(2) Voluntary

Voluntary or recommendatory standards are created by non-government organizations and professional society and they do not have the backing of government legislation. Thus, they can only be effective if there is a very wide consensus for their acceptance by the given standard's potential users and beneficiaries. Sometimes these standards become mandatory when a governing body stipulates them in legislation or regulation.

3. RECOGNITION OF IVSC AND IVS

The International Valuation Standards Council (IVSC) is an independent, not-for-profit, non-governmental organisation (NGO) member of the United Nations working closely with World Bank, EU, BIS, OECD, IMF, WTO, Basel Banking Committee, etc.

The two principal functions of IVSC are :

- (i) To develop and promulgate globally recognised financial standards, acceptable to the world's capital market organisations, regulators and market participants; and
- (ii) To act as a global focus for valuation profession.

IVSC thus acts as the global standard setter for valuation practice and the valuation profession, serving the public interest. Its core objectives are to: develop high quality International Valuation Standards (IVS) which underpin consistency, transparency and confidence in valuations across the world, and encourage the adoption of IVS across the globe, along with professionalism provided by Valuation Professional Organisations.

IVSC consists of nearly 100 member organisations from around the world and is supported by numerous sponsors who are leaders in the valuation field. These include the world's leading accountancy and valuation firms, professional bodies and other important global organisations. IVSC publishes International Valuation Standards for all asset types, and for all purposes and users.

3.1 Objectives of IVS³

The objectives of IVS can be broadly summarized as below.

- Consistency in approach & understanding of valuation process
- Credible and consistent valuation opinions by trained valuers
- Independence, objectivity and transparency in valuers approach
- Clarity on engagement and disclosures
- Clarity as to the “basis of valuation” and use of “assumptions”
- Clarity in reports and adequate disclosure for benefit of 3rd parties
- They do not instruct how to value in individual cases
- Not to prescribe a standard format but to ensure minimum contents of valuation report
- They do require adoption of mandatory requirements
- They do require that valuation reports are appropriate and proportionate to the task.

4. INTERNATIONAL VALUATION STANDARDS 2017

Effective from 1st July 2017, the IVS 2017 is a 107-page concise compilation which in addition to the Introduction, Glossary and Framework, mainly comprises of two major parts – five General Standards and six Asset Standards.

4.1 Main changes in IVS 2017⁴

1. In the IVS 2013, all substantive portions of the standard were labelled ‘commentary’ with the exception of the scope and effective date sections. IVS 2017 has eliminated the ‘commentary’ label to make it clear that the contents are mandatory for compliance with IVS.
2. The section on IVS Definitions from *IVS 2013* is removed. A new Glossary is added which **does not attempt to define basic valuation, accounting or finance terms** (such as asset, liability, cash flow, etc) **as valuers are assumed to have an understanding of such terms** and the definitions may vary depending on the purpose and the jurisdiction.
3. Mandatory nature of the standards has been clarified with the use of ‘may’, ‘must’ and ‘should’ in the publication. When a statement is made in ‘terms of engagement’ or ‘valuation report’ that a valuation is undertaken in accordance with IVS, it is implicit (mandatory) that valuation is prepared in compliance with all relevant standards issued by IVSC.
4. “*Competence*” - In cases when the valuer does not possess all of the necessary technical skills, experience and knowledge to perform all aspects of a valuation, IVS 2017 allows valuers to seek the assistance of specialists in certain aspects of overall assignment provided this is disclosed in the scope of work.

³ CBRE, *Valuation Methodology Market Perspective, 2017*.

⁴ Alexander Aronsohn, *International Valuation Standards : Main Changes – Whats new in IVS 2017?*

5. A “*departure*” is a circumstance where specific legislative, regulatory or other authoritative requirements *must* be followed that differ from some of the requirements within IVS. **Departures** are not only permitted but mandatory to meet statutory requirements that must be followed in spite of being different from IVS. In this case, a valuer may still state that the valuation was performed in accordance with IVS.

6. **IVS 101: Scope of Work** – has revised the requirement to provide a written scope of work in all cases. It is a valuer’s responsibility to ensure that all parties to the valuation engagement understand the scope of job.

Though a written scope of work is the most effective way to ensure compliance, it may not be feasible or necessary in all circumstances, particularly in those cases where valuers are carrying out valuations for their employer.

7. **Some of the main changes in IVS 2017 are in the two new General Standard Chapters IVS 104 : Bases of value, and IVS 105 : Valuation approaches and methods.**

- **IVS 104: Basis of Value** - It is the valuer’s responsibility to choose the relevant basis or bases of value according to the terms and purposes of the valuation assignment. The valuer’s choice should consider instructions and input received from the client or their representatives. However, valuer should not use a basis or bases of value that is inappropriate for the intended purpose of the valuation. **Compliance with IVS may also require the valuer to use a basis of value that is not defined or mentioned in the IVS.**

In addition to the IVS defined *Bases of Value* (i.e. Market Value, Market Rent, Equitable Value, Investment Value/Worth, Synergistic Value and Liquidation Value), IVS 104 also provides definitions and guidance for non-IVS defined bases of value. These non-IVS basis may include Fair Value under IFRS, Fair Market Value under fiscal laws or taxing statutes, and others.

e.g. If a valuer is instructed to use an IVS defined basis of value for financial reporting purposes under the International Financial Reporting Standards (IFRS), a valuer should not use any IVS defined basis but should rather choose ‘Fair Value’ defined under accounting/financial reporting standards as a ‘basis’ though not defined in IVS.

- **IVS 105: Valuation Approaches and Methods** - provides additional guidance on the main valuation approaches. The three approaches (market approach, income approach, cost approach) are all based on the economic principles of price, equilibrium, anticipation of benefits or substitution.

IVS 105 provides detailed guidance on each of these methods. For example, the income approach provides guidance on the discounted cash flow method, the type of cash flow, the explicit forecast period and cash flow forecasts, and further guidance is contained on calculating terminal value with either the Gordon Growth Model/Constant Growth Model, Market Approach/Exit Value, Salvage Value/Disposal Cost or Discount Rate.

The key concept in IVS 105 is that **valuers are not required to employ more than one method** for the valuation of an asset, **particularly when the valuer has a high degree of confidence** in the accuracy and reliability of a single method given the facts and circumstances of the valuation engagement.

However, **valuers should consider the use of multiple approaches and methods**, and more than one valuation approach or method may be used to arrive at an indication of value, **particularly when there are insufficient factual or observable inputs for a single method to produce a reliable conclusion**.

More than one valuation approach or method may be used to arrive at an indication of value and for this purpose, the terms ‘Weight’ and ‘Weighting’ have been defined under the Glossary of IVS 2017.⁵

The word “*weight*” refers to the amount of **reliance placed on a particular indication of value** in reaching a conclusion of value (e.g. when a single method is used, it is afforded 100% *weight*).

The word “*weighting*” refers to the process of analysing and **reconciling differing indications of values**, typically from different methods and/or approaches. This process **does not include the averaging of valuations**, which is not acceptable.

After thorough analysis, a valuer might determine that equal weight should be applied to multiple valuation approaches/methods effectively resulting in an averaging. This is not viewed as simple averaging and would be allowed under IVS 2017 in appropriate circumstances.

8. **Asset Standards** are expanded and includes relevant information from the technical information papers of previous version of IVS.

IVS 400: Real Property Interests requires the valuers to consider the **contract rent** when valuing a superior interest that is subject to a lease or an interest created by the lease.

⁵ *IVSC, IVS 2017 : Basis for Conclusions.*

The revised chapters IVS 200: Business and Business Interests, IVS 500: Financial Instruments and the new IVS 210: Intangible Assets are of particular interest for accountancy professionals.

4.2 General Standards

While IVS 101: Scope of Work and IVS 102: Investigations and Compliance are generic in their contents, compliance with IVS 103: Reporting **does not require any specific format** but lays down certain minimum content such as (i) purpose and intended use, (ii) scope of work or terms of engagement, (iii) approach(es) adopted, (iv) method(s) applied, (v) key inputs used, (vi) assumptions made, (vii) conclusions of value with principal reasons, (viii) date of report which may differ from valuation date.

IVS 104 and IVS 105 constitute the core content of this paper and discussed at length. Compliance with this mandatory standard IVS 104 **requires a valuer to select the appropriate basis (or bases) of value** according to the terms and purpose of an assignment, and follow all applicable requirements associated with that basis of value, whether those requirements are included as part of this standard (for IVS-defined bases of value) or not (for non-IVS-defined bases of value). After selection of basis of value, the valuer should then consider the application of one or more premises of value.

4.2.1 IVS 104: Bases of Value

Bases of Value (or standards of value) describe the fundamental premises on which the reported values will be based. The selection of basis (or bases) appropriate to the assignment is critical because it may influence a valuer's selection of methods, inputs, assumptions and ultimate opinion of value.

There are IVS defined bases and other non-IVS defined bases of value (prescribed by law, private contract or other agreement).

IVS defined Bases of Value include:

1. Market Value
2. Market Rent
3. Equitable Value (erstwhile Fair Value under IVS 2013)
4. Investment Value
5. Synergistic Value
6. Liquidation Value (newly introduced)

Note⁵: Special Value is removed as a distinct basis of value because valuers seldom perform valuations using Special Value as the basis of value. Rather, valuations are typically performed using another basis of value using certain special assumptions ("hypothetical assumptions") or a specific purchaser with a special interest resulting in Synergistic Value.

➤ **Market Value**

It is the estimated amount for which an asset or liability* *should* exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.

* *Inserted w.e.f. 1st January 2014*

Transaction costs (seller's costs of sale and buyer's cost of purchase) should be disregarded.

Market Value (MV) is an exchange price concept with no shelf-life beyond the date of valuation. It is perceived generally to be both observable and objective in that it can be related to actual transactions taking place in a market and the valuer is therefore a score-keeper and not a market-maker.⁷

Though the basis of value for secured lending should be Market Value, lenders frequently amended MV by asking valuers to incorporate assumptions reflecting less favourable circumstances.

Highest and Best Use (HABU) and Reasonable Exposure Time are conditions inherent in the definition of Market Value.

HABU is a use that maximises the potential of an asset and that is physically possible, legally permissible and financial feasible. As explained by David Parker¹, the assumption of HABU is fundamental to the concept of market value and proper application of the MV definition as it excludes limitation to a sub-optimal use, consistent with the rational hypothetical buyer who would seek to optimise the use of a property to the maximum of its potential and therefore, to optimise the value of the property. In the conceptual framework of IVS, HABU is addressed as "The market value of an asset will reflect its highest and best use which may be for continuation for an existing use or for some alternative use. This is determined by the use that a market participant would have in mind for the asset when formulating the price that it would be willing to bid."

The concept of Exposure Time has an important role in the appraisal process because market value definitions typically include a condition that a reasonable time is allowed for exposure in the open market.⁶

⁶ *Guidance Note 14, Appraisal Institute, USA, July 2013.*

⁷ *Baum A. and Crosby N. Property Investment Appraisal, Oxford, Blackwell Publishing, Routledge, 2008.*

Exposure Time is defined in *Uniform Standards of Professional Appraisal Practice (USPAP)* and *The Dictionary of Real Estate Appraisal* as ‘the estimated length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal.’ It is a retrospective estimate/opinion based on an analysis of past events assuming a competitive and open market.

An understanding of reasonable market Exposure Time is needed to recognize and evaluate the impact of limited market exposure in liquidation transactions.

Consider the valuation of an industrial building with warehouse ceiling height of 16 feet. The market demands and most competing properties have 24 feet clear height. In addition to considering the effect of this functional deficiency on value and rental revenue, the valuer would need to evaluate the effect on marketability and Exposure Time. Commonly, the time required to obtain a buyer will be extended for a property with functional obsolescence.

The valuer could consider market time data for properties that have sold with similar obsolescence issues or interview market participants to support an opinion of Exposure Time.

‘Liability’ in Market Value definition

Opinions of internationally reputed stalwarts in valuation were sought and their views are presented herein.

1. *Roy Farthing (EY, Australia), Rodney Hyman (Former Chairman-PM Comm. RICS, Australia) and Krzysztof Grzesik (Chairman-TEGOVA, Poland)*

The reason behind the mention of liabilities in Market Value and the Equitable (Fair) Value definition is quite simple. The definition applies if you value assets (tangible, intangible or financial) OR if you value liabilities. Obviously if you’re engagement is to value tangible assets, you don’t need to worry about liabilities because it’s not part of your scope. There are of course plenty of transactions which include tangible assets, intangible assets, financial assets, current assets (e.g. inventory) and liabilities and therefore values may be required for each (e.g. in the acquisition of an operating business). Conceivably, the transaction could just involve the acquisition of a liability. Presumably, the vendor would pay the acquirer to assume the liability in that situation.

Whatever the case, it is likely that different experts will value each broad category, consistent with their abilities. In most situations, the valuation of a liability would be done by an accountant, business/intangible asset valuer or even the entity acquiring the business or liability. In a firm like EY, we would feel comfortable valuing all items on the balance sheet but different people would address each category (real property, plant & equipment, intangible

assets, financial assets, current assets & liabilities). But there is no reason to assume that because the definition mentions liabilities, if your scope of work is to value say the plant & equipment, you somehow have to value any liabilities, whether they're associated with the plant & equipment or not.

Just keep in mind that the IVS are aimed at all valuers, not just those that value property, plant & equipment and therefore the definitions they use try to embrace the widest possible usage.

2. *Chris Derry (Former Chairman-PM Committee RICS, UK)*

I have always believed that 'liabilities' can be relevant.

- Thirty years ago, when a UK plant was decommissioned and demolished, the scrap metal could be recovered and the building materials crushed and sold for hardcore. Typically £2m net could be recovered from a medium sized establishment. These days with health and safety regulations (largely asbestos related), it costs several million to decommission a plant, even after the sale of recovered materials.
- The problem in such cases is allocating the end liability between land, buildings and PME. It is complex, but certainly relevant.
- Of course, the ultimate liability is decommissioning a nuclear power plant.
- From a going concern point of view, in the case of power stations, it can be the case that for the last couple of years of their life, the ultimate decommissioning cost will be greater than the DRC value - and, hence, the entity has a negative value, even though it is satisfactorily generating an income.
- Back to basics: the going concern value of an individual item of plant is usually considered to be the value attributable to the remaining part of its economic life by reference to current costs, plus the estimated net recoverable value upon withdrawal from use. There is no doubt that this 'recoverable value' can be a liability.
- A few instances of relevance are:
 - Plant which is difficult to access where removal costs will be more than the resale/scrap value
 - Plant where there will be high costs of toxic material disposal and clean-up (e.g. metal plating plants and many chemical manufacturing works)
 - Plant with a high asbestos content where meeting health and safety requirements for removal will negate or exceed any recovery value
 - Plant in remote locations where removal is required, but transport costs will be high

- There will be lots of other circumstances that will result in assets actually becoming a liability at the end of their lives and it is my view that it is appropriate to take this into account when calculating the economic worth to an ongoing business.

➤ **Market Rent**

It is the estimated amount for which an interest in real property *should* be leased on the valuation date between a willing lessor and a willing lessee on appropriate lease terms in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.

- ***Appropriate lease terms***

- EXCLUDES a rent inflated or deflated by special terms, considerations or concessions, being terms that would typically be agreed in the market for the type of property on the valuation date between market participants;
- INCLUDES more than one terms/conditions such as length/period, frequency of rent reviews, responsibilities for outgoings, repair and maintenance obligations, assignment and subletting rights.

➤ **Equitable Value**

It is “the estimated price for the transfer of an asset or liability between identified knowledgeable and willing parties that reflects the respective interest of those parties.”

It requires the assessment of price that is fair between two specific, identified parties considering the respective advantages and disadvantages that each will gain from the transaction.

e.g. XYZ Steel Ltd with a steel manufacturing plant was facing challenges with profitability due to international change in regulations. Steel scrap is a major raw material for XYZ Steel Ltd., and is mainly supplied by PQR Trader Ltd. (a global steel scrap trader).

PQR Trader Ltd. (buyer/acquirer) appointed Valuers to estimate Equitable Value (erstwhile *Fair Value under previous IVS*) of specified fixed assets (land, buildings, plant + machinery) of XYZ Steel Ltd. on as-is where-is basis for internal management review (possible intent of Joint Venture / Acquisition).

The major points for consideration include the strategic elements associated with assets (seller's point of view as well as buyer's point of view). The positive synergies and relative demerits are judiciously evaluated.

In joint ventures/mergers/acquisitions, it is not uncommon for valuers to provide range of value for the intended purpose.

➤ **Investment Value / Worth**

It is the value of an *asset* to a particular owner or prospective owner for individual investment or operational objectives.

Investment value is a subjective assessment of value to an owner and may reflect an owner's or prospective owner's perception of the market rather than a valuer's objective analysis of the market.⁹

It may be different from the price that could be obtained in a sale. This basis of value reflects the benefits received by an entity from holding the asset and therefore, does not presume a transaction or a hypothetical exchange. It is often used for measuring investment performance.

➤ **Synergistic Value**

It is the result of a combination of two or more *assets* or interests where the combined value is more than the sum of the separate values. The additional value above the aggregate of the respective interests arising from merger is often also referred to as "marriage value."

This synergistic value phenomenon will arise in nearly all cases where interests are merged and can act as an incentive for owners of interests to sell to each other, or to join together in a sale to a third party, so as to exploit the synergies.

The question that arises is: who should take the benefit of the added value? Since the parties are interdependent they are of equal importance to the release of the added value, so as a general guide the sum is shared equally.

This type of value may also arise where owners of adjoining properties merge their interests to form a larger single site. This will be particularly so where the united interests create a development site but where the individual sites are incapable of, or are unsuitable for, development alone. In these circumstances a person buying the interests (known as "assembling the site") can pay over and above normal value by sharing the added value among the parties.¹⁰

e.g. Consider the case of two plots of land situated back-to-back. One abutting public road of lesser width allowing regular FSI and another abutting road of larger width allowing additional / premium FSI. When the two plots are amalgamated, the inferior plot which could otherwise avail less saleable area would now be entitled to exploit additional saleable area on the merger.

⁹ Baum A., Mackmin D., Nunnington N., *The Income Approach to Property Valuation*, 6th Edition, EG Books, 2011.

¹⁰ Shapiro E., Mackmin D., Sams G., *Modern Methods of Valuation*, 11th Edn., Routledge, 2013.

➤ **Liquidation Value**

It is the amount that would be realised when an *asset* or group of *assets* are sold on a piecemeal basis.

Liquidation Value *should* take into account the costs of getting the *assets* into saleable condition as well as those of the disposal activity. Liquidation Value can be determined under two different premises of value:

- (a) an orderly transaction with a **typical marketing (reasonable) period**,
- or
- (b) a forced transaction with a **shortened marketing period**

Underlying parameter in estimating liquidation value is ascertaining whether the asset can be salvaged for their balance useful life of its components based on observed condition and demand or will it be traded only for its material content. i.e. Scrap Value.

Second-hand import data and domestic sale prices of second-hand like or similar assets is also taken cognizance of.

- All equipment or assets listed in the itemized report are to be sold on a piecemeal basis "as is" and "where is".
- Any deletions or additions to the items listed could change the psychological and/or monetary appeal that may be necessary to gain the indicated price(s).

The IVS definition of liquidation value assumes the business is terminated. Thus, liquidation value of a business is the net price received from the sale of assets minus the liabilities. However, loss-making business enterprises can be liquidated as going concern considering the possibility of revival of profitable operations and this is facilitated by the definition of ‘Liquidation Value in Place’ provided by the American Society of Appraisers.

ASA definition of ‘Liquidation Value in Place’¹¹ – An opinion of the gross amount, expressed in terms of money that typically could be realized from a properly advertised transaction, with the seller being compelled to sell, as of a specific date, for a failed, non-operating facility, assuming that the entire facility is sold intact.

It is opined that this definition of ‘Liquidation Value in Place’ prescribed by ASA should form the central concept of valuation during the resolution process under India’s new Insolvency & Bankruptcy Code, 2016.

¹¹ *Definitions of Value relating to MTS Assets, Machinery & Technical Specialties Committee of the American Society of Appraisers, www.appraisers.org.*

➤ **Other Basis of Value**

IVSC allows the use of basis of value other than those defined in IVS. Some of these include:

▪ ***Fair Value under IFRS 13 / IndAS 113***

“The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date”.

It is an ***exit price*** at the measurement date from the perspective of a market participant that holds the asset or owes the liability.

For a non-financial asset, the valuation premise appropriate for measurement should be consistent with its *highest and best use*.

▪ ***Fair Market Value under Taxing Statutes or Fiscal Laws***

Fair Market Value is a specific type of market value as defined by a legal or regulatory jurisdiction and may vary with individual jurisdictions.

e.g. *FMV under sec.2 (22B) Income Tax Act* in relation to a ***capital asset***, means—(i) the price that the capital asset would ordinarily fetch on sale in the open market on the relevant date, and (ii) where the price referred to in sub-clause (i) is not ascertainable, such price as may be determined in accordance with such manner as may be prescribed.

e.g. *FMV under sec.3(d) of Income Declaration Scheme (IDS, 2016)* is higher of (i) cost of acquisition, or (ii) the price that the property shall ordinarily fetch if sold in the open market on the 1st day of June, 2016 on the basis of the valuation report obtained by the declarant from a registered valuer.

e.g. *FMV under sec.2 (16) Benami Transactions (Prohibition) Amendment Act, 2016, VAT, GST, Customs and other laws...*

▪ ***Mortgage Lending Value under European Valuation Standards***

Definition of MLV incorporated in TEGOVA BlueBook 2016 (EVS 2) :

“The value of immovable property as determined by a prudent assessment of the future marketability of the property taking into account long-term sustainable aspects of the property, the normal and local market conditions, the current use and alternative appropriate uses of the property.”

The value on which the lending is based (mortgage lending value) is the value of the property which based on experience may throughout the life of the lending / loan be expected to be generated in the event of sale, unattached by temporary, e.g. economically induced, fluctuations in value on the relevant property market and excluding speculative elements.¹²

¹² *German Pfandbrief Act, 2005.*

As a rule, MLV is well below the market value. During recessive market phases in the past, the gap between mortgage lending and market value was very small. In boom phases, on the other hand, and especially in foreign sub-markets, mortgage lending values were in some cases more than 40% below the market value.

4.2.2 Premises of Value under IVS 104

A 'Premise of Value' or Assumed Use describes the circumstances of usage of an asset or liability. Different bases of value *may* require one particular Premise of Value or allow the consideration of multiple Premises of Value. Some common Premises of Value are:

- (a) highest and best use (HABU),
- (b) current use/existing use,
- (c) orderly liquidation, and
- (d) forced sale.

➤ ***Highest and Best Use (HABU)***

HABU is the use, from a *participant* perspective, that would produce the highest value for an *asset*.

The highest and best use for an *asset may* be its current or existing use when it is being used optimally. However, HABU *may* differ from current use or even be an orderly liquidation.

If different from the current use, the costs to convert an *asset* to its highest and best use would impact the value.

The highest and best use *must* be physically possible (where applicable), financially feasible, legally permissible and result in the highest value. Thus, there are four criteria used to analyze HABU:¹³

- (1) legally permissible - What uses are legally permitted at the site? What does the zoning or general plan regulation allow on the site?..... Valuer must consider what restrictions exist now, but also must consider if any changes are likely in the near future.
- (2) physically possible - the next step is to determine if the site (size, shape, topography, other features) can physically support the use.
- (3) financially feasible - It may not be financially feasible to initiate a project now, but it might be in the future, and
- (4) maximally productive – amongst the financially feasible uses.

A logically structured HABU study of the four tests form the foundation for the opinion of value.

¹³ *Appraisal Today, Volume 22, Issue 7, July 2014.*

➤ ***Current Use / Existing Use***

The current use *may* be, but is not necessarily, also the highest and best use.

➤ ***Orderly Liquidation***

An orderly liquidation describes the value of a group of *assets* that could be realised in a liquidation sale, given a reasonable period of time to find a purchaser (or purchasers), with the seller being compelled to sell on an as-is, where-is basis.

➤ ***Forced Sale***

The term “forced sale” is often used in circumstances where a seller is under compulsion to sell and that, as a consequence, a proper marketing period is not possible and buyers *may* not be able to undertake adequate due diligence.

Unless the nature of, and the reason for, the constraints on the seller are known, the price obtainable in a forced sale cannot be realistically estimated.

A “forced sale” is a description of the situation under which the exchange takes place, not a distinct basis of value. If such compelling circumstance/situation(s) of the seller do not exist at the valuation date, these *must* be clearly identified as special assumptions.

Specific instructions required to be given to valuer on the special assumptions (constraints inconsistent with market value):¹⁴

- Unreasonably short period in which to achieve sale;
- Limited marketing campaign or inadequate exposure to market;
- Inappropriate or sub-optimal selling method; and
- Anxious or unwilling seller with a need to liquidate an asset in sub-optimal manner
- A vendor with a primary objective of recouping a loan or secured amount rather than obtaining the market price;
- Potential buyers being aware of the circumstances of sale and the seller’s weakened bargaining position.
- The reporting of a price range rather than a single figure is appropriate due to insufficient directly comparable evidence and circumstances

¹⁴ *Addressing the Concept of ‘Forced Sale’, A&NZ Valuation TIP 3, 2015.*

4.2.3 Assumptions and Special Assumptions

Assumptions : are matters that are reasonable to accept as fact in the context of valuation assignment without specific investigation or verification. They are matters that, once stated, are to be accepted in understanding the valuation.

e.g. (i) Assets are free from all encumbrances, have clear marketable title and machines are not on hire-purchase; (ii) Economic life of buildings is more than that of plant-machinery; (iii) Depreciated Replacement Cost (DRC) of buildings is subject to demand and potential profitability, and DRC of plant-machinery is subject to potential profitability.

Special Assumption : is an assumption that either assumes fact that differ from the actual facts existing at the valuation date or that would not be made by a typical market participant in a transaction on the valuation date.

e.g. (i) A property is freehold with vacant possession; (ii) Occupier is not a protected tenant; (iii) Proposed building or under-construction property is completed on valuation date.

Assumptions and Special Assumptions must be reasonable and relevant having regard to the purpose for which valuation is required.

4.2.4 IVS 105: Valuation Approaches and Methods

While the terms ‘approach’ and ‘method’ are, more often than not, used interchangeably in common parlance, it is imperative for valuers to distinguish between the meanings of the two in professional practice.

‘Valuation Approach’ implies the preliminary direction taken by a valuer to deal with the relevant data for an assignment of valuation by eliminating the less appropriate ones. According to IVS, a valuation approach is *one* of the three principle ways of estimating value, viz. Market Approach, Income Approach and Cost Approach.

‘Valuation Method’ is a specific way or modality under the above-selected approach, for reaching a conclusion to the valuation problem involving tangible fixed assets.

Therefore, a valuation approach is a broader concept whereas the valuation methods are subsets of the approach(es).

A valuer can even resort to a suitable combination (or hybrid) of any two or more approaches. While valuers may employ more than one method and thus work out different valuations of the same property, the one which is reasonably nearer and more representative of the relevant facts and circumstances of the case should be adopted.

Valuation Approaches are based on the economic principles of:

- Price equilibrium : Market Approach.
- Anticipation of benefits : Income Approach.
- Substitution : Cost Approach.

The three principal forms of real property assets are –

- (i) Investment Property,
- (ii) Owner-occupied or marketable non-investment Property, and
- (iii) Service or non-marketable non-investment Property.

Broad guideline for selection of valuation approach is summarized below.¹⁵

Investment property (always marketable)	Marketable non- investment property	Non-marketable non-investment property (service property)
<i>Value Ingredients – Utility, marketability, liquidity</i>	<i>Value Ingredients – Utility, marketability</i>	<i>Value Ingredients – Utility</i>
<ul style="list-style-type: none"> • Leasehold land • Rented property (residential house/shop/ office) on a freehold or leasehold land • Cinema / theatre • Hotel, motel • Petrol pump <p style="text-align: center;">Generally valued by Income Approach</p>	<ul style="list-style-type: none"> • Self occupied property (residential house/ shop/ office) on a freehold or leasehold land <p style="text-align: center;">Generally valued by Market Approach</p>	<ul style="list-style-type: none"> • Religious properties – temple, church, mosque • Non-profit oriented educational property • Public property – town hall etc. • Charitable hospital <p style="text-align: center;">Generally valued by Cost Approach</p>

■ **Market Approach**

Comparable Transactions Method utilises information on transactions involving *assets* that are the same or similar to the subject *asset* to arrive at an indication of value. Valuer should choose comparable transactions within the following context:

1. Evidence of several transactions is better to a single transaction
2. Transactions should be of similar assets and closer in time frame to the valuation date and in geographical proximity
3. Transaction should be ‘arm’s length’ between unrelated parties
4. Information of the transaction should be from a reliable and trusted source.
5. Actual transactions provide better evidence than intended transactions

¹⁵ Ashok Nain, *Valuation Principles and Procedures, Dew Drops Education Pvt. Ltd., 2010.*

Listing Discount¹⁶

In addition to closed sales, knowledge of listings and pending (under contract) properties may be used to demonstrate the most current market activity and current competition considered by potential buyers. Because the final conveyance amount is unknown, listing comparables and pending sales should be used cautiously, but are often helpful:

- (a) in establishing the upper limit of probable value in the final reconciliation, or
- (b) as guidance in times of rapidly changing market conditions.

Cash Equivalence¹⁷

As stated in USPAP Standards Rule 1-2(c), Special or creative financing or sales concessions granted by anyone associated with sales should be duly adjusted.

- An opinion of Market Value may presume “all cash” (to the seller), meaning ‘no-financing’ or debt-free at the time of transferring;
- The buyer may mortgage the real estate as security to a third-party lender who pays the full/part of the price in cash;
- In some cases, the seller may finance the purchase.

Comparable transaction which is based on non-market financing or financing with unusual conditions or incentives, should be analysed and adjusted for parity.

e.g. Sale instance may reveal that several post-dated cheques for payment which would be realizable in 1-2 years time subsequent to execution of conveyance deed. Acknowledging the time value of money, the payment realization in future has to be discounted to the relevant date of execution of document.

■ **Income Approach**

It provides an indication of value by converting future cash flow to a single current value. Under the income approach, the value of an *asset* is determined by reference to the value of income, cash flow or cost savings generated by the *asset*.

Discounted Cash Flow Method (DCF)

The forecasted cash flow is discounted back to the valuation date, resulting in a present value of the *asset*.

i.e. PV of (explicit forecast period and terminal value)

¹⁶ *Identifying Comparable Properties, The Appraisal Foundation, USA, 2013.*

¹⁷ *Cash Equivalency in Valuations, Appraisal Institute, USA, 2002.*

The important matters to consider in DCF are:

1. Type of cash flow (i.e. Pre tax, Post tax, Nominal / real, Currency)
2. Explicit forecast period (depends on life of the asset, availability of past data, time required to achieve stabilised level of growth and profits, time of entire business cycle)
3. Cash flow forecasts constructed by using prospective financial information (PFI), non-cash expenses like depreciation and amortisation to be added back, whereas capital expenditure and changes in working capital to be deducted.
4. Terminal Value : Gordon growth model / constant growth model, Market approach / exit value, salvage value / disposal cost.
5. Discount Rate to be determined/developed by either Capital asset pricing method (CAPM), Weighted average cost of capital (WACC), Observed or inferred yields, Internal rate of return (IRR), Weighted average return on assets (WARA), Build up method (in absence of market inputs).

■ **Cost Approach**

It is based on the principle that a buyer will pay no more for an *asset* than the cost to obtain an *asset* of equal utility.

Replacement Cost Method

- Based on replicating the utility of the asset and not the exact physical properties;
- Normally adjusted for physical deterioration and obsolescence;
- Such adjusted value is called depreciated replacement cost (DRC).

Reproduction Cost Method

- Cost to create an exact replica of the asset;
- Adjust for depreciation related to physical, functional and external obsolescence;
- Deduct total depreciation from total costs to arrive at the value.

Summation Method for Investment Companies

- Value each of the component of the asset using appropriate valuation approaches and methods;
- Add the value of the components to reach the value of the subject asset.

5. CONCLUSIONS

- IVS is a concise compilation of information and guidance that does not direct any particular course of action but which is intended to reinforce consistency, transparency and confidence in valuations.

- Many basic definitions are excluded from current version of IVS on the assumption that valuers ought to know them prior to referring IVS 2017.
- Though the present system of registration of valuers under section 34AB of Wealth Tax Act 1957 does not allow company or other body corporate to practice as registered valuer under section 34AC of the Act, the IVS 2017 defines a “valuer” is an individual, group of individuals or a firm who possesses the necessary qualifications, ability and experience to execute a valuation in an objective, unbiased and competent manner.
- A closer study of IVS 2017 reveals that certain terminologies such as ‘Realisable Value’ or ‘Distress Value’ commonly used in India, as such, are not defined as ‘Basis of Value’ in the International Standards.
- Market Value is the central concept of IVS; however, ‘Fair Market Value’ is not an IVS-defined basis of value.
- The confusion in term ‘Fair Value under IVS’ and ‘Fair Value under IFRS’ is removed by replacing the term ‘Fair Value’ with ‘Equitable Value’ under IVS.
- Weighting and reconciliation of value indications by different approaches/methods has been included while simple averaging of values is not acceptable.
- Exposure time, Highest and Best Use, and Cash Equivalence are three important concepts in Market Value as a Basis of Value.

As author Chris Thorne¹⁸ puts it, “valuers and clients should not be under the misbelief that mere mention of IVS will ensure a satisfactory valuation. It is unrealistic to believe that IVS alone can assure quality and prevent errors. Valuers should wisely exercise the freedom and discretion allowed to them for compliance with IVS. Valuers should not merely include some words or headings that match requirements in the standards, without an attempt to make them relevant to the task in hand.”

“Risk is inseparable from valuation and valuers should realise that proper management of risks inherent in the valuation process protects the valuer and also enhances the credibility for those who rely on it. This can be done by properly understanding and applying the IVS appropriately, and further mitigated by following system of checks before delivery of valuation report and audits afterwards also.”

¹⁸ Chris Thorne, *Just following the rules?*, Pi Magazine, Issue 8 / October 2017, Howden UK Group.

For details readers are requested
to refer
International Valuation Standards, 2017
published by
the International Valuation Standards Council.

25.0 STUDY OF INDIAN ACCOUNTING STANDARDS (IAS) AS APPLICABLE TO VALUATION OF REAL ESTATE

25.1 Introduction:

The accounting process provides information that management, creditors, investors, and other interested parties use to evaluate the success and efficiency of company. A Company has many types of assets and each type is reported in separate account. Every account has its own name. Assets of a company include cash, inventory, property, plant, machinery and equipment.

Due to inflation, historical cost based accounting depicts a considerable understatement in the operating capital and exaggerated and illusory profits. In an inflationary trend, depreciation based on historical cost is evidently not sufficient to maintain the operating capability of the enterprise. This results in an overstatement of profit in as much as the inventories consumed are also valued at their historical cost and not at current prices. On the other hand in the event of decline in the prices there is an understatement of profit. In order to avoid this and to give true and fair view of balance sheet, periodical valuation of assets is desirable.

Where the fair value model is applied for the recognition of property assets in the balance sheet, International Accounting Standards require current revaluation of the assets.

25.2 VALUATION IN BOOKS OF ACCOUNT

- The value of real estate is intended to reflect its worth to an undertaking, which is expected to continue in operation for the foreseeable future. The basis of valuation will be based upon its value on the assumption that the real estate will continue in its present existing use in the business of the company.
- The term 'Going Concern' is an accounting concept and accounting assumption. It is derived from capitalization of profits of the business reflecting turnover and assets and liabilities, including contingent liabilities. The capacity of the assets being important in business, the earning potential of the asset is considered as the basis on which valuation of the business is arrived at.

A business may be treated as a 'Going Concern' so long as the earning capacity of the business is at least equal to a fair return on an investment equal to, at a minimum, the liquidation value of the net assets of the business.

25.3 APPLICABLE STANDARDS

The classification of assets determines which IAS or IFRS applies. For valuation of real estate, accounting standards that are required are:

- Property, plant and equipment: IAS 16
 - Investment Property – IAS 40
 - Lease – IAS 17
 - Impairment to Assets – IAS 36
 - Inventories – IAS 2
-
- **Property, plant and equipment: Ind AS 16**

Property, plant and equipment (PPE) is recognised when the cost of an asset can be reliably measured and it is probable that the entity will obtain future economic benefits from the asset.

PPE is measured initially at cost. Cost includes the fair value of the consideration given to acquire the asset (net of discounts and rebates) and any directly attributable cost of bringing the asset to working condition for its intended use (inclusive of import duties and non-refundable purchase taxes).

Directly attributable costs include the cost of site preparation, delivery, installation costs, relevant professional fees and the estimated cost of dismantling and removing the asset and restoring the site (to the extent that such a cost is recognized as a provision).

Classes of PPE are carried at historical cost less accumulated depreciation and any accumulated impairment losses (the cost model), or at a re-valued amount less any accumulated depreciation and subsequent accumulated impairment losses (the revaluation model). The depreciable amount of PPE (being the gross carrying value less the estimated residual value) is depreciated on a systematic basis over its useful life.

Subsequent expenditure relating to an item of PPE is capitalized if it meets the recognition criteria. PPE may comprise parts having different useful lives. Depreciation is calculated based on each individual part's life. In case of replacement of one part, the new part is capitalized to the extent that it meets the recognition criteria of an asset, and the carrying amount of the parts replaced is derecognized.

The cost of a major inspection or overhaul of an item occurring at regular intervals over the useful life of the item is capitalized to the extent that it meets the

recognition criteria of an asset. The carrying amounts of the parts replaced are derecognized.

➤ **Investment property: Ind AS 40**

Certain properties are classified as investment properties for financial reporting purposes in accordance with Ind AS 40, 'Investment property', as the characteristics of these properties differ significantly from owner-occupied properties. It is the current value of such properties and changes to those values that are relevant to users of financial statements. Investment property is a property (land or a building, or part of a building or both) held by an entity to earn rentals and/or for capital appreciation. This category includes such property/ies in the course of construction or development. Any other properties are accounted for as property, plant and equipment (PPE) or inventory in accordance with the following:

- Ind AS 16, 'Property, plant and equipment', if they are held for use in the production or supply of goods or services
- Ind AS 2, 'Inventories', as inventory, if they are held for sale in the ordinary course of business.

Initial measurement of an investment property will be at cost. Subsequent measurement of investment properties to be carried at cost less accumulated depreciation and any accumulated impairment losses. However, the fair value of the investment property is disclosed in the notes.

➤ **Leases: Ind AS 17**

A lease gives one party (the lessee) the right to use an asset over an agreed period of time in return for payment to the lessor. Leasing is an important source of medium and long-term financing; and accounting for leases can have a significant impact on lessees' and lessors' financial statements.

Leases are classified as finance or operating leases at inception, depending on whether substantially all the risks and rewards of ownership transfers to the lessee. Under a finance lease, the lessee has substantially all of the risks and rewards of ownership. All other leases are operating leases. Leases of land and buildings are considered separately under Ind AS. Under a finance lease, the lessee recognises an asset held under a finance lease and a corresponding obligation to pay rentals. The lessee depreciates the asset. The lessor recognises the leased asset as a receivable. The receivable is measured at the 'net investment' in the lease—the minimum lease payments receivable, discounted at the internal rate of return of the lease, plus the unguaranteed residual that accrues to the lessor.

Under an operating lease, the lessee does not recognise an asset and lease obligation. The lessor continues to recognise the leased asset and depreciates it. The rentals paid are normally charged to the income statement of the lessee and credited to that of the lessor on a straight-line basis unless another systematic basis is more representative of the time pattern of the user's benefit or if the payments to the lessor are agreed to increase in line with expected general inflation to compensate for the lessor's expected inflationary cost increases. Linked transactions with the legal form of a lease are accounted for on the basis of their substance—for example, a sale and leaseback where the seller is committed to repurchase the asset may not be a lease in substance if the 'seller' retains the risks and rewards of ownership and substantially the same rights of use as before the transaction.

Equally, some transactions that do not have the legal form of a lease are in substance leases if they are dependent on a particular asset that the purchaser can control physically or economically.

➤ **Impairment of assets: Ind AS 36**

Nearly all assets—current and non-current—are subject to an impairment test to ensure that they are not overstated on the balance sheet.

The basic principle of impairment is that an asset may not be carried on the balance sheet above its recoverable amount. Recoverable amount is defined as the higher of the asset's fair value less costs of disposal and its value in use. Fair value less costs of disposal is the price that would be received to sell upon disposal of an asset in an orderly transaction between market participants at the measurement date, less costs of disposal. Guidance on fair valuing is given in Ind AS 113, 'Fair value measurement'. Value in use requires management to estimate the future pre-tax cash flows to be derived from the asset and discount them using a pre-tax market rate that reflects current assessments of the time value of money and the risks specific to the asset.

All assets, subject to the impairment guidance, are tested for impairment where there is an indication that the asset may be impaired. Certain assets (goodwill, indefinite lived intangible assets and intangible assets that are not yet available for use) are also tested for impairment annually even if there is no impairment indicator. This impairment test may be performed any time during the annual period, provided it is performed at the same time every year.

When considering whether an asset is impaired, both external indicators (for example, significant adverse changes in the technology, market, economic or legal environment or increases in market interest rates) and internal indicators (for

example, evidence of obsolescence or physical damage of an asset or evidence from internal reporting that the economic performance of an asset is, or will be, worse than expected) are considered. Recoverable amount is calculated at the individual asset level.

However, an asset seldom generates cash flows independently of other assets, and most assets are tested for impairment in groups of assets described as cash-generating units (CGUs). A CGU is the smallest identifiable group of assets that generates inflows that are largely independent from the cash flows from other CGUs. The carrying value of an asset is compared to the recoverable amount (being the higher of value in use or fair value less costs of disposal). It is not always necessary to determine both an asset's fair value less cost of disposal and its value in use. If either of these amounts exceeds the carrying amount, the asset is not impaired and it is not necessary to estimate the other amount. An asset or CGU is impaired when its carrying amount exceeds its recoverable amount.

Any impairment is allocated to the asset or assets of the CGU, with the impairment loss recognised in profit or loss. Goodwill acquired in a business combination is allocated to the acquirer's CGUs or groups of CGUs that are expected to benefit from the synergies of the business combination. However, the largest group of CGUs permitted for goodwill impairment testing is an operating segment before aggregation. An impairment loss recognised in prior periods for an asset other than goodwill shall be reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. An impairment loss recognised for goodwill is not reversed in a subsequent period.

26.0 ASSET VALUATION UNDER – THE SARFAESI ACT 2002, THE LARR ACT 2013, THE COMPANIES ACT 2013, AND THE INSOLVENCY AND BANKRUPTCY CODE, 2016

26.1 ASSET VALUATION UNDER THE SECURITISATION AND RECONSTRUCTION OF FINANCIAL ASSETS AND ENFORCEMENT OF SECURITIES INTEREST ACT, 2002 (THE SARFAESI ACT 2002)

Consideration of ‘value of asset’:

Obviously, there cannot be any risk of loss to the Bank if the value of security provided by the borrower/s is much more than the outstanding. If there are no serious complaints against a particular borrower and if he commits default and expresses his willingness to update the account and if the value of the security is intact and much more than the outstanding, then, Banks can certainly accommodate the requests from such borrowers. It is very frequently complained that the Bank is not accommodative to the borrowers even when the value of security is more and the Bank mechanically follows the RBI guidelines with regard to classification of account as ‘NPA’. There cannot be any justification as to why the Banks cannot be accommodative to the temporary problems of the borrowers in remitting the dues as agreed where the value of security is much more than the outstanding. Banks show more eagerness in disposing the asset than providing an opportunity to the borrower to regularize or to update his or her account.

Ascertainment and establishing the ‘value of asset’ can also be very difficult for the borrower. Apart from the valuation report submitted by the borrower or obtained by the Bank while sanctioning the loan, it would be very difficult to establish the current market-value of the property while the Bank knows as to how to get the valuation reports and fix ‘reserve price’ and dispose of the property. When the value of security provided by the borrower/s is much more than the outstanding due, then, definitely, Bank can go slow and accommodate the request of the borrower seeking time to update and regularize as ultimately Bank can realize the entire outstanding with interest, penal interest and also legal expenses. But, when the Bank proceeds with its action under SARFAESI Act, 2002 and if the borrower challenges the action under section 17, can the DRT consider the ‘value of asset’ or ‘realisable value of asset’ for granting some relief to the borrower or the appellant is another important issue. DRT can certainly consider the ‘value of asset’ also apart from other considerations while granting or rejecting the relief sought by the borrower.

It has become a practice in Debt Recovery Tribunals as many say that the Tribunals mandate the borrowers to make some deposit in order to get relief and there is a statutory provision of depositing 50% of the outstanding with the DRT if the borrower chooses to prefer an appeal against the order of DRT.

This procedure and practice makes it very clear that the object is to allow the Banks to recover their dues. Consideration of 'value of asset' is more important for the borrowers as ultimately borrower suffers if the asset is sold in an 'auction' for a meagre price. It is a known fact that there can be a clear gap between the prevalent market-price of an asset and the price for which the property is sold in a 'public auction' conducted by the Bank under the provisions of SARFAESI Act, 2002. It is certainly the risk and responsibility of the borrowers to establish the price of property and to establish the difference between outstanding due and the market value of the property. It is in-fact, a difficult thing to do for the borrowers in many cases.

Courts now have made it very clear that even the 'Auction Sale' under the provisions of SARFAESI Act, 2002 can be a subject matter of an appeal under section 17 and the DRT or the High Court under Article 226 can set-aside the sale in appropriate cases. But, frequently getting the 'Auction Sales' set-aside under SARFAESI Act, 2002 is not a good trend and it can affect the credibility of the Bank auctions under the provisions of SARFAESI Act, 2002 and the bidders consider lot of risk factors while bidding for a property and it can result in a situation where the bidders are careful in locking their deposits with the Bank. Very delicate balance needs to be done on these issues while interfering with the 'Auction Sales' though it is also the responsibility of the bidders to do their own assessment of the issue by getting fullest possible information from the Banks and doing their own enquiries as the Bank sells the property with 'as and where condition'. How the DRT considers the value of asset while deciding the relief sought by the borrowers under section 17 and how the DRT or the Court looks into the objections with regards to valuation of the property is a matter of detail and no 'hard and fast rule' can be laid in this regards.

However, keeping the interests of the borrowers and the public interest in consideration, the Act and rules provide detailed procedure to be followed in conducting 'auctions' and the procedure is summed-up by Madras High Court in a recent judgment of A. Varalakshmi Vs. The Chief Manager Punjab National Bank reported in CDJ 2012 MHC 3240 and the relevant portion of the judgment is as follows:

"Once the possession of the secured asset has been taken by virtue of the provisions of the SARFAESI Act, in terms of sub-rule (5) of Rule 8 of the Rules, the authorised officer shall obtain valuation of the property from an approved government valuer and in consultation with the secured creditor, fix the reserve price of the property and may sell the whole or any part of the immovable secured asset by any of the following four methods viz.,

- (a) By obtaining quotations from the persons dealing with similar secured assets or otherwise interested in buying the such assets; or
- (b) By inviting tenders from the public; or
- (c) By holding public auction; or
- (d) By private treaty.

Sub-rule (5) of Rule 8 refers to effecting of sale of immovable property as contemplated in sub-rule (1) of Rule 9 of the Rules. Sub-rule (1) of Rule 9 provides that no sale of immovable property under these rules shall take place before the expiry of 30 days from the date on which the public notice of sale is published in newspapers as referred to in the proviso to sub-rule (6) or notice of sale has been served to the borrower. Rule 9(1) refers to the proviso to sub-rule (6) of Rule 8, where it states that if the sale of such secured asset is being effected by either inviting tenders from the public or by holding public auction, the secured creditor shall cause a public notice in two leading newspapers; one in vernacular language having sufficient circulation in the locality by setting out the terms of sale, which shall include –

- (a) The description of the immovable property to be sold, including the details of the encumbrances known to the secured creditor;
- (b) The secured debt for recovery of which the property is to be sold;
- (c) Reserve price, below which the property may not be sold;
- (d) Time and place of public auction or the time after which sale by any other mode shall be completed;
- (e) Depositing earnest money as may be stipulated by the secured creditor;
- (f) Any other thing which the authorised officer considers it material for a purchaser to know in order to judge the nature and value of the property.

A combined reading of the above provisions would show that in the event the authorised officer intends to sell the secured asset by inviting tenders from the public in terms of sub-rule (5)(b) of Rule 8 or by holding public auction in terms of sub-rule (5)(c) of Rule 8, he shall cause a public notice in two leading newspapers one in vernacular language having sufficient circulation in the locality by setting out the terms of sale as indicated earlier in terms of the proviso to sub-rule (6) of Rule 8. This provision is intended for the purpose that when the sale is to be effected by inviting tenders from the public by holding public auction, the public must be made aware of the description of the immovable property, the details of the encumbrances, the secured debt for recovery of which the property is to be sold, reserve price, time and place of public auction, deposit of earnest money and other conditions which the authorised officer considers it material for a purchaser to know in order to judge the nature and value of the secured asset.

The said proviso to sub-rule (6) of Rule 8 is mandatory in the event the authorised officer intends to sell the secured asset by inviting tenders from the public by holding public auction. One more condition for such sale is that in terms of Rule 9(1), no sale of immovable property shall take place before the expiry of 30 days from the date on which the public notice of sale is published in newspapers by virtue of the proviso to sub-rule (6) or notice of sale is served to the borrower. To this extent, there is no dispute.

However, in the event the authorised officer intends to sell the secured asset by the above two methods by fixing the reserve price and if he fails to obtain a price higher than the reserve price, he shall effect the sale at such price which is consented by the borrower in terms of the second proviso to Rule 9(2) of the Rules. The authorised officer has two options. In the event the authorised officer fails to obtain a price higher than the reserve price and in the event the consent of the borrower is obtained, he can sell the secured asset at such price for which the borrower has consented by following the procedure enumerated in sub-rule (5)(b) and (c) as well as sub-rule (6) of Rule 8.

The consequential question would be in the event the consent of the borrower could not be obtained, namely, when the borrower refuses to give consent, what would be the procedure to be adopted by the authorised officer? In the event no consent could be obtained, he cannot resort to sell the property either by obtaining quotations or by private treaty and has no other option except to resort to sale by public tenders or public auction.

In this context, a reference also can be made to the first proviso to Rule 9(2) of the Rules providing that no sale under the rule shall be confirmed, if the amount offered by sale price is less than the reserve price, specified under sub-rule (5) of Rule 9. Only for that reason, the second proviso requiring the consent of the borrower has been made. This issue will be considered in point no.(3). As far as the first question is concerned, in the event the authorised officer fails to obtain a price higher than the reserve price, he cannot sell the secured asset for a lesser price than the reserve price without the consent of the borrower. The said issue came up for consideration before a Division Bench of this Court in *K.Raamaselvam and others v. Indian Overseas Bank, Aminjekarai Branch and another*, AIR 2010 Madras 93, where the Division Bench held as follows:-

"It is crystal clear from the present stand taken by the borrower that there is no consent for confirmation of such sale. As a matter of fact, the Authorised Officer has never bothered to find out from the borrower whether he was willing that the sale should be confirmed, despite the fact that the Authorised Officer had failed to obtain a price higher than the reserve price.

We do not think that in view of the clear language in the second proviso, such a contention can ever be countenanced. In fact, the first and second provisos contemplate the situation that if the bid amount is less than the reserve price, such a position is covered by the first proviso and if the bid amount is more than the reserve price, the situation is contemplated in the main provision. However, if the Authorized Officer fails to obtain the price higher than the reserve price, with the consent of the borrower, the sale may be confirmed only after the borrower and the secured creditor give their consent. By no stretch of imagination, it could be construed that even if the Authorised Officer fails to obtain price higher than the reserve price, he may, confirm the sale without obtaining any consent from the borrower or from the secured creditor."

What if the borrower fails to give consent?

Point No.(3): This question relates to a situation when the borrower refuses to give consent to the authorised officer to sell the secured asset for less than the reserve price and the authorised officer decides to sell the secured asset by private treaty. The power of the authorised officer to sell the secured asset by private treaty is beyond dispute, as it is one of the methods contemplated for sale of immovable property in terms of Rule 8(5) of the Rules. However, in the event the authorised officer decides to sell the secured asset by private treaty, such sale should be strictly in conformity with Rule 8(8) of the Rules. The said sub-rule states that "sale by any methods other than public auction or public tender, shall be on such terms as may be settled between the parties in writing". When this rule mentions the sale by any methods other than public auction or public tender, it conveys two things, namely, in the event the sale is made through public auction or public tender in terms of Rule 8(5)(b) and (c), the provisions of sub-rules (6) and (7) of Rule 8 would be attracted.

In the case of any other sale, the provisions of Rule 8(5)(a) & (d) would alone be attracted. As a consequence, a sale by private treaty must be on such terms as between the parties in writing. The word "parties" came up for consideration before a Division Bench of this Court-Madurai Bench in J. Rajiv Subramanian and another vs. M/s Pandiyas and others, AIR 2012 Madras 12, where the Division Bench held as follows:-

"The first question for our consideration is as to what are the formalities to be adopted when invoking private treaty and effecting a sale on that basis. In this connection, it would be worthwhile to refer to Rule 8(5) of the Security Interest (Enforcement) Rules, 2000 which reads thus:

"Before effecting the sale of the immovable property referred to in sub-rule (1) of rule 9, the authorised officer shall obtain valuation of the property from an approved valuer and in consultation with the secured creditor, fix the reserve price of the

property and may sell the whole or any part of such immovable secured asset by any of the following methods:

- a) By obtaining quotations from the persons dealing with similar secured assets or otherwise interested in buying the such assets; or
- b) By inviting tenders from the public;
- c) By holding public auction; or
- d) By private treaty.

As per the private treaty, other than public auction or public tender, it can be settled between the parties invoking as per Rule 8(8) of the Security Interest (Enforcement) Rules, 2002. The sale of properties by private treaty is also permissible in law. The only condition is that it shall be on such terms as settled between all the parties in writing. From this, it is clear that the presence of debtor and his willingness in writing are essential.”

26.2 ASSET VALUATION UNDER THE RIGHT TO FAIR COMPENSATION AND TRANSPARENCY IN LAND ACQUISITION, REHABILITATION AND RESETTLEMENT ACT, 2013 (THE LARR ACT 2013)

Compensation

It will be four times the market value of land in rural areas and twice in urban areas. The market value of the land will be set as higher of: minimum land value, if any, specified in the Indian Stamp Act, 1899 or; average of the sale price for similar type of land being acquired, ascertained from the highest fifty per cent of the sale deeds registered during the preceding three years in the nearest vicinity of the land being acquired.

Determining Market Value:

The claimant will be entitled to the compensation which is determined on the basis of the market value of the land determined as on the date of preliminary notification. The market value of the proposed land under Section 26 to be acquired shall be set as the higher of:

- The minimum land value, if any, specified in the Indian Stamp Act, 1899 for the registration of sale deeds in the area, where the land is situated; or
- The average of the sale price for similar type of land being acquired, ascertained from the highest fifty per cent of the sale deeds registered during the preceding three years in the nearest village or nearest vicinity of the land being acquired.; or
- The consented amount in case the land is acquired for private companies or public-private partnership projects.

The market value would be multiplied by a factor of, at least one to two times the market value for land acquired in rural areas and at least one times the market value for land acquired in urban areas.

Example: The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 mandates compensation and entitlements without limit to number of claimants. Thus, for clarity and as an example, if 1000 acres of rural land is to be acquired for a project, with market price of INR 2,25,000/- per acre, 100 families claim to be land owners, and 5 families per acre claim their rights as livelihood losers under the new Act, the total cost to acquire the 1000 acre would be

- Land compensation = INR 90,00,00,000
- Land owner entitlements = INR 6,30,00,000 + 100 replacement homes
- Livelihood loser entitlements = INR 365,00,00,000 + 5000 replacement homes

The average effective cost of land, in the above example will be at least INR 41,00,000/- per acre plus replacement homes and additional services.

The new Act of 2013 proposes the above benchmarks as minimum. The state governments of India, or private companies, may choose to set and implement a policy that pays more than the minimum proposed.

Value of Things Attached:

The Collector in determining the market value of the building and other immovable property or assets attached to the land or building which are to be acquired, under Section 29 will use the services of a competent engineer or any other specialist in the relevant field, as may be considered necessary by him.

The Collector for the purpose of determining the value of trees and plants attached to the land acquired, use the services of experienced persons in the field of agriculture, forestry, horticulture, sericulture, or any other field, as may be considered necessary by him.

The Collector for the purpose of assessing the value of the standing crops damaged during the process of land acquisition may use the services of experienced persons in the field of agriculture as may be considered necessary by him.

Determination of Compensation:

The Collector having determined the market value of the land to be acquired shall under Section 27 calculate the total amount of compensation to be paid to the land owner whose land has been acquired by including all assets attached to the land.

In determining the amount of compensation to be awarded for land acquired under this Act, the Collector shall under Section 28 take into consideration—

- The market value as determined under section 26 and the award amount in accordance with the First and Second Schedules;
- The damage sustained by the person interested, by reason of the taking of any standing crops and trees which may be on the land at the time of the Collector's taking possession thereof;
- The damage sustained by the person interested, at the time of the Collector's taking possession of the land, by reason of severing such land from his other land;
- The damage sustained by the person interested, at the time of the Collector's taking possession of the land, by reason of the acquisition injuriously affecting his other property, movable or immovable, in any other manner, or his earnings;
- In consequence of the acquisition of the land by the Collector, the person interested is compelled to change his residence or place of business, the reasonable expenses incidental to such change;
- The damage bona fide resulting from diminution of the profits of the land between the time of the publication of the declaration under section 19 and the time of the Collector's taking possession of the land: and
- Any other ground which may be in the interest of equity, justice and beneficial to the affected families.

26.3 ASSET VALUATION UNDER THE COMPANIES ACT 2013

A registered valuer shall decide the approach to valuation based upon the purpose of the valuation in accordance with applicable standards, if any and can choose from Asset, Income and Market Approach.

One or more of the following prescribed methods or any other method accepted or notified by the Reserve Bank of India, Securities and Exchange Board of India or Income Tax Authorities or that may deem fit to adopt by the Valuer can be used and justified in the report:

- Net Asset Value Method
- Market Price Method
- Yield Method / Profit Earning Capacity Value (PECV)
- Discounted Cash Flow Method (DCF)
- Comparable Companies Multiples Methodology (CCM)
- Comparable Transaction Multiples Method (CTM)
- Price of Recent Investment Method (PORI)
- Sum of the Parts Valuation (SOTP)

- Liquidation Value
- Weighted Average Method

26.4 ASSET VALUATION UNDER THE INSOLVENCY AND BANKRUPTCY CODE, 2016

Valuation of assets is one of the core features of the corporate insolvency resolution process under the Insolvency and Bankruptcy Code, 2016 (Code). However, there are various clarifications that are yet to be provided by the Insolvency and Bankruptcy Board of India (Board) in relation to provisions pertaining to valuation of assets as provided under the Code and the Regulations. One of the prominent controversies in relation to valuation of assets is the lack of clarity surrounding interpretation of the term 'liquidation value' under the Code.

The term "liquidation value" is defined under Regulation 35(1) of the Insolvency and Bankruptcy Board of India (Insolvency Resolution for Corporate Persons) Regulations, 2016 (CIRP Regulations) as 'the estimated realizable value of assets of the corporate debtor if the corporate debtor were to be liquidated on the insolvency commencement date'. Regulation 35(2) of the CIRP Regulations prescribes the method for determining liquidation value. From a bare reading of the said definition, it emerges that liquidation value is the notional realizable value that assets of the corporate debtor would fetch, should the corporate debtor be liquidated on the insolvency commencement date (and not the value that may be actually realized under a resolution plan). However, the ambiguity arises with respect to determining "estimated realizable value" in the context of the insolvency resolution process as opposed to valuation in an out-and-out liquidation of assets. Typically, a valuation report often comprises more than one sale value for an asset based on valuation under different scenarios. For instance, a valuation report may provide for a fair market value, realizable value and distressed sale value of an asset.

The multitude of jargon and terminology in valuation only adds to the already difficult task that registered valuers (appointed under the Code) and the insolvency professional discharging his/her function as an interim resolution professional (IRP)/resolution professional (RP) face in that should be liquidation value for purposes of Regulation 35 read with Regulations 36 and 38 of the CIRP Regulations. The determination of 'liquidation value' of assets is an extremely crucial exercise, keeping in view its practical implication on the resolution plan, claims of creditors and prospective investors.

Objective:

One of the most important pieces of information that forms part of the Information Memorandum¹ is liquidation value. The purpose of having to provide for a liquidation value as part of the Information Memorandum during the corporate insolvency

resolution process is in turn to enable compliance with provisions of Regulation 38 of the CIRP Regulations which requires identification (and subsequently payment) of specific sources of funds for payment of dues of operational creditors and dissenting financial creditors at liquidation value in priority to recovery of dues of other financial creditors who approve the resolution plan. In the event a resolution plan is reached and approved, operational creditors and dissenting financial creditors will have to be paid at this "notional" liquidation value in Regulation 35(1) since the corporate debtor would not actually go into liquidation.

Duty of an IRP/RP vis-à-vis the liquidation value of the corporate debtor:

One of the key tasks of an IRP/RP is to appoint two registered valuers (as per Regulation 27 of the CIRP Regulations), who in turn will determine liquidation value (as per Regulation 35 of the CIRP Regulations) of the corporate debtor and submit the same to the IRP/RP. The registered valuers are required to provide an estimate of liquidation value "computed in accordance with internationally accepted valuation standards, after physical verification of the inventory, and fixed assets of the corporate debtor.

It is incumbent upon the IRP/RP to observe if there is a significant difference between the two estimates of liquidation value submitted to him/her, in which case, the IRP/RP may appoint a third registered valuer who will submit an estimate of the liquidation value computed in the same fashion as the two valuers first appointed. Thereafter, the IRP/RP will have to consider average of the two closest estimates as liquidation value.

Pursuant to this, the IRP/RP is required to note the said liquidation value of the corporate debtor as well as the liquidation value due to an operational creditor (arrived as per the waterfall mechanism under section 53 of the Code) in the Information Memorandum prepared in terms of Regulation 36 of the CIRP Regulations.

Thus, it is to be noted that the duty of determination of liquidation value is based on the registered valuer and the duty of the IRP/RP in this regard is summarized herein below:

- (a) Appointment of two registered valuers (as per Regulation 27);
- (b) Observing any discrepancy in the two values submitted by the registered valuers and subject thereto, appointing a third valuer to provide another estimate of the liquidation value, so that the average of the two closest values may be taken as the liquidation value (as per Regulation 35(2));
- (c) Incorporating the said liquidation value (as provided by the registered valuers) in the Information Memorandum (as per Regulation 36).
- (d) Ensuring that every resolution plan identifies sources of funds, and provides for making payment of claims of operational creditors at liquidation value in priority

to financial creditors and within 30 days of its approval (Regulation 38(1)(b) of the CIRP Regulations);

- (e) Ensuring that every resolution plan identifies sources of funds to make payment of claims of the dissenting financial creditors at liquidation value in priority to recovery by other financial creditors who approve the resolution plan (Regulation 38(1)(c) of the CIRP Regulations).

Liquidation value visà- vis Realizable value:

The term 'Liquidation value' as generally understood is the value of an asset which is arrived at when a seller is under extreme compulsion to sell. As mentioned earlier, Regulation 35 of the CIRP Regulations, which defines the term 'liquidation value' specifies that the said value is to be a notional value, which should be arrived at considering a hypothetical scenario of liquidation of the Corporate Debtor on the date of insolvency commencement. In other words, it will be an estimated value calculated by registered valuers if the Corporate Debtor were to be liquidated on the insolvency commencement date. This is similar to the concept of "vertical comparison" under Chapter 11 of the United States Bankruptcy Code, and an accepted definition for arriving at liquidation value under English insolvency laws.

It is observed that the definition of the term 'liquidation value' uses the term "realizable value", thereby indicating that liquidation value is the notional realizable value arrived at the time of liquidation of the Corporate Debtor, in terms of provisions of the Code. In view of the aforesaid, it may be pertinent to consider the procedure to realize assets during liquidation of the Corporate Debtor, as more particularly provided under Chapter III of the Code, read with the Insolvency and Bankruptcy Board of India (Liquidation Process) Regulations, 2016 (Liquidation Process Regulations).

In this regard, Regulations 32, 33 and Schedule 1 of the Liquidation Process Regulations, provide that a liquidator appointed as per the Code, may sell the assets either on a stand-alone basis or sell the assets in a slump sale /a set of assets collectively /the assets in parcels.

However, it is stated that the mode of sale shall ordinarily be through auction, unless,

- (1) The asset is perishable; or
- (2) Likely to deteriorate in value significantly if not sold immediately; or
- (3) Is fetching a better price than the reserved price of a failed auction; or
- (4) Has the permission of the Adjudicating Authority, in which case the liquidator shall sell the assets by means of a private sale.

The Schedule I to the Liquidation Process Regulations, under part (1) item (4), specifies that for the purposes of auction, the reserve price would be the value of the asset determined by the registered valuers in terms of Regulation 35.

Thus, it becomes evident that identification of an asset plays a crucial role in determining liquidation value. In ordinary circumstances, the liquidation value of an asset is likely to be the notional reserve price at which such an asset would be sold in an auction. However, if the nature of the asset is perishable or such that its value may depreciate significantly if not sold immediately, then the value of such an asset may be determined on the basis of a private sale. It may be stated herein that the methodology to be adopted for determining the aforesaid values is to be as per internationally accepted valuation standards, after physical verification of assets of the Corporate Debtor.

Conclusion:

Valuation is a quintessential part of the corporate insolvency resolution process, and a proper understanding of liquidation value is crucial to protect the interest of stakeholders and to formulate a compliant resolution plan. Any errors in determining liquidation value in the corporate insolvency resolution process can have farreaching consequences, including the effect of undermining of reversing any resolution plan that may be approved on the basis of an incorrect liquidation value.

In fact, a case of allegedly incorrect determination of liquidation value under the CIRP of Hotel Gaudavan Private Limited has already resulted in a criminal complaint against officers of a private securitization company and the resolution professional³. It is therefore crucial for insolvency professionals, and more importantly, for registered valuers, to have a correct understanding of the definition of liquidation value under the Code read with CIRP Regulations. While one expects the understanding of valuers and a customization of valuation methods to more accurately determine liquidation value in the corporate insolvency resolution process, any clarification on liquidation value under the CIRP Regulations and the Code by the Board or the Adjudicating Authority would be a welcome move that would help bring about consensus on this much debated issue.

27.0 ROLE, FUNCTIONS AND DUTIES OF A VALUER

27.1 INTRODUCTION

A valuer must know precisely his role, his functions and his duties towards the clients, the society and fellow valuers as well as the profession. A valuer must also know the sequence of operations he should undertake to do a thorough job of estimating fair and reasonable market values of properties. In this unit the student will learn about these duties and functions of a valuer.

27.2 THE ROLE OF A VALUER

The role of a valuer is that of an advisor, giving his client opinion and advice regarding fair market value of the interest held by the client in a property, enabling the client to take decisions regarding financial matters or management of the property. A valuer is often called upon to estimate present market value of a property, i.e. the price at which an interest in a property can be expected to sell as between a willing, able and prudent vendor and willing, able and prudent purchaser, who are neither forced to sell nor to buy, in a genuine transaction, having regards to future trends in a property market.

His opinion and advice may also be sought on whether the prices are reasonable and are likely to be maintained and also about any possibilities of changes in rental and capital values. In cases where properties are considered as investment a valuer may be required to advise on policy matters, to suggest what reserve fund or sinking fund should be created for further repairs or redemptions of capital respectively.

In respect of valuation for certain special purposes like local, State or Central Government taxation or compulsory acquisition of land etc., a valuer is required to take in to consideration statutory provisions especially regarding material date of valuation, factors or matters which shall be consider and which shall not be considered etc. though the basis is the open market value.

A valuer is also often required to advise on the policy to be adopted for management of an estate and/or management of properties as investment. The two main objectives of good estate management are –

(i) Maximizing income and capital value and (ii) Securing good maintenance. Advice on management of a group of investment properties of various types involves consideration of a number of important matters like (a) possibility of increase or decrease in capital values in future (b) examining reasonableness of present rents and

outgoings and possible increase or reduction therein and (c) Provision of reserves for future repairs or any other capital expenditure etc.

In all such matters the role of a valuer is that of an advisor to his client. He is required to carefully consider the instruction given by his client with a view of precisely understand the requirement of a client. As an advisor however, he has to give his own independent, honest and conscious opinion and advice and not an advice tailored to suit what client desires.

27.3 THE FUNCTION OF A VALUER

In order to perform his role of an advisor efficiently and effectively and especially for advising on future trends, a valuer needs to have sound technical knowledge and clear understanding of the basic principles of valuation. Further he should also have knowledge gained by experience and by keeping himself informed about the current international, national and local economic conditions. In light of such economic conditions he is required to make careful study of local real estate market, rentals and sale prices in the areas where he is practicing.

Site Inspection

On receiving and accepting instructions from a client a valuer must inspect the property to be valued. The Axiom “Inspect before value” should be scrupulously observed. During such inspection he should, by his own observation and also by making inquiries on site, collect all the information and data regarding physical condition of the property and its estimated future economic life, interest of the client in the property which is to be valued, rent, outgoings etc. He should also collect information about instances of rentals and sale transactions in respect of similar and comparable properties in the vicinity/ locality inspect the properties involved in the instances of sale and rentals and should keep detailed notes regarding various factors of comparison of properties.

Collection of information and data

On the basis of instruction from the client which identify (i) The interest in the property to be valued (ii) Purpose of valuation and (iii) The material date for valuation and considering the data and information available or likely to be available the valuer is required to decide the method or approach to be adopted for valuation. Once the method of valuation is adopted, he should collect all the information and data required to be collected as per requirement of the method adopted. The information and data should be collected without any bias or pre-notions should be first hand and duly verified as correct and true, rejecting hearsay evidence/data. A valuer should obtain / collect as much information, data and evidence as possible so as to render valuation as

accurate as possible. He should always remember that the best estimate is always based on the best evidence.

Study of the Property Market

1. One of the main and the most important function of a valuer is to study the real estate market or the property market in the area of his operation or practice. This study of property market is not limited only to collection of instances of rentals and sales, to find out and compare rates of rentals and sale prices per unit area and to keep up to date record thereof. It further extends to analysing each and every genuine instance of sale, finding out Y.P. and rate of interest yielded by investment made in a property (i.e. purchase price) and comparing it with the return or rate of interest yielded by the other alternative forms of investment, such as capital market or shares and debentures, fixed deposits in commercial banks, Govt. securities etc.

2. **Analysis of a Sale**
In analyzing a sale instance, the usual steps of valuation process are just reversed. The purchase price, including black or unaccounted money divided by actual or estimated net annual income (gross annual rent minus annual outgoings) gives the figure of Year's Purchase (Y.P.) from which the remunerative rate of interest can be worked out either at single rate, in the case of perpetual income- (rate of interest = $100 / \text{Y.P.}$) or at dual rate in the case of terminable income (from valuation tables considering accumulative rate of interest- sinking fund accumulation- at 2.5 % to 3%)

3. **Estimating Fair Rent**
The first step in the study of the property market by analysis of instances of sale is to estimate fair market rents of (i) The property to be valued as on the date of valuation and (ii) The properties involved in the genuine instances of sale as on the dates of transactions and if the properties involved in instances of sale are let out, to verify whether actual rents are fair and reasonable and are not unduly low. Fair market rents of these properties are estimated by comparison (i.e., by market approach) with the properties involved in the instances of rentals. Such comparison can be either direct or by adopting weightage system.

4. **Weightage Score System**
The properties involved in the instances of rentals and sales and the property to be valued can be compared by taking into consideration various factors of comparison. As many as 50 to 60 factors of comparison, grouped into seven categories viz (i) Land itself (ii) Location with reference to amenities and facilities (iii) Building(s) (iv) Utility Services (v) Legal (vi) Economic and (vii) Social, can be identified. Further four or five levels of each of these factors of comparison can

also be identified. For example, in Location factor levels can be identified on the basis of distances of properties from amenities or social facilities (Including school, market, bus station, etc.) or in case of water supply (services) on the basis of timings of water supply every day etc.

Appropriate weightages to each of these factors of comparison and their levels are assigned on the basis of priorities or comparative importance as may be revealed by local residents through inquiries made during site inspection. Multiplication of weightage assigned to a factor of comparison and that assigned to its actual level at which it is provided gives weightage score for that particular factor of comparison and the sum total of weightage scores of all the factors of comparison gives Total Weightage Score (T.W.S.) of the properties. Fair market rents for the property to be valued and the properties involved in instances of sale can be estimated by comparing them with the properties involved in the instances of rentals in terms of (a) area (b) total weightage score (c) date of transaction or date of verification and (d) rate of rent per unit area.

Since weightages to the various factors of comparison and their levels are assigned according to the preferences and priorities indicated by the local residents, comparison by adopting weightage system would be more objective.

5. **Capital Value**

It is common experience that the prices shown in the documents of sale are often lower than the actual prices paid. The rates of interest worked out on the basis of such documented prices would be deceptive, not true and may be very high. It is therefore necessary for a valuer to obtain or skillfully extract information about actual prices paid in sale transactions including unaccounted or black money. This requires adopting proper technique and skill of inquiries while interviewing persons having firsthand knowledge of sale transaction i.e. vendors, purchasers, witnesses to sale transaction, etc.

It is the experience of the students of Master of Valuation (R.E.), Sardar Patel University, Vallabh Vidyanagar, Gujarat, that by winning confidence of interviewees, regarding maintaining secrecy, through proper technique and skill, about 90% of the interviewees revealed correct information about actual prices paid in sale transactions. The rates of interest worked out on the basis of actual prices paid including unaccounted money, would be true indicators of true rates of interest yielded by real estate investments. Further the rates of interest thus worked out, being within a certain reasonable range i.e. being consistent, it would be a proof that information about the actual prices paid, including unaccounted money, is reliable, consistency being the proof of reliability.

6. **Rate of Interest**

The rate of interest yielded by a property sold is worked out by (i) firstly finding out Y.P. by dividing actual price paid (including unaccounted money) by net income and then (ii) by dividing 100 by Y.P., in case of perpetual income or with the help of valuation tables, considering accumulative rate of interest as 2½% to 3% in the case of terminable income as the case may be. Several dissertations by the students of Master of Valuation (R.E.), S.P. University, V.V.Nagar, Gujarat have shown that the rates of interest yielded by residential properties generally varied from about 4% to 5% irrespective of places from small towns to metropolitan cities and irrespective of time in general, but varied according to changes in the general economic conditions as revealed by economic indices.

The fact that the rates of interest are almost same (within a certain range) irrespective of time and/or place can be attributed to the fact that the feeling of 'Security' is universal, irrespective of time and place, is just like that felt by a child in the lap of his mother irrespective of whether she is a beggar woman or a Maharani of certain Kingdom in certain era / period. The rate of interest yielded by commercial properties varied from about 6% to 10% or more depending upon whether the goods and services sold are of daily necessities like grocer's shop and banks (about 6%) or are of 'once in a while' or occasional requirement like jewellery shop (9% to 10%) irrespective of income level.

7. **Economic Conditions**

The rate of interest yielded by properties is a better measure of comparison between heterogeneous properties like 'fructose' contents for comparison between variety of fruits or 'calories' for comparison among variety of food items. It is also best unit for comparison between alternative forms of investment including real estate capital market, etc. since real estate is one to the alternative form of investment and cannot be considered in isolation. The comparison of rates of interest yielded by properties with various economic indices has shown that the rate of interest varied, according to general economic conditions prevailing at the time of transactions as indicated by various economic indices like BSE and Nifty Indices (Capital Market), rates of interest yielded by State and Central Govt. Securities, interest rates on lending by banks, inflation rates, foreign exchange rates, etc.

It has been observed in general, that the graph of rate of interest yielded by properties runs parallel to the graphs of BSE and Nifty indices (Capital Market) except in the conditions of boom period, when graphs divert and in the period of recession when graphs converge. In the areas where 'dollar economy' is a dominating factor, the rate of interest yielded by property changes inversely with changes in the dollar exchange rate. The increase in inflation rate results in

increase in level of rents and thereby in increase in property values though with time lag.

8. **Capital Appreciation and Capital Erosion**

It is observed that the rates of interest yielded by properties, e.g. residential properties (varying from about 4% to 5%) are much less than those 8½% to 9% yielded by Govt. long term securities which are considered as 'guilt edged securities' i.e. Securities which are 100% secured and safe. This is due to the fact that investment in real estate is subject to 'Capital Appreciation' (Values of properties appreciating with spread of development and rise in income level) and is guarded against 'Capital Erosion' (with increase in inflation rate, values of properties also rise) while investment in money form does not experience 'Capital Appreciation' and is subject to 'Capital Erosion'.

The supreme court of India seem to have overlooked this fact (Since it might not have been brought to the notice of the Supreme Court by the parties concerned) while ruling that in the case of real estate, appropriate Y.P. for capitalizing net income should be taken between 8 to 12 (i.e. rate of interest would then be 12½ to 8.33%) which may be correct in the case of developed countries where towns have almost reached saturation point and town growth is slow and where inflation rates are low between 2% to 3%.

Economic Factors

1. It is seen that values of properties are subject to effect of (1) Physical factors such as increase in population (demand for residential properties) increase in employment in trade and commerce (demand for commercial properties) development of infrastructure and spread of town etc. (2) Changes in legislation such as rent control act, Urban land ceiling etc or changes in development control rules (3) Changes in govt. policies especially fiscal policies regarding rate of interest, cash reserve ratio, development policies like giving incentive to housing and infrastructure development etc. and (4) Economic factors all of which affect either demand or supply or both, of properties. Since a valuer is many a time required to give opinion and advice about possibilities of changes in rental and capital values of properties, he is required to study all these aspects and their effect on property values. While the effect of first three aspects is clear and obvious / perceptible, the effect of economic factors needs some explanation.
2. The economic factors having effect on investment in real estate can be briefly outlined as gross domestic product (G.D.P.) and per capita income (P.C.I.), domestic savings, investment of domestic savings in various alternative forms like Govt. securities, fixed deposits, capital market i.e. shares and debentures,

real estate, gold and jewellery, saving bank account, cash in hand etc. A valuer has to study fluctuations in investments of domestic savings in these alternative forms especially those in investments in real estate so as to be able to reasonably know the future trends in real estate so as to be able to reasonably know the future trends in real estate market.

3. A valuer is also advised to study the changes in Net Fixed Capital Formation (N.F.C.F.) (excluding stock in hand which can be manipulated) in various sectors of economy especially those in Construction (supply of real estate) and in Real Estate (demand for real estate), so as to know trends in future, The information regarding Net Fixed Capital Formation is available at National and State levels. These however give enough indication of trends in the RE market.

27.4 DUTIES OF A VALUER

General

A valuer has three fold duties viz. –

- 1) Duty to the client
- 2) Duty to the profession of valuers and
- 3) Duty to the society.

Performing duties to the profession will, in general, take care of his duties to the society.

Duty to the Client

It is a primary duty of a valuer to give services to his client to the satisfaction of the client without sacrificing his duties to the profession of valuers. Receiving and accepting instruction from a client costs contractual obligation on a valuer. He is free to adopt any method or approach to valuation, but once he adopts a certain method he should take all the reasonable care, (i) in collecting all the necessary information and data which should be first hand evidence duly verified personally and no hearsay evidence (ii) In analyzing the information and data (iii) In arriving at the logical conclusions and (iv) In expressing opinion and advice in definite, clear and unambiguous words and terms. In exercising reasonable care, the care to be taken is that as is expected from an ordinarily competent professional valuer unless a valuer claims himself to be highly experienced expert and reputed valuer, in which case the standard of care is that as can be expected from such highly experienced, expert valuer.

In case, a value fails to exercise standard of case in performing his function he may have to face charges of negligence. It may be stressed that the criteria for deciding

negligence is not the wrong figure or result but the way, the process, in which the result is arrived at. A valuer should therefore take all the reasonable care in performing his functions, in performing the job as a professional valuer.

Duty to profession

1. The first and foremost duty of a valuer to the profession is that he should have perfect integrity to the profession. It is expected that he must have full involvement in the subject matter i.e. the job, but at the same time he should have no involvement either in the person i.e. his client or in the property to be valued. In case he has any such involvement it is his primary duty to disclose it. A valuer should have no bias in performing the job. When he is unable to give opinion and/or advise as desired by a client he should courteously refuse to accept the work. Integrity to the profession comes first than that to a client.
2. Secondly a valuer should always remember that honesty is the best policy, inside and outside the court. In case he has not done something, he should not pretend to have done it, in which case he is prone to being exposed. When he has not done something he should say so, otherwise should also give logical justification for not doing it.
3. Lastly but most importantly, while performing the job he should always be true to his own conscious. He should perform his task and give opinion according to his own conscious and not according to somebody else's conscious. Remember no one can ever deceive one's own conscious.
4. The professional standard e.g. valuation standards in case of valuers, generally prescribe "Do's and DO Nots, which can be summed up in three simple words viz. Honesty, Integrity to profession and ones own Conscious. By observing honesty, integrity to profession and following one's own conscious a valuer will have automatically duly observed all the Valuation Standards.

27.5 PROFESSIONAL ETHICS

What is ethics?

The word ethics relates to the 'Values' and essentially the moral values.

We are living in a society as human beings and the society expects a reasonable standard of moral values from all its members. In order to live peacefully in this world and also to conduct day to day business smoothly, direct or indirect support, cooperation and positive response from other members of the society is necessary.

In this connection, it is worthwhile to mention the four-way test given by Rotary International, which reads as follows:

The four way test of the things, we think, say or do:

- (i) Is it the truth?
- (ii) Is it fair to all concerned?
- (iii) Will it build goodwill and better friendship?
- (iv) Will it be beneficial to all concerned?

Before thinking, saying or doing anything, one must ask these four questions to himself and wait for the reply from his own conscience. The conscience will give a correct answer and what one has to do is just to follow the answer given by his conscience. One can then say that he has behaved **ethically**. Everybody has thus to follow certain ethical standards in the day to day life.

A professional

Ethical standard have to be followed by one and all members of a society.

When one enters into any profession, his responsibility increases. He must behave as a 'Professional' if he wants to be recognized as 'Professionals' in the society.

A professional is a person who converts his training, skill, knowledge, intellect etc. into 'Service' which he imparts to the client / customer and in turn earns money in lieu of his services, e.g. a Lawyer, an Engineer, a Doctor, a Chartered Accountant, a Valuer, an Insurance Consultant etc.

Ethics in a profession

In any profession there are number of professionals who are the family members of that fraternity. Though they are the competitors of each other, the competition has to be a healthy one and also a competition with cooperation.

Thus, to maintain healthy environment in the profession in particular and in turn in the society in general, all professionals have to follow certain norms of professional ethics and observe certain code of conduct in their behaviour, which will ensure smooth functioning of the profession and also better services to the clients.

Ethics in Valuation Profession

A person engaged in the valuation profession also has to observe certain ethics and code of conduct. Importance of ethical behaviour by a valuer increases because of the fact that he deals with the financial matters of his client, in which interest of some other parties may also be involved. In the case of valuation for mortgage purpose for example, financial institute giving loan, is also interested. Similarly, in cases of

insurance, taxation etc. insurance company, taxation authority etc. are also interested. Thus, deviation from ethical behaviour by a valuer is harmful to at least one of the parties - either the other party, and also spoil or taints his image as a valuer and run affects his practice in the long.

27.6 THE CODE OF CONDUCT

1. To ensure mutual co-operation amongst members by free inter-change of opinion and experience.
2. To endeavor to protect the profession of valuation concerning all categories from misrepresentation and misunderstanding.
3. To express an opinion only when it is founded on adequate knowledge and honest conviction if he is serving as a witness before a court or commission.
4. To hold in regard the professional reputation of other Corporate Members and not to injure directly or indirectly the professional reputation or practice of another Corporate Member.
5. To exercise the restraint in criticizing the work of another Corporate Member.
6. To refrain from associating in work with another valuer who does not conform to ethical practice.
7. To refrain from misrepresenting his qualifications to a client or to the profession.
8. To treat all information acquired during the course of the business strictly confidential unless released by the client or demanded by a court of law.
9. To present clearly the consequence to be expected if the professional judgement is overruled by a non-professional adequacy of work.
10. To observe integrity and fair play in the practice of the profession of valuation.
11. To refrain from undertaking to review the work of another Corporate Member of the same client except under Government orders and/or with the knowledge of the first Corporate Member.
12. To present the information to the Council of the Institution for action if a Corporate Member considers that another Corporate Member is guilty of the unethical, illegal or unfair practice.
13. To order his conduct according to the professional standards and customs of country when a Corporate Member is engaged in valuation work in a country abroad and to adhere as closely as is practicable to the principles of his code.
14. To give unbiased valuation reports conforming to the objective opinion of the property and not to attempt merely to accommodate the interests of the client.
15. To steer clear of situations where interests and duty clash.
16. To refrain from entertaining a client who either fails to declare that he had not engaged another valuer for the same valuation work or produces a clearance certificate of no-objection from the other valuer if already engaged.
17. To conduct yourself and the profession in a manner which will not prejudice your professional status or the reputation of the Institution.
18. To follow this code as amended and or revised from time to time.

Conclusion

To maintain the healthy relationship amongst the professionals and between professional and the client, it is must for every professional to follow the professional code of conduct and maintain certain ethical standards to ensure the smooth functioning of the profession and to reach the highest level of imparting the professional service.

28.0 Case Laws

28.1 K.P. VARGHESE vs. I.T.O.

1981 AIR 1922, Supreme Court of India, 4th September 1981

Capital gains-Whether understatement of consideration in a transfer of property is a necessary condition for attracting the applicability of sub-section (2) of section 52 of the Income Tax Act 1961 – Burden of proof of such understatement is on the Revenue- Interpretation of statute explained.

Note: *Section 52 of I.T. Act (Consideration for transfer in cases of understatement) is omitted by the Finance Act, 1987, w.e.f. 1-4-1988.*

FACTS

The appellant assessee sold his house in Ernakulam on 25th December 1965 to his daughter-in-law and five of his children for the same price of Rs.16,500 at which he purchased in the year 1958. Assessment of the assessee for the assessment year 1966-67 was thereafter completed in normal course and in this assessment, no amount was included by way of capital gains in respect of the transfer of the house, since the house was sold by the assessee at the same price at which it was purchased, and no capital gains accrued or arose to him as a result of the transfer.

On 4th April 1968, however, the Income Tax officer (I.T.O.) issued a notice under section 148 of the Act seeking to reopen the assessment of the assessee for the assessment year 1966-67 as the ITO proposed to fix the fair market value of the house sold by the assessee at Rs.65,000 as against the consideration of Rs.16,500 for which the house was sold and assess the difference of Rs.48,500 as capital gains in the hands of the assessee.

The objections raised by the assessee were overruled and an order of reassessment was passed by the Income Tax officer including the sum of Rs.48,500 as capital gains and bringing it to tax under sub-section (2) of section 52 taking the view that it was enough to attract the applicability of the sub-section if the fair market value of the property as on the date of the transfer exceeded the full value of the consideration declared by the assessee by an amount exceeding the declared value by more than 15%.

The assessee thereupon filed a writ petition in Kerala High Court challenging the validity of the order of reassessment insofar as it brought a sum of Rs.48,500 to tax relying on sub-section (2) of section 52 of the Income Tax Act, 1961. The writ petition was allowed, but in appeal the **Full Bench by a majority judgment agreed with the views of the Income Tax Officer** and dismissed the writ petition.

HELD

On appeal, **Supreme Court held** that sub-section (2) of sec. 52 can be invoked only where the consideration for the transfer has been understated by the assessee or in other words, the consideration actually received by the assessee is more than what is declared or disclosed by him and the burden of proving such under-statement or concealment is on the Revenue. This burden may be discharged by the Revenue by establishing facts and circumstances from which a reasonable inference can be drawn that the assessee has not a correctly declared or disclosed the consideration received by him and there is understatement or concealment of the consideration in respect of the transfer. Sub-section (2) has no application in case of an honest and bonafide transaction where the consideration received by the assessee has been correctly declared or disclosed by him, and there is no concealment or suppression of the consideration.

In the present case, it was not the contention of the Revenue that the property was sold by the assessee to his daughter-in-law and five of his children for a consideration which was more than the sum of Rs.16,500 shown to be the consideration for the property in the Instrument of Transfer and there was understatement or concealment of the consideration in respect of the transfer. It was common ground between the parties and that was a finding of fact reached by the Income-tax Authorities, that the transfer of the property by the assessee was a perfectly, honest and bonafide transaction where the full value of the consideration received by the assessee was correctly disclosed at the figure of Rs.16,500.

Therefore, subsection (2) had no application to the present case and the Income-tax officer could have no reason to believe that any part of the income of the assessee had escaped assessment so as to justify the issue of a notice under section 148. The order of re-assessment made by the Income-tax officer pursuant to the notice issued under section 148 was accordingly without jurisdiction and the majority judges of the Full Bench were in error in refusing to quash it.

The Supreme Court directed the Revenue to pay the costs of the assessee throughout. It is a well known fact borne out by practical experience that the determination of fair market value of a capital asset is generally a matter of estimate based to some extent on guess work and despite the utmost bonafides, the estimate of the fair market value is bound to vary from individual to individual. This condition of 15% or more difference is merely intended to be a safeguard against hardship which would be occasioned to the assessee if the inflexible rule of the thumb enacted in sub section (2) were applied in marginal cases.

The postulate underlying sub-section (2) is that the difference between one honest valuation and another may range upto 15% and that constitutes the class of marginal cases which are taken out of the purview of sub-section (2) in order to avoid hardship to the assessee.

**28.2 GOLD COAST SELECTION TRUST LTD. vs. HUMPHREY (INSPECTOR OF TAXES)
(1949) 17 ITR 19 (HL), 14 July 1948**

The appellant, the Gold Coast Selection Trust Ltd. carried on the trade of a dealer in stocks and share and an exploiter of and dealer in gold-mining concessions in the Gold Coast Colony. Its practice has been to acquire concessions for land considered to have gold bearing possibilities. Concessions so acquired were exploited by the Trust to the extent necessary for the ascertaining of their potentialities. If a concession was proved to be gold bearing, and if it appeared to the Trust that further development might result in the profitable production of gold, the Trust transferred such concession to a company, the business of which was to work the concessions and market the gold produced. The transferee company was in every case a public company, its directors were drawn from the directorate of the appellant company; and the consideration for the transfer of the concession was in each case satisfied by an issue of fully paid-up shares in the transferee company.

The shares so issued (hereinafter called vendor share) were of a par value equal to the price named in the agreement for the sale of the concessions as the sale price. Permission to deal in the shares of the transfer companies was accorded by the London Stock Exchange in each case, and dealings in these shares in limited quantities in fact took place. The vendor shares issued to the Trust together with other holdings acquired by it were large enough to give the Trust control over the company which was acquiring the concession from it.

The question that arose is whether fully paid shares acquired under the agreement by the Trust should, for income-tax purposes, be valued at what figure in money for the purpose of computation of the profits and gains of the Trust for the relevant year.

J. Viscount Simon held that:

When a trader in the course of his trade receives a new and valuable asset (not being money) as the result of sale or exchange, and if that asset takes the form of fully paid shares, the valuation will take into account not only the terms of the agreement but a number of other factors, such as prospective yield, marketability, the general outlook for the type of the business of the company which has allotted the shares, the result of a contemporary prospectus offering similar shares for subscription, the capital position of the company, and so forth. There may also be an element of value in the fact that the holding of the share gives control of the company. **If the asset is difficult to value but is nonetheless of a money value, the best valuation possible must be made. Valuation is an art, not an exact science. Mathematical certainty is not demanded, nor indeed is possible.** It is for the Commissioners to express their estimate in the money value attributed by them to the asset, and this is a conclusion of fact to be drawn from the evidence before them.

28.3 RUSTOM CAVASJEECOOPER vs. UNION OF INDIA
AIR 1970 SC 564, Supreme Court, 10th February 1970

Bank Nationalization case involved the Banking Companies (Acquisition and Transfer of Undertakings) Act of 1969 and some provisions of the Indian Constitution.

The science of valuation of property recognises several principles or methods for determining the value to be paid as compensation to the owner for the loss of his property. There are different methods applicable to different classes of property in the determination of the value to be paid as recompense for loss of property. A method appropriate to the determination of value of one class of property may be wholly inappropriate in determining the value of another class of property.

The important methods of determination of compensation are:

- (i) market value determined from sales of comparable properties, proximate in time to the date of acquisition, similarly situate, and possessing the same or similar advantages and subject to the same or similar disadvantages. Market value is the price the property may fetch in the open market if sold by a willing seller unaffected by the special needs of a particular purchase;
- (ii) capitalization of the net annual profit out of the property at a rate equal in normal cases to the return from gilt-edged securities. Ordinarily value of the property may be determined by capitalizing the net annual value obtainable in the market at the date of the notice of acquisition;
- (iii) where the property is a house, expenditure likely to be incurred for constructing a similar house, and reduced by the depreciation for the number of years since it was constructed;
- (iv) principle of reinstatement, where it is satisfactorily established that reinstatement in some other place is bona fide intended, there being no general market for the property for the purpose for which it is devoted (the purpose being a public purpose) and would have continued to be devoted, but for compulsory acquisition. Here compensation will be assessed on the basis of reasonable cost of reinstatement;
- (v) when the property has outgrown its utility and it is reasonably incapable of economic use, it may be valued as land plus the break-up value of the structure. These are, however, not the only methods.

The court further stated these are however, not the only methods. The method of determining the value of the property by application of an appropriate multiplier to

the net annual income or profit it is a satisfactory method of valuation of land with buildings, only if, the land is fully developed i.e., it has been put to full use legally permissible and economically justifiable and the income out of the property is normal commercial and not a controlled return or a return depreciated on account of special circumstances. If the property is not fully developed or the return is not commercial, the method may yield a misleading result.

28.4 HAYES' WILL TRUSTS vs. HAYES AND OTHERS (1971) 1 WLR 758

By his will dtd.23 February 1962, the testator Thomas Wilfred Hayes appointed Ruth Hayes (widow), son Wilfred Thomas Hayes and others to be the executors and trustees of his will.

On 16 February 1967, the testator died and on 30 June 1967 the will and codicil were proved by all the executors. The executors agreed to sell the real property to the son at the agreed estate duty valuation. Defendants considered the price to be too low and objected to the sale.

For the purposes of estate duty assessment, the valuation should be the **best possible price** which it would fetch in the open market if sold in lots and not at the lower price which it would fetch if sold as a whole.

Thomas J. of Chancery Division held that the words “**best possible price**” are directed to the sale being in such manner as would obtain the best possible price in the market. It does **NOT mean** that the price to be fixed by valuation is the **highest possible price that might be obtained**. It has been established time and again in these courts that there is a range of price, in some circumstances wide, which competent valuers would recognise as the price which “property would fetch if sold in the open market.” The most likely price, in the absence of consultation between the valuers representing conflicting interests, would presumably be the **mean price**.

28.5 V.C. RAMCHANDRAN vs. C.W.T. (1980) 126 ITR 157, Karnataka High Court, 16th March 1979

Whether the market value of a residential building under self-occupation of the owner-assessee for purposes of levying wealth tax under the W.T. Act should have been ascertained under capitalization of annual rental value method, and not by adopting the land and building method, is the precise question of law arising for consideration.

The assessee owns several house properties in the City of Bangalore and one of them (23,280 square feet site area with 3845 sq. ft. building) under consideration is self-occupied by the assessee.

HELD

If there are more than one valuation of the same property, the one which is reasonable and nearer to the correct market value, having due regard to all the relevant facts and circumstances of the case alone should be accepted. Therefore, in such a case if the higher valuation between several valuations appears to be a reasonable one, the same has got to be accepted. We are unable to accede to the submission that in cases where value of the property is ascertained under more than one method, the lowest should be accepted.

However, statutory valuations such as those under Wealth Tax Act are done in the manner prescribed under the relevant statute rather than by the application of the general principles of valuation.

28.6 SUBHAKARAN CHOWDHURY vs. INSPECTING ASSISTANT COMMISSIONER (I.A.C.) (1979) 118 ITR 111, Calcutta High Court, 26th February 1979

Wholly tenant-occupied property should be valued by rental method

FACTS

On 8-9-1972, a valuer had valued the said property at Rs.1,32,000 on the rental method as the said property was fully tenanted. On 15-11-1972, the petitioners registered a deed of conveyance in respect of a property for a consideration of Rs.1,35,000 and obtained possession from the vendors. On 23-4-1973, the competent authority issued a notice under section 269D(1) of I.T. Act for the purpose of acquisition of the said property. The IAC estimated the value of the land at the rate of Rs. 30,000 per Cottah as prevalent in the vicinity. On this basis, he estimated the total value of the land at Rs. 2,00,000. Since the apparent consideration exceeded more than 25 per cent, he had initiated the acquisition proceedings.

HELD

The definition provided under clause (d) of section 269A of the Act says "fair market value" is value which a property would fetch in sale in open market. The value of a property to a particular purchaser or to a particular person is not the fair market value of the property. A particular purchaser or a particular tenant may have a particular value for the property. But, in respect of the entirety of the tenanted premises, that value to the particular tenant may be different from the fair market value and for the purpose of this section one has to proceed on the basis of **fair market value**, that is to say, the value **which a tenanted premises would fetch in open market** and on that basis the fact that the entirety of the premises was tenanted was a factor relevant in determining whether there has been under-valuation and that factor does not seem to have entered into the consideration of the IAC before initiation of the proceeding.

If the premises in question is let out to tenants, then, according to the prevalent view, the premises in question has to be valued **not** on the basis of the value of the land but on the rental method. This has been the view of this court following several decisions of the Supreme Court as would be apparent from the decision in the case of *CIT v. Panchanan Das* [1979] 116 ITR 272 (Cal) and in the case of *CIT v. Smt. Ashima Sinha* [1979] 116 ITR 26 (Cal).

28.7 WENGER & CO. vs. D.V.O.

(1978) 115 ITR 648, Delhi High Court, 30th August 1978

Combination of Methods can be applied.

Wenger building of the assessee situated at Connaught Place area of New Delhi was erected on land obtained on perpetual lease. **Part of building was occupied by petitioner and rest of building was occupied by tenants**. DVO valued portion occupied by tenants by capitalizing rental value and valued self-occupied portion on basis of prevailing rates of property in same area but he valued land on basis of sale of adjacent property.

On writ, the petitioners challenged the valuation of the owner occupied portion of the building contending that the valuation should have been done on the basis of the annual letting value fixed for the tenanted portions.

The contention of the petitioners that valuation of the self-occupied portion should have been done on the basis of standard rent or annual letting value was not well founded. It is a well-known fact that giving vacant possession of buildings, though previously rented out, fetches better market price. It cannot be assumed that the hypothetical purchaser would let out the self-occupied portions which he buys from the hypothetical seller or would let out such portions in the condition in which he buys them. Therefore, the very premise on which the argument was founded was faulty.

It is one of the settled principles of valuation that market value has to be ascertained by considering sales of similar properties in the same neighbourhood or similar environment. If there are no such instances of sales available, then capitalisation of rent or making some sort of comparative evaluation of sales of other properties is an acceptable mode of valuation.

28.8 SORAB TALATI vs. JOSEPH MICHEM

Appeal 101 of 1949, Court of Small Causes at Bombay, 15th December 1949

Investment Theory of Rent

In 1949, Small Causes Court of Bombay, for the first time, laid down principles of Rent Fixation (Standard Rent) in the case of Sorab Talati. In this case, the Court approved of Investment Theory in preference to Comparable Rent Theory to fix Standard Rent of the rent controlled premises. In this case, the court considered return or yield from Gilt Edged Security as the basis for determining fair return to the landlord on his investments in land and buildings. Considering and comparing alternative forms of sound investments viz. Govt. Security and immovable property, the Court upheld the following returns as fair returns to the landlord on his capital investment in land and buildings.

1.50% return i.e. more than the average yield on long term government security was approved as fair return on land investment and 2.50 % return more than the average yield on long term government security was approved as fair return on investment in buildings. For leasehold properties, 1% extra yield on both types of investment was considered fair to account for the extra risk of investing capital in leasehold properties.

Note : This is one of the very first case laws post-independence on the subject of rent fixation based on reasonable return to the landlord on his investment in a freehold property under the Bombay Act 57 of 1947, by considering the net yield on gilt-edged securities as the basis of comparison. However, there are more lucrative forms of investments that have evolved in the general investment market and net returns from such available options have been favoured for consideration in valuation, and also ratified by various court decisions such as *Union of India vs. Shanti Devi (Supreme Court, AIR 1983 SC 1190)*.

28.9 C.W.T. vs. P. N. SIKAND

1977 AIR 1657, Supreme Court, 1st April 1977

Unearned increase "payable" to the lessor as per the agreement is deductible out of the valuation for leasehold interest

This Appeal raised an interesting question of law relating to valuation of leasehold interest in land when there is a covenant in the lease that the lessee shall not be entitled to assign the leasehold interest without obtaining the prior approval in writing of the lessor and the lessor shall be entitled to, claim and recover from the, lessee a certain specified proportion of the unearned increase in the value of the land at the time of the assignment.

The land belonged to the President of India and it was leased by the President of India to one Vashesharan Devi on the terms and conditions set out in an agreement of lease dated 30th December 1954 and the leasehold interest was acquired from Vashesharan Devi by the assessee. The premium for the grant of the lease was Rs.24,400 and the annual rent was fixed at Rs.610 subject to certain variations. The following terms and conditions of the lease are important and material:

"the lessee shall before any assignment or transfer of the said premises hereby demised or any part thereof obtain from the lessor or such officer or body as the lessor may authorise in this behalf approval in writing of the said assignment or transfer and all such assignees and transferees and the heirs of the lessee shall be bound by all the covenants and conditions herein contained and the answerable in all respect therefore. Provided also that the lessor be entitled to claim and recover a portion of the unearned increase (i.e. the difference between the premium already paid and current market value) in the value of land at the time of transfer (whether such transfer is an entire site or only a part thereof), the amount to be recovered being 50 per cent of the unearned increase.

The Lessor shall have a pre-emptive right to the property after deducting 50 per cent of the unearned (torn) said."

The assessee constructed a large building on the land and the question arose as to how the leasehold interest of the assessee in the land together with the building should be valued.

The asset consists of leasehold interest of the assessee in the land together with the building constructed upon it. The building, of course, belongs to the assessee having been constructed by him and the determination of its value should not present any difficulty, because there are recognised methods of valuation of buildings. The difficulty, however, arises in regard to valuation of the leasehold interest in the land. The leasehold interest is held by the assessee under a lease-deed executed by the President of India.

Clause (13) of the lease-deed provides that the assessee shall not be entitled to assign the leasehold interest in the land without obtaining the prior approval in writing of the lessor and 50 per cent of the unearned increase in the value of the land at the time of the assignment shall be claimable by the lessor, and moreover, if the lessor so desires, he shall have pre-emptive right to purchase the property after deducting 50 per cent of the unearned increase in the value of the land.

The covenant in clause (13) is a covenant running with the land and it would bind whosoever is the holder of the leasehold interest for the time being. It is a Constituent

part of the rights and liabilities and advantages and disadvantages which go to make up the lease- hold interest and. it is an incident which is in the nature of burden on the leasehold interest. Plainly and indisputably it has the effect of depressing the value which the leasehold interest would fetch if were free from this burden or disadvantage. Therefore, when the leasehold interest in the land has to be valued, this burden or disadvantage attaching to the leasehold interest must be duly discounted in estimating the price which the leasehold interest would fetch. To value the leasehold interest on the basis that this burden or disadvantage were to be ignored would be to value an asset different in content and quality from that actually owned by the assessee.

The clause of payment of “unearned increase or increment” is a charge on the land before transfer is affected and has to be therefore deducted from total value of the property.

28.10 LAND ACQUISITION OFFICER vs. JASTI ROHINI
(1995) 1 SCC 717, Supreme Court, 27th October 1994
HELD

The reasonable method to determine the market value of the acquired land is on the evidence of transactions of bona fide sales of acquired land, but **not on** evidence of sales of such land **got up** having had knowledge of the proposed acquisition.

Reliance of **small extents** of land does **not** furnish any satisfactory basis or offer assistance for fixation of the market value of **vast area**.

28.11 SUBH RAM & OTHERS vs. STATE OF HARYANA & ANOTHER
(2010) 1 SCC 444, Supreme Court, 20th October 2009

Concept of deduction of development cost to arrive at market value of undeveloped land from value of developed land

These appeals relate to determination of compensation for 38.48 acres of land in village Jharsa, Tehsil & District Gurgaon, Haryana, acquired for establishment of a jail.

If the market value of a large tract of agricultural and or undeveloped non-agricultural land possessing potential for development is to be determined with reference to the market value of a small residential plot situated in a neighbouring residential layout, it becomes necessary to work back the market value of the large tract of undeveloped land from the market value of the small residential plot. This is because the value of one square yard of undeveloped land is not the same as one square yard of developed residential plot. If there is a large tract of agricultural or undeveloped land, obviously the entire extent cannot be sold as residential plots.

If the agricultural or undeveloped land has to be sold as residential plots, it is first necessary to make a layout of plots in such land. This would mean that a provision will have to be made for roads to provide access to each plot in the layout. A minimum of 25% of the total land area will be utilised for roads.

A typical layout will also have cross-roads, and areas earmarked for park, and/or community areas. Consequently non-saleable area (area which cannot be sold as plots) would be around 30% to 40% of the total area. Therefore, in the hypothetical layout method of determination of market value, as a first step, the areas that will be used up for roads, drains, parks/playgrounds and community areas, will have to be excluded from the total extent of the acquired land. The standard deduction in this behalf is one-third (33%). But merely deducting the areas required for roads, drains, parks and community areas, will not convert a large tract of agricultural or undeveloped land into a developed residential layout. For that, considerable financial outlay has to be made. The land will have to be levelled.

The land will have to be converted from agricultural use to non-agricultural residential use by paying necessary fees/fine to the Revenue/development authorities. Then the roads will have to be asphalted or concreted. Drains will have to be dug and lined with reinforced cement concrete or stone, for drainage of rain water. Electricity, water, and sewage lines will have to be laid. Deposits will have to be made to the Authorities dealing with electricity, water, sewage removal. The development will also involve the service of surveyors, engineers and developers. All these involve considerable expenditure. Further, as there will be a time gap between the expenditure for development and the actual sale of plots, the cost of development will also have an element of interest on investment. The developer who undertakes the development and invests the monies for development would also expect a reasonable profit when the plots are sold. All these expenditure and factors are standardised into another one-third (33%) deduction towards expenses of development.

Thus, if the valuation of a large extent of agricultural or undeveloped land is to be based on the sale price of a small developed plot in a private layout, then the standard deductions should be one-third (for roads etc.) plus one-third (for expenditure of development) in all two thirds (or 67%), as 'development cost' from the value of small plot. The percentage of deduction may however vary between 20% to 75% depending on several circumstances.

The **purpose of acquisition can never be a factor to increase the market value** of the acquired land.

Deduction of ₹development cost' is the concept used to derive the ₹wholesale price' of a large undeveloped land with reference to the ₹retail price' of a small developed

plot. The difference between the value of a small developed plot and the value of a large undeveloped land is the ₹development cost'

**28.12 JAWAJEE NAGNATHAM vs. REVENUE DIVISIONAL OFFICER
(1994) 4 SCC 595, Supreme Court, 25th January 1994**

Basic Valuation Register is not an evidence to determine the market value

Basic valuation register maintained by the registering authority for collection of stamp duty has no statutory base and cannot form any basis to determine market value.

The Basic Valuation Register is prepared in official capacity by Revenue Department to collect stamp duty and registration charges.

Section 47A of the Indian Stamp Act, 1899 (amendment for Andhra Pradesh) conferred no express power to the government to determine the market value of the lands prevailing in a particular area, village, block, District or the region and to maintain Basic Valuation Register for levy of stamp duty for registration of an instrument, etc.

The Basic Valuation Register had no statutory foundation and therefore it does not bind the parties. Neither the Registrar nor the vendor is bound by it. The market value of the land for proper stamp duty has to be determined as per the law under Section 47A itself.

The Basic Valuation Register prepared and maintained for the purpose of collecting stamp duty has no statutory base or force. It cannot form a foundation to determine the market value mentioned there under in instrument brought for registration. Evidence of bonafide sales between willing prudent vendor and prudent vendee of the land acquired or situated near about that land possessing same or similar advantageous features would furnish basis to determine market value.

**28.13 CHIMANLAL HARGOVINDDAS vs. S.L.A.O. (Poona)
AIR 1988 SC 1652, Supreme Court, 21st July 1988**

Sale Comparison Technique – General guidelines for adjustment of most comparable instances to provide index of market value

Land at Tigris Camp in Poona was placed under acquisition for purpose (i.e. construction of Rural Police Headquarters).

Comparative Method entails making valuations by directly comparing the properties under consideration with comparable properties which have been sold recently after proper selection of comparables and after making necessary allowance i.e. **loading** the price reflected in the instance taken as norm **for plus factors** and **unloading** it **for minus factors**.

This technique aims at utilising the information available from instances of sales of comparable properties for the purpose of estimation. It is based on the principle that a well informed purchaser will pay no more for a property he would like to purchase than the cost to him of acquiring a substitute property having practically the same utility.

The case of Chimanlal Hargovinddas lays down norms for index of market value as also for drawing out the balance sheet of plus and minus factors. In this case, the Supreme Court has observed that while determining market value of land, the following factors have to be borne in mind:

1. Determined as on crucial date of publication of the modification under Section 4 of Land acquisition act (dates of notification under section 6 and 9 are irrelevant)
2. The determination has to be made standing on the date line of valuation (date of publication of notification under Section 4) as if the valuer is a hypothetical purchaser willing to purchase land from the open market and is prepared to pay a reasonable price as on that day. It has also to be assumed that the vendor is willing to sell the land at a reasonable price.
3. In doing so by the instances method, the Court has to correlate the market value reflected in the most comparable instance which provides the index of market value.
4. Only genuine instances have to be taken into account. (Sometimes instances are rigged up in anticipation of acquisition of land).
5. Even post notification instances can be taken into account,
 - a. If they are very proximate
 - b. Genuine
 - c. The acquisition itself has not motivated the purchaser to pay a higher price on account of the resultant improvement in development prospects.
6. The most comparable instances out of the genuine instances have to be identified on the following considerations :
 - i. Proximity from the time angle ;
 - ii. Proximity from the situation angle.
7. Having identified the instances which provide the index of market value, the price reflected therein may be taken as the norm and the market value of the land under acquisition may be deduced by making suitable adjustments for the plus and minus factors vis-à-vis land under acquisition by placing the two in juxtaposition.
8. A balance sheet of plus and minus factors may be drawn for this purpose and the relevant factors evaluated in terms of price variation as a prudent purchaser would do.
9. The market value of the land under acquisition has thereafter to be deduced by loading the price reflected in the instance taken as norm for plus factor and unloading it for minus factors.

The exercise in the process 1 to 9 has to be undertaken in common sense manner as prudent man of world of business would do.

Illustration :

Plus factors	Minus factors
Smallness of size	Largeness of area
Proximity to the road	Situation in the interiors at a distance from the road.
Frontage as a road	A narrow strip of land with very small frontage compared to the depth
Nearness to developed area	Lower level requiring the depressed portion to be filled up.
Regular shape	Remoteness from developed locality
Level vis-à-vis land under acquisition	Some special disadvantage factor which would deter a purchaser.
Special value for an owner of an adjoining property to whom it may have some very special advantage	

The evaluation of these factors of course depends on the facts of each case. They cannot be any hard and fast or rigid rule. Common sense is best and most reliable guide.

28.14 Duncan Industries Ltd. vs. State of UP
AIR 2000 SC 355

Judicial interpretation of plant & machinery for stamp duty purpose

(I) Facts of the Duncan Industries Ltd. case:

- ICI India Ltd. by an agreement of sale dated 11-11-1993 agreed to transfer on an “as is where is” and “as a going concern” its fertilizer business of manufacturing, marketing, distribution and sale of urea fertilizer in favour of Duncan Industries Ltd. (DIL) for a total consideration of INR 700 million. The said agreement also stated that the vendor would on the “transfer date” transfer the business by actual delivery of possession to DIL, in respect of such of the estates and properties mentioned in the agreement as were capable of being transferred by actual and/or constructive delivery and in respect of the estates requiring transfer by execution of necessary documents vesting the title thereof in DIL, and it was further agreed and declared that the ownership in respect of the assets and properties comprised in the “fertilizer business” to be transferred as per

the agreement, would be deemed to be vested in DIL on and from the “transfer date” which according to the agreement means 11-12-1993.

- Pursuant to the said agreement, a deed of conveyance dated 9-6-1994 was executed by ICI in favour of DIL, on the presentation of the said conveyance deed for registration, the registration authorities levied stamp duty on plant & machinery also, over and above immovable property. This was challenged by DIL in the High Court.

(II) The arguments advanced by the learned senior counsel appearing for the appellant:

- That the High Court committed an error in coming to the conclusion that the plant & machinery which were transferred by the vendor to the appellant, were immovable properties, attracting the provisions of the Stamp Act and at any rate under the conveyance deed dated 9-6-1994, the vendor had not conveyed any title to the appellant in regard to these plant & machinery. It was also contended that the High Court failed to look into the intention of the parties who by an agreement date 11-11-1993 had treated the plant & machinery as movables and have delivered possession of the said plant & machinery as movables on 11-12-1993. Hence, the said plant & machinery is neither immovable property nor the property which has been transferred by virtue of the deed of conveyance dated 9-6-1994. Therefore, the value of the said plant & machinery could not have been taken into consideration for the purpose of arriving at the correct and true value of the property conveyed under the deed of conveyance. He also contended that the valuation in regard to the plant & machinery made by the authorities and as accepted by the High Court is incorrect and contrary to law.

(III) The argument advanced by the learned senior counsel appearing on behalf of the State:

- That the document dated 11-11-1993 (agreement of sale and transfer of fertilizer business) by ICI in favour of the DIL contemplated an agreement to transfer the business of manufacturing, marketing, distribution and sale of urea fertilizer that is fertilizer business itself with a stipulation that the first stream, second stream and the third stream urea manufacturing plants as well as the Ammonia manufacturing plants would also be transferred as a part of the transfer of fertilizer business of the ICI as going concern. He also contended that a reading of the documents at Para 1(c)(i) of the said agreement which defines “fertilizer business” clearly

shows that the intention of the vendor was to transfer all properties that comprised the fertilizer business.

(IV) Views of the Hon'ble Supreme Court on arguments advanced by the counsels from both the sides:

- We have heard learned counsels for the parties and the question that arises for our consideration is: whether by the conveyance deed dated 9-6-1994, the plant & machinery were also transferred and if so, whether the High Court was right in accepting the valuation as made by the authorities for the purpose of stamp duty payable?
- Considering the question whether the plant & machinery in the instant case can be construed as immovable property or not, the High Court came to the conclusion that the machineries which formed the fertilizer plant, were permanently embedded in the earth with an intention of running the fertilizer factory and while embedding these machineries the intention of the party was not to remove the same for the purpose of any sale of the same either as a part of a machinery or scrap and in the very nature of the user of these machineries, it was necessary that these machineries be permanently fixed to the ground. Therefore, it came to the conclusion that these machineries were immovable property, which were permanently attached to the land in question. While coming to this conclusion the learned Judge relied upon the observations found in the case of **Reynolds v. Ashby and Son, (1904) AC 466** and **Official Liquidator v. Sri Krishna Deo, AIR 1959 All 247**. We are inclined to agree with the above finding of the High Court that the plant & machinery in the instant case are immovable properties. The question whether machinery, which is embedded in the earth, is movable property or an immovable property, depends upon the facts and circumstances of each case. Primarily, the Court will have to take into consideration the intention of the parties when it decided to embed the machinery whether such embedment was intended to be temporary or permanent. A careful perusal of the agreement of sale and conveyance deed along with the attendant circumstances and taking into consideration the nature of machineries involved clearly shows that the machineries which have been embedded in the earth to constitute a fertilizer plant in the instant case, are definitely embedded permanently with a view to utilize the same as a fertilizer plant. The description of the machines as seen in the Schedule attached to the deed of conveyance also shows without any doubt that they were set up permanently in the land in question with a view to operate a fertilizer plant and the same was not embedded to dismantle and remove the same for the purpose of sale as machinery at any point of

time. The facts as could be found also show that the purpose for which these machines were embedded was to use the plant as a factory for the manufacture of fertilizer at various stages of its productions. Hence, the contention that these machines should be treated as movables cannot be accepted. Nor can it be said that the plant & machinery could have been transferred by delivery of possession on any date prior to the date of conveyance of the title to the land. The learned senior counsel for DIL, in support of his contention that the machineries in question are not immovable properties, relied on a judgment of this Court in *Sirpur Paper Mills Ltd. vs. Collector of Central Excise, Hyderabad*, (1998) 1 SCC 400: (1998 AIR SCW 366: AIR 1998 SC 1489). In the said case, this Court while considering the leviability of excise duty on paper-making machines, based on the facts of that case, came to the conclusion that the machineries involved in that case did not constitute immovable property. Whether a thing is a machine or immovable property depends upon the facts and circumstances of each case. The Court considering the said question will have to take into consideration the intention of the parties, which embedded the machinery, and also the intention of the parties who intend alienating those machineries. In the case cited by Mr. Verma, this Court in para 4 of the judgment had observed thus: "In view of this finding of fact, it is not possible to hold that the machinery assembled and erected by the appellant at its factory site was immovable property as something attached to earth like a building or a tree. The Tribunal has pointed out that it was for the operational efficiency of the machine that it was attached to earth. If the appellant wanted to sell the paper-making machine it could always remove it from its base and sell it."

- From the above observations, it is clear that this Court has decided the issue in that case based on the facts and circumstances pertaining to that case hence the same will not help the appellant in supporting its contention in this case where after perusing the documents and other attending circumstances available in this case, we have come to the conclusion that the plant & machinery in this case cannot but be described as an immovable property. Hence, we agree with the High Court on this point.
- The next question for consideration is whether the vendor did transfer the title of the plant & machinery in the instant case by the conveyance deed dated 9-6-1994. Here again, it is imperative to ascertain the intention of the parties from the material available on record. While ascertaining the intention of the parties, we cannot preclude the contents of the agreement pursuant to which the conveyance deed in question has come into existence. We have noticed that as per the agreement it is clear what

was agreed to be sold is the entire business of fertilizer on an “as is where is” basis including the land, building thereon, plant & machinery relating to fertilizer business-description of which is found in the definition of the term “fertilizer business” in the agreement itself which has been extracted by us hereinabove. It is not the case of the appellant when it contends that the possession of plant & machineries was handed over separately to the appellant by the vendor that these machines were dismantled and given to the appellant, nor is it possible to visualize from the nature of the plant that is involved in the instant case that such a possession de hors (not including) the land could be given by the vendor to the appellant. It is obviously to reduce the market value of the property the document in question is attempted to be drafted as a Conveyance Deed regarding the land only. The appellant has embarked upon a methodology by, which it purported to transfer the possession of the plant & machinery separately and is contending now that this handing over possession of the machinery is de hors (not including) the conveyance deed. We are not convinced with this argument. Apart from the recitals in the agreement of sale, it is clear from the recitals in the conveyance deed itself that what is conveyed under the deed dated 9-6-1994 is not only the land but the entire fertilizer business including plant & machinery.

Verdict of the court

For the reasons stated above, we are of the considered opinion that the vendor as per the conveyance deed dated 9-6-1994 has conveyed the title it had not only in regard to the land in question but also the entire fertilizer business in “as is where is” condition including the plant and machinery standing on the said land. Therefore, the authorities below were totally justified in taking into consideration the value of these plant and machineries along with the value of the land for the purpose of the Act.

28.15 Commissioner of Wealth-Tax vs. Purshottam N. Amersey and anr. (1969) 71 ITR 180 (Bom)

‘If sold in the open market’

“.....it would fetch **if sold in the open market.....**” it must have regard to the actual facts and the actual circumstances and decide whether the asset could be sold or not in the open market. In that respect, it seems to us that the Tribunal was clearly wrong on a point of construction. When the statute uses the words “if sold in the open market”, it does not contemplate any actual sale or the actual state of the market, but only enjoins that it should be assumed that there is an open market and the property can be sold in such a

market and on that basis directs that the value should be found out. It is a hypothetical case, which is contemplated by those words of the sub-section. The tax officer must assume that there is an open market in which the asset can be sold and proceed to value it on that basis. The use of the words ‘if sold’ creates a fictional position, which the tax officer has to assume.”

**28.16 Dr. K. A. Dhairawan and Others - The appellants, as trustees, of the Mankeshwar Temple Trust vs. J. R. Thakur and Others - The Respondents
AIR 1958 SC 789**

If there are no rights in the property, there is no value.

In valuation of property, we are valuing the rights of individuals in the property and **there can even be a negative right of an individual in a property.**

An interesting case came up before the Supreme Court of India - Dr. K. A. Dhairawan and Others - The appellants, as trustees, of the Mankeshwar Temple Trust vs. J. R. Thakur and Others - The Respondents (AIR 1958 SC 789).

The lessor ‘A’ granted a lease to lessee ‘B’ for a period of 21 years on certain terms and conditions –

- Lease rent of ₹ 50/- per month.
- Under the terms of the lease, the lessees were to construct a double storied building on the land at a cost of not less than ₹ 10,000/-.
- On the termination of the lease, either at the end of 21 years or earlier, the lessees were to surrender and yield up the demised premises including the building with its fixtures and appurtenances to the lessors free of cost.

Accordingly, lessee constructed a building and sub leased to various parties on certain rent.

Lessors served a notice to quit before the expiry of lease and as lessee did not quit, the lessor filed a suit and Supreme Court held as under:

Lessee has no right over the land after the expiry of lease period. The building constructed by the lessee shall vests with the lessors and rent received by the lessee shall be received by the lessor after the expiry of lease period.

The gist of the judgement is given below:

Facts of the case –

The lessors granted a lease of a parcel of land to the lessees for 21 years at a rent of ₹ 50/- per month. Under the terms of the lease, the lessees were to construct a double storied building on the land at a cost of not less than ₹ 10,000/-. The construction had to be to the satisfaction of the lessors' engineers, and the building had to be

insured for at least ₹ 12,000/- in the joint names of the lessors and the lessees with an insurance firm approved by the lessors. In case of damage or destruction, the building was to be repaired out of the money received from the insurance company. On the termination of the lease, either at the end of 21 years or earlier, the lessees were to surrender and yield up the demised premises including the building with its fixtures and appurtenances to the lessors free of cost. After the expiry of 21 years, the lessors filed a suit for a declaration that they were entitled to the building, and were entitled to claim possession of the same and to recover the rents and profits thereof. The lessees pleaded that they were lessees of the building and were protected from eviction therefrom by the provisions of the Bombay Rents, Hotel and Lodging House Control Act, 1947 and that the covenant for delivery of possession of the building could not be enforced as the lease in respect of the land could not be terminated on account of the protection given by the Act.

Held,

That upon a proper construction of the lease there was a demise only of the land and not of the building and consequently the provisions of the Act did not apply to the contract for delivery of possession of the building. The ownership in the building was with the lessees and in which the lessors had no right while the lease subsisted.

The appellants are entitled to a declaration that the building constructed on the land demised under the lease, belongs to the Mankeshwar Temple Trust and the said trust is entitled to recover all the rents and profits from the same and the respondents have no right, title and interest therein since the expiration of the said lease. The first respondent is directed to render an account of the rents received by him from the tenants of the building from 23-5-48 and to pay to the appellants the amount found due, after accounting, with interest at 6% per annum from 23-5-48 until payment. There will be an order of injunction restraining the respondents, their agents and servants from interfering with the collection of rents and profits by the appellants from the tenants of the aforesaid building. **Appeal allowed.**

Comments

If the above property had been mortgaged by lessee to the bank one year prior to expiry of lease period and repayment period of loan is 10 years, say after 2 years, lessee becomes a defaulter and at the time of taking loan, valuer had valued as land and building without considering the fact that lessee had a right for one year only. Imagine the fate of the bank!

The consideration of this legal aspect falls in the jurisdiction of a valuer.

In fact, such a situation had arisen where a public sector company advanced loan on a property mortgaged by the lessee. After mortgaging the property, the lessee had handed over the possession of the property to the lessor as per the terms of

lease agreement. Thereafter the lessee became the defaulter. The mortgagee wanted to recover the money by liquidating the security and for that served a notice to the lessor. **The lessor replied that he is the owner of the property, but he is not the party to mortgage transaction, and hence mortgagee has no right to recover money by liquidating his property.** The mortgagee approached a senior valuer in the Government Department for the advice. He advised that mortgagee can only recover from their valuer and legal advisor. These consultants did not look into lease agreement and did not advise that mortgagor is not the owner of the property but possessing lease hold rights for the certain period only and therefore mortgagee had to ensure that period of loan need to be less than the balance period of lease.

REPORT WRITING

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REPORT WRITING

1.0 Introduction

The valuer receives instructions from the client to carry out valuation of land and building. The valuer performs his duty as per the Terms of Reference and estimates value.

Right from taking instructions from client, inspecting the property, collecting data, analyzing data and estimating value, whatever he has done is to be reported in writing.

While writing valuation reports valuer has to keep in mind that the report – like painting, sculpture, or architecture – is an art form. It should be pleasing in appearance and precise in content. It should take the reader by the hand and lead him along the line of thought adopted by the writer toward the goal of a convincing conclusion. Along the way, the reader should find satisfaction, education, and evidence of skillful use of knowledge. In addition, the report should be professional in design, logical in reasoning, and completely convincing in text.

The following topics are covered in this chapter:

- Qualities of a Report on Valuation
 - Orderly and organized
 - Continuity
 - Properly arranged
 - Definite and concise

- General Structure of a Valuation Report
 - Parts of a Report
 - Assumptions and limitations
 - Method of valuation
 - Caveat
 - Confidentiality

- Physical
- Information
- Special Circumstances

2.0 Report on valuation is always written in a simple language like an essay for easy understanding to a non-professional. It should be able to create interest in the mind of a reader to read it from the beginning to the end, like reading a story or a novel. It is, therefore, necessary that a report should have certain specific qualities.

Qualities of a Report on Valuation

(a) Orderly and organized

The report should be orderly and organized. This implies that before writing a report, an order in which following points shall be incorporated, should be decided:

- information and data/facts,
- findings, and
- conclusion.

The order must follow:

- a definite,
- systematic, and
- logical sequence.

The information and data/facts, and findings must then be described in a series of paragraphs and each paragraph needs to be independent and yet logically following the earlier paragraph. Conclusion shall be given at the end.

(b) Continuity

In order to maintain continuity of a report while reading, no break should be felt between any of the parts of the whole report. It is,

therefore, necessary that schedules, statements, and such other information should not form part of the main body of the report, but instead be attached to the report as appendices/annexures. The executives referring the report are generally not interested in such statements and in case if they are interested, the same can be referred in appendices/annexures.

(c) Properly arranged

A report should be arranged in such a manner that a client can easily refer to any particular part of report without any difficulty. Headings and sub-headings to paragraphs should be given in such a way that a reader can visualize what it contains.

(d) Definite and concise

The report should be brief and to the point. The length of the report should just be required to convey forcefully the information, facts, and opinion with reasoning. It should not be too long or too short, than required. The ambiguity has no place anywhere in the report. The words, sentences and paragraphs should be such as to convey maximum meaning in minimum use of words.

3.0 General Structure of a Valuation Report

(a) Parts of a Report

- Instructions
- Purpose of valuation
- Executive summary
- Collection of data and narration of facts
- Analysis of information and data
- The conclusion
- Supporting material i.e. statements, tables, charts, graphs, plans, maps, photographs etc. forming annexure to the main descriptive report.

(b) The report shall also include

- (i) Basis/Premise and it's definition
- (ii) Assumptions and limitations
- (iii) Method of valuation adopted
- (iv) Caveats

(i) The definition of value

In the last 60 years, in a number of land acquisition cases the Supreme Court of India has held that the '**market value**' must satisfy the '**willing buyer**' and the '**willing seller**' concept. Similar view is expressed by the Law Commission of India in their report of the year 1958.

As a general rule, where no definition of the 'market value' is given in a report then it is to be presumed that the standard definition of market value satisfying the 'willing buyer' and the 'willing seller' mentioned above has been adopted.

In cases, where the 'value' estimated is different from the standard definition, it must necessarily be clearly defined in a report.

(ii) Assumptions and limitations

Limiting conditions will mostly arise in collection of information and data where a valuer is unable to collect and verify the same. In such cases, the limitations must be stated along with the assumptions made for limiting conditions. In certain circumstances, the value statement can also be subjected to qualifying clauses. Utmost care should, however be taken to ensure that such qualifying clauses shall not, in any case, render value statement almost meaningless.

If there are any limiting conditions regarding the use of a report, then they must be clearly mentioned.

(iii) Method of valuation to be adopted

The selection of a method of valuation is the prerogative of the valuer. Based on the facts and circumstances of each case, the valuer shall select appropriate method of valuation.

It is not necessary to estimate market value of a property by adopting all the three approaches to valuation, unless the valuer himself desires to cross-check with alternative approach. In any case, however, temptation to arrive at an average value should always be scrupulously or strictly avoided because in reality average never exists.

Valuation of tangible assets involves three basic approaches:

- Market
- Income and
- Cost

(iv) Caveats

Caveats are essential part of instructions, setting limits to the extent of contract between the parties. Caveats are especially in respects of

- confidentiality
- physical
- information
- special circumstances

(v) Confidentiality

In giving and accepting instructions, a contract has been created whereby a professional owes certain duty to a client. It is necessary to make the extent of such liability clear and limited to the client only. While writing a report it must be borne in mind as to how the data and information in a report will be used

especially when such data and information are passed on to professional advisors or third parties. In order to limit the liabilities, it should be stated in the report that –

The report is confidential to the client for specific purpose to which it relates. It may be disclosed to other professional advisors assisting the client in respect of that purpose only, but the client shall not disclose the report to any other person.

It should also be clearly stated that –

No responsibility can be accepted to any third party including the professional advisors in respect of whole or part of the report.

Further, considering the eventuality of litigation in respect of the subject matter of valuation, it is advisable to include a clause in the report that –

The valuer does not agree to any appearance or giving testimony / evidence in any court, any hearing or any other proceedings by reason of rendering this report **unless** prior arrangements have been made in that respect.

(vi) Physical

A detailed inspection of the assets to be valued is a **‘must’** for a valuer. However, even after carrying out the most searching and comprehensive site inspection and investigations, latent defects i.e. defect, which cannot be normally revealed, even after thorough search of record and site inspection, will remain hidden. A valuer can be further protected by stating that no investigations were possible for latent defects, if any.

In case a valuer comes to know from the inspection and going through the records more detailed investigation and analysis are essential then same can be reported advising the clients to

further look into such aspects.

(vii) Information

In carrying out the work as per instructions, several types of data and information are required to be collected from various sources. While data and information regarding physical condition of assets, fixed asset records, records of maintenance, licences to run the hotel, nursing homes and such other properties are collected at the time of site inspection, the data regarding sale prices etc. are collected from market sources and clients. All such data should be verified.

Further, it is advisable to quote the source of information such as in the report. Any information, if attributed to its source, creates no liability for a valuer unless it is so erroneous or misleading, which a reasonably competent professional is expected to realise.

Any asset or its use in contravention of any statutory requirements or otherwise, any statutory notice served etc. is a matter, which usually affect the value of a property and all these need to be reported.

A valuer interprets legal and statutory documents on the basis of his academic and professional education in valuation.

He is, however, not held responsible for finer points of law and in cases involving finer points of law; a client may be clearly advised to seek legal opinion.

Special Circumstances

Caveats are for preventing:

- liabilities to third parties and misuse of a report by the client or other persons

- to limit the responsibility of a valuer in respect of the quality of information supplied by others as well as for finer points of law
- the task being limitless, to set limitations to the task.

The limits are to be established by caveats. However, same must be relevant to the client's needs and practice in terms of the task that can be undertaken by a reasonably competent valuer; otherwise it will be of little or no benefit to the client. By pointing out the limitations of the report in certain specific matters, the caveats in general also guard the client against misinterpretation of the report and thereby being misled. A reasonably qualified and experienced professional valuer, in fact, needs no other safeguard than that provided by his professional integrity and honesty.

4.0 It is to be borne in mind by the valuer that while performing his duty he shall:

- Completely and understandably set forth the valuation in a manner that will be not be misleading.
- Provide sufficient information to fully understand its data, reasoning, analyses, assumption and limiting conditions.

5.0 The services of valuers are mainly required for following fiscal and non-fiscal purposes:

Fiscal purposes

Levy of Taxes such as:

- Municipal Taxes on Land and Buildings collected by Local Self Government.
- Stamp Duty collected by State Governments on documents for transfer of properties.
- Income-Tax / Capital Gains.
- Any other purpose not referred above.

Non-fiscal purposes

- Award of compensation for compulsory acquisition of property for public purposes.
- Computation of betterment levies under town planning laws.
- Valuation of tangible assets owned by the Govt. of India, State Governments, Public Sector undertakings and statutory bodies like port trusts, for privatization as well as ascertaining return on investment/current value.
- Liquidation of assets for recovery for settlement of financial disputes by Commissioner, High Courts and Official Liquidator.
- Computation of rent at the time of leasing of property and subsequent renewal of leases in Government/Semi Government organization, as also while fixing mesne profits by courts of law.
- Grant and recovery of loans and advances by Banks.
- Insurance of immovable and movable property.
- Any other purpose not referred above.

6.0 The steps for valuation process to be carried out for conducting any assignment by a valuer are outlined in paragraph no.8 below and same need to be reported in writing.

Note: *The minimum requirement on the content of the report is highlighted hereinafter. This is not exhaustive. The content of the report and information to be reported will depend upon the nature of assignment.*

The report is broadly divided into following two parts:

Part – I	-	Executive Summary
Part – II	-	Annexures

The **Executive Summary** will give the gist of the exercise in about less than 10-15 pages so that it can serve the purpose of the management.

The content of Executive Summary:

- Identity of the valuer
The letterhead of the valuer must show the qualifications of valuer to perform the assignment.
- Date of report
The date on which report is submitted.
- Instructions
The terms of reference by the clients showing details of the property to be valued with the location(s).
- Date
The date on which the value of property is required which in most of the cases is prior to date of report.
- Purpose
The purpose for which instructions is given **e.g.** Insurance, Sale/Purchase, etc. as the case may be.
- The checklist submitted and information received.
- Definition of market value used
To suit the terms of reference.
- Basis of valuation (As per the terms of reference)
- Procedure adopted
How the exercise is conducted
- Method of valuation
Cost / Income / Market approach
- General remarks

Please refer to Chapter on Case Studies for matter to be included under this.

- Assumptions and limiting conditions

In this part valuers shall discuss the limiting conditions under which the assignment is performed and assumptions made for such limiting condition.

- Summary of Valuation

The summary of values estimated.

Annexures will include details of property valued along with supporting documents used in estimating the value.

- 7.0** The valuers of real estate have to encounter properties falling under following categories in actual practice.

Open land

Residential, Commercial and Industrial

- Free hold
- Lease hold

Built-up properties

Residential property (other than apartments)/ Commercial property office building (other than office apartments)/ Industrial property (other than industrial unit in a multistoried industrial building):

- Entire building occupied by owner
- Entire building occupied by the tenant protected under rent act
- Entire building occupied by the tenant not protected under rent act
- Entire building occupied by lessee
- Partly occupied by owner and partly by the tenant protected under the rent act.
- Partly occupied by owner and partly by the tenant not protected under the rent act.
- Partly occupied by owner, partly by the tenant protected under the rent act and partly by the tenant not protected under the rent act
- Partly occupied by owner and partly by the lessee

- Partly occupied by owner, partly occupied by the lessee, partly occupied by tenant protected under the rent act and partly by the tenant not protected under the rent act.
- Buildings falling under above categories where FSI is fully utilised/partially utilised.

Residential ownership apartments in a multi-storied building, Office premises in a multi-storied commercial building, Industrial premises in a multi-storied industrial building and Shops on ground floor in a multi-storied commercial building

- Occupied by owner
- Occupied by the tenant protected under rent act
- Occupied by the tenant not protected under rent act
- Occupied by lessee

Hotel buildings

Cinemas

Nursing homes

Petrol pumps

Properties under development

Any other type of the property not covered above

7.1 The above properties can be broadly classified in following categories:

- (a) Open Land
- (b) Buildings other than apartments in the multi-storied buildings and apartments in the multi-storied buildings – let us call these properties as built-up properties

The following approaches to value shall be applied depending upon the nature of the property.

- (a) Income capitalization approach - Income producing property like rented/leased properties
- (b) Sales comparison approach - Owner occupied/marketable properties

- (c) Cost approach - Specialised properties like public school, Jail etc.

The interest in the real estate to be valued may include ownership right, leasehold, tenancies, leave and license, etc.

The real estate like land and building yielding periodical income by way of rent will be valued by income capitalization approach. The other items of real estate which are commonly transacted in the market will abide by the market approach. At this stage the consideration of location, occupational use, size, amenities, state of construction, age and other relevant parameters will arise.

Specialized real estate which are neither income yielding nor marketable shall be valued by cost approach comprising market value for land and depreciated replacement cost for buildings which will take into account all forms of obsolescence.

7.2 The information required to carry out the valuation of above property is outlined as under:

Open land:

Area and shape of land

- Dimension of each side of the plot
- Frontage on roads and widths of roads
- Demarcation of land
- Soil bearing capacity, foundation conditions, level of land and cost of leveling if any
- Tenure of land
- Is it Freehold or Lease-hold land
- In case of lease-hold –
 - Name of Lessor
 - Name of Lessee
 - Date of commencement of lease
 - Period of lease
 - Date of termination of lease
 - Premium paid
 - Ground rent per annum
 - Covenants of lease with regards to

- Termination of lease
 - Renewal of lease
 - Payment of unearned increase in the event of sale or transfer
 - Conditions of transfer
- Is land affected by Land Reforms Act, Coastal Regulation Zone, and Revenue Code of the State Government? Or any other Acts.
 - Zoning of land as per Master Plan / Development Plan
 - Development plan / Master plan / Planning proposals affecting the land such as reservation for public purpose like health facilities, playgrounds, recreation garden, road widening, new road, transport facilities etc. Give details if any.
 - What is permissible FSI / FAR? How much is it utilised? If balance FSI is available then is it possible to consume?
 - D.C. rules, Bye-laws affecting land values
 - In case of industrial property –what is the industrial locational policy of the Government for expansion as well as establishment of new industry.
 - Is there any outstanding which can be recovered by attachment of property?
 - To collect data regarding sale transactions in the vicinity which have taken place in nearby areas and compare the sale instances with property in question with regard to following factors and prepare an analytical report:-
 - Date
 - Area / Size, shape, frontage etc.
 - Physical
 - Location – including proximity to amenities and facilities like educational, health, shops and markets, transportation, municipal services etc.
 - Social – including type and class of locality
 - Economic
 - Legal
 - Utility and potential use
 - Transferability

Note:

(a) While valuing large plots of land from sale instances of small plots of land, details of hypothetical and development schemes with estimated values of laid out plots should be given.

(b) Lease-hold land

Income approach to valuation is to be applied by keeping in mind terms and condition of lease agreements and other relevant facts.

Built-up properties

Is the construction carried out as per plans approved by Municipal Authorities / Local Authority?

Is it owner occupied / vacant / rented / leased / given on leave and licence or any other manner permissible under the law? Specify if there is any other occupancy.

Market Approach

Owner occupied residential/commercial/industrial building, owner occupied apartment in a multi-storied building, owner occupied shops and offices in a multi-storied building to be valued by market approach.

Statement showing sale transactions along with names of seller / purchaser / dates of execution and registration, registration number and plan / scaled map showing property under valuation and sale instances with overall rate of consideration, area and date to be submitted with report, analysis and comparison of sale with property and estimating value of property as on relevant date, by such analysis.

Income Approach

Hotel and Nursing Home buildings to be valued by income approach.

These properties are sold as fully operational business units and the valuation of operational entity includes:

- land and buildings
- trade fixtures, fittings, furniture, furnishings and equipment

- market's perception of the potential together with benefit of existing approvals, licences, permits contracted future bookings, existing membership which are an important part of the ongoing business.

Valuer to report on following issues:

- Validity of various licences, permits etc. required to carry on the business
- Sustainability of the business and possible future fluctuations
- If existing use is not likely to be sustainable due to change in demand for particular trading activity or property likely to sell in the open market for a use other than the existing use, then value on alternative use also reported.

The rented buildings are generally valued by income approach.

The rented buildings can also be valued by market approach, if instances of sales of the comparable rented properties are available.

The tenants fall under following two categories:

- (a) The tenants protected under the rent control act.
- (b) The tenants not protected under the rent control act.

If the property under valuation is occupied by the tenants protected under Rent Control Acts, then sale instances to be considered for comparison must also be of the property occupied by the tenants protected under Rent Control Acts.

If the property under valuation is occupied by the tenants not protected under Rent Control Acts, then sale instances to be considered for comparison must also be of the property occupied by the tenants not protected under Rent Control Acts.

8.0 The following steps are represented as a guideline to be pursued for valuation of property

- | Step I | Terms of reference |
|---------------|---|
| | <ul style="list-style-type: none"> • The source of instruction • The purpose of valuation |

- The date of valuation

Step II Basic issues of the assignment

- Identification of the assets
- Identification of rights, title and interest
- Inspection of land, survey buildings
- Date as on which valuation is to be made
- Applicable basis of valuation

Step III Data collection, selection and analysis

- Government sources
- Sources of local bodies and developmental authorities
- Neighbourhood sources
- Market sources
- Literature sources
- Client sources

Step IV Application of valuation approaches

The following approaches to value shall also be applied depending upon the nature of the asset.

- (a) Income capitalization approach - Investment assets
- (b) Sales comparison approach - Marketable assets
- (c) Cost approach - Specialised assets

The interest in the real estate to be valued may include ownership right, leasehold, tenancies, leave and license, nature of encumbrances etc.

The real estate like land and building yielding periodical income by way of rent will be valued by income capitalization approach. The other items of real estate which are commonly transacted in the market will abide by the market approach. At this stage the consideration of location, occupational use, size, amenities, state of construction, age and other relevant parameters will arise.

Specialized real estate which are neither income yielding nor marketable shall be valued by cost approach comprising market value for land and depreciated replacement cost for buildings which will take into account all forms of depreciation.

CASE STUDIES

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Kirit P.Budhbhatti
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CASE STUDIES

This section covers the case studies of Valuation assignments handled in actual practice. These case studies are based on the situation/conditions prevalent as on date of valuation when the valuation was undertaken. However, they certainly throw light on issues to be taken into consideration for valuation under different facts and circumstances.

The format of presentation of various case studies is as under:

The facts of the case is briefly narrated first and it is followed by the valuation required under facts and circumstances of a given case.

While going through the case studies one finds that the following observation of Honourable David Laro of United States Tax Court, Washington, D.C. on valuation are very appropriate:

“Anyone approaching the subject of valuation should be aware of certain truisms as a frame of reference. They are:

Each valuation case is unique. Although guidance can be obtained from earlier cases, each case is unique. One case is rarely on point with another, and a significant differentiation of the facts can usually be made.

A. Valuation Report of a Property offered as a Security against Bank Loan

Facts of the Case

This case pertains to valuation of a property located in Mumbai. The entire property is rented and the tenants are protected under applicable rent control act. There is a balance potential for development and right to future potential have been retained by the owner with him.

The rent charged by the landlord is in excess of the standard rent. The willing buyer will certainly take into consideration the fact that in the event the tenant moves the court for fixation of standard rent then in that case Court will reduce contractual rent to the level of standard rent. Therefore it becomes necessary to work out the standard rent.

The building was constructed in 1950 as per rules and regulations prevalent then and surrounding open spaces are kept accordingly.

As per current rules there is a deficiency in the open space. For granting construction as per current rules Municipal Corporation levies premium for deficiency in the open space and this is an important factor for consideration as it is a liability.

Even the actual balance potential is less than it appears to be due to rules and regulation for construction.

As on 31-12-1987 there were two sets of Building Bye-laws in force as under:

- (i) Sanctioned Bye-laws
- (ii) Draft Bye-laws

As per M.C.G.M. circular no. CE/1234/DPC of 29-04-1985, for any building proposals received after 30-04-1985 the stringent of the two sets of Bye-laws will be applicable.

Therefore, in this valuation also the stringent of two sets of bye-laws was adopted.

If the above factors are not properly considered while accepting the property as a security then in the event of default the property will not fall under the category of secured assets defined under S.5(n) of Banking Regulation Act, 1949.

1.0 As per the instruction from ABC, inspection of immovable property located off Bhulabhai Desai Road, Mumbai – 400 026, was carried out for estimating 'Fair Market Value' thereof.

2.0 Purpose for which valuation is made: Sale of the property

3.0 Date as on which valuation is made: 31.12.1987.

Date of inspection of the property: 03.01.1988

Date of report: 25.01.1988

4.0 Definition of Fair Market Value estimated

The Law Commission of India in their report of the year 1958 under Para 45, defined 'market value' as the price, which a willing vendor might reasonably expect to obtain from a willing purchaser. The disinclination of the vendor to part with his land and the urgent necessity of the purchaser to buy must alike be disregarded and both must be treated as persons dealing in the matter at arm's length and without compulsion.

5.0 Brief description of the property:

Property consists of a residential building having construction on ground plus two upper floors with a covered garage located Off Bhulabhai Desai Road, Mumbai – 400 026.

It is located in a highclass residential area.All the basic amenities like schools,colleges,market,Govt.offices are available at easy approach.

The locality is served by BEST buses,taxis and western railway suburban trains are available from reasonable distance.

As per the document, land area is 2,960 sq. yd. This is a plane piece of land having rectangular shape. This is a free hold land.

As per the information received, no part of land is notified for acquisition.

Please refer to Annexure-I for type of construction of the building

By an agreement dated KLM registered in the Office of the Sub-Registrar of Mumbai under serial no. NOP, the owners purchased in 1949-1950 land admeasuring 2,960 sq. yd. for Rs.7,70,000/- and constructed bungalow having construction on ground floor and first floor in the year 1950 with a cost of Rs.3,30,000/-. The total investment in 1950 was ₹ 11,00,000/- (Rupees eleven lakhs only). The second floor was constructed in the year 1966-67 and subsequently some additions were carried out.

5.1 Furnished below is the statement showing construction carried out during 1966-67 and thereafter with built-up area and investment made.

Year	Built-up area in sq. ft.	Investment
1950	12,650	(a) 11,00,000/-**
1966 – 67	9,000	(b) 4,00,000/-
1967 – 68	2,000	(c) 60,000/-
1972 – 73	350	(d) 10,000/-
1976 – 77	3,000	(e) 3,00,000/-
Total	27,000	18,70,000/-

**** This includes investment in land amounting to Rs.7,70,000/-**

The entire property is rented immediately on completion of construction and the tenants are protected under the Rent Control Act.

As per the terms of agreement between landlord and tenant the rights for future development potential of property rests with the landlord only.(Note: This is very important because if land lord has passed on the rights of the future development to tenant then in that case it will adversely affect the value of rights of landlord in the property).

The ground floor and first floor of the property were first let out immediately after construction in 1950 and second floor was let out for the first time immediately after construction in 1966-67.The construction carried out in subsequent years is for additional facilities provided to the existing tenants.

Furnished below is the details of actual rent paid by the tenants,outgoings and net rent as on valuation date.

Gross rent received p.a	10,80,000	(X)
Outgoings p.a.		
(i) Property tax	67,000	
(ii) Repairs	2,00,000	
(iii) Rent collection charges	75,000	
(iv) Land revenue	21,600	
(v) Maintenance of lift and pump	20,000	

	Total 3,83,600	(Y)
Net rent	= (X) - (Y)	
	= ₹ 6,96,400/-	

Note: Electricity charges, water charges, insurance premium are borne p.a. by the tenants and hence same have not been considered.

6.0 Value of property under consideration consists of:

- (a) Capitalized value of rent in perpetuity as the tenants are protected under the rent control act. Therefore, there is no possibility for the land lord to get the property so long as tenants abide by the rent control act and therefore value of right of reversion of rented property to the landlord will be meagre/negligible.
- (b) Value of balance potential for construction

6.1 Capitalized Value of property

In order to find out the capitalized value of property it is essential to first find out whether the rent charged is the standard rent or not. In case the rent charged is not a standard rent then tenant can file an application for fixation of standard. It is pertinent to point out that in case of Rent Act applicable to city of Mumbai where the property is located there is no time limit within which a tenant has to file an application for standard rent. Therefore, the prudent purchaser would definitely take into consideration whether the rent charged by the landlord is a standard rent or not and risk involved in purchasing a rented property wherein rent charged is higher than the standard rent. The prudent purchaser will base his offer on capitalized value of the standard rent and not on the capitalized value of net actual rent charged by the owner.

In view of the facts mentioned above first the standard rent is estimated

The standard rent can be estimated by following two methods:

- a. By comparable rental instances in the locality
- b. By theory of investment

As comparable rental instances are not available the standard rent is calculated by theory of investment.

The property is rented immediately on completion of construction and therefore return on investment made needs to be worked out. But the question arises at what rate the return is to be worked out?

In Appeal No.101 of 1949 in R.A. Application No.805 of 1948; Sorab D. Talati vs. Joseph Michem: as decided by M.D. Lalkaka Ch.J. and Barodawala J., decided on 15-12-1949 the reasonable return on investments in the cost of construction was allowed at 2.5% more and that in the land at 1.5% more as compared to the return available on the gilt-edged securities.

Net Yield on gilt-edged securities was available in 1950-51 and 1966 -67 as under:

1950-51		3.51%
1966-67		5.57%
Investment of the owner in 1950	=	11,00,000/-

This investment was for entire area of land and building having construction on Ground and First Floor having built-up area of 12,650 sq. ft.

Calculation of land apportioned to the portion rented in 1950

Total area of land	=	2,960 sq. yd.
Total construction carried out as on date of valuation		
Main building	=	26,000 sq. ft.
Garage	=	1,000 sq. ft.
Total	=	27,000 sq. ft.

$$\begin{aligned}
 &\text{Built-up area of Ground Floor and First Floor at the time of purchase in 1950} &&= && 12,650 \text{ sq. ft.} \\
 &\text{Land apportioned 12,650 sq. ft.} &&= && \frac{12,650}{(9 \times 1.33)} \\
 &&&&&= && 1,057 \text{ sq. yd.}
 \end{aligned}$$

Note: The above computation of apportionment of land is as per building bye-laws prevalent as on 31-12-1987. Data regarding building bye-laws at the time of purchase are not available.

$$\text{Investment in land in 1950} = 7,70,000/-$$

Investment in building existed in 1950 having construction on ground floor and first floor with total built-up area of 12,650 sq. ft. is ₹ 3,30,000/- (11,00,000 – 7,70,000)

$$\begin{aligned}
 &\text{Total construction carried out as on date of valuation (31-12-1987)} \\
 &&&= && 27,000 \text{ sq. ft.}
 \end{aligned}$$

$$\begin{aligned}
 &\text{Built-up area existed at the time of purchase of property in 1950} \\
 &&&= && 12,650 \text{ sq. ft.}
 \end{aligned}$$

This is about 50% of area existed as on 31-12-1987 and therefore about 50% investment in land is considered for the purpose of calculation of Standard Rent.

$$\begin{aligned}
 &= 0.5 \times 7,70,000 \\
 &= 3,85,000/-
 \end{aligned}$$

Net return on investment of portion rented in 1950 will be as under:

$$\begin{aligned}
 \text{Net return on value of land} &= \frac{(3.51+1.50)}{100} \times 3,85,000 \\
 &= 19,289/- \quad (x)
 \end{aligned}$$

$$\begin{aligned}
 \text{Net return on value of building} &= \frac{(3.51+2.50)}{100} \times 3,30,000 \\
 &= 19,833/- \quad (y)
 \end{aligned}$$

$$\begin{aligned}
 \text{Net return on value of land and building} &= (x) + (y) \\
 &= \mathbf{39,122/-} \quad \mathbf{(A)}
 \end{aligned}$$

$$\begin{aligned}
 &\text{Construction carried out in 1966-67 is about } \frac{1}{3} \text{ of total built-up area} \\
 &&&= && \frac{1}{3} \times 27,000 \\
 &&&= && 9,000 \text{ sq. ft.}
 \end{aligned}$$

Land apportioned to construction
carried out in 1966-67

$$= \frac{9,000}{(9 \times 1.33)}$$

$$= 751.00 \text{ sq. yd.}$$

Investment in construction carried
out in 1966-67

$$= 4,00,000/-$$

Para 5.1, item (b)

Local inquiry revealed that in the vicinity of land in question two parcels of open land one admeasuring 700 sq. yd and other admeasuring 800 sq,yd were sold at 1150 per sq,yd in Nov.65 and Dec.65. Therefore, value of land in 1966-67 at ₹ 1,200/- per sq. yd. is considered to be fair and reasonable. net return on investment for land and construction carried out in 1966-67 will be as under:

Net return on value of land

$$= \frac{(5.57 + 1.50)}{100} \times 1,200 \times 751$$

$$= 63,715/- \quad (m)$$

Net return on value of the
building

$$= \frac{(5.57 + 2.50)}{100} \times 4,00,000$$

$$= 32,280/- \quad (n)$$

Net return on value of
land and building

$$= (m) + (n)$$

$$= \text{₹ } 95,995/- \quad (B)$$

Net return on investment in land during 1967-68 to 1976-77 is as under:

Year	Land apportioned to construction carried out in sq. yd.	Land rate per sq. yd.	Net Return in %	Net Return In
1967-68	167.00	1,350	5.45+1.5 = 6.95%	15,668
1972-73	29.00	2,000	5+1.5 = 6.50%	3,770
1976-77	250.00	3,000	5+1.5 = 6.50%	48,750
Total				68,188 (C)

Net return on investment in building during 1967-68 to 1976-77 is as under:

Year	Amount of Investment in	Net Return in %	Net Return in	
1967-68	60,000	5.45+2.5= 7.95%	4,770	Para 5.1, item (c)
1972-73	10,000	5+2.5 = 7.50%	750	Para 5.1, item (d)
1976-77	3,00,000	5+2.5 = 7.50%	22,500	Para 5.1, item (e)
Total			28,020	(D)

$$\begin{aligned} \text{Net standard rent} &= (A) + (B) + (C) + (D) \\ &= 2,31,325/- \\ &\text{Say, } \mathbf{2,31,000/-} \end{aligned}$$

The net standard rent per annum is 2,31,000/-

The net actual rent charged per annum is 6,96,400/-

Analysis of the behaviour of the property under consideration in general investment market with reference to the various ingredients on which the yield depends:

Ingredients

Analysis

Security and regularity of income.

- i. (a) Contractual rent is not secured.
- (b) There is a risk of tenant moving the Court for fixation of standard rent.
- (c) Net standard rent is ₹ 2,31,000/-
- (d) Due to deficiency in open space, huge amount requires to be paid to Mumbai Municipal Corporation to consume balance F.S.I. External beams and columns will have to be constructed which will add to the cost.
- ii. Sufficient security of capital is absent in such a property.

- iii. The controlled rent does not adjust keeping in pace with the factor of inflation, rising level of prices or declining value of rupee.

Security of capital

- i. No capital appreciation to the rent controlled property.
- ii. The occupant has right to continue in possession and he cannot be ejected on account of restrictive rent legislation. Thus, the investor cannot come into possession of the premises and take advantage of the increased value of the asset on account of inflation.

Liquidity of capital

Investment in a property like this is inferior to investments in other spheres covered by the Reserve Bank of India (RBI). Because investment in property like this cannot be easily converted into liquid cash in a short-term like gilt edged security offered by RBI.

High cost of transfer

It involves high cost of transfer. The Stamp Duty and Registration charges will be about 10-11%.

Higher the value less will be the purchasers

In case of a large property like the one under consideration, small investors cannot enter the field. This will, result in a limited market for the large property under consideration.

Taxation problems

Ordinary individuals are likely to be scared away by the additional wealth tax burden that it carries.

The banks are offering 6 to 7% on long term fixed deposits where one can liquidate the investment easily and it has no hassles like for property referred above.

In view of facts mentioned above and rate of capitalization at 10% for property under valuation is considered to be fair and reasonable.

Capitalised value of property at 10% works out to –

$$\begin{aligned}
 &= 2,31,000 \times 100/10 \\
 &= \mathbf{23,10,000/-} \qquad \qquad \qquad \mathbf{(a)}
 \end{aligned}$$

6.2 Computation of balance potential:

The plan showing the layout of the buildings is enclosed.

The following issues need to be taken into consideration while computing balance potential –

There is no possibility of having construction behind the existing main building as per Rules and Regulations / Bye-laws / Development Control Rules of Municipal Corporation of Greater Mumbai (DCR of MCGM).

As on 31-12-1987 there were two sets of Building Bye-laws in force as under:

- (i) Sanctioned Bye-laws
- (ii) Draft Bye-laws

As per M.C.G.M. circular no.CE/1234/DPC of 29-04-1985, for any building proposals received after 30-04-1985 the stringent of the two sets of Bye-laws will be applicable. (Circular is enclosed at Annexure – ‘AA’).

The details of vital Sanctioned Bye-laws / Draft Bye-laws / Circular having direct bearing on value of balance F.S.I. are as under:

Sanctioned Bye-laws

Bye-law No. 38(ii) and 38(vii), appearing on page no.14 of DCR of MCGM is enclosed at Annexure – ‘BB’.

Bye-laws No. 39 (ii), 39(iii), 39(v), 39(vi) and 39(vii), appearing on Page no.14 of DCR of MCGM are enclosed at Annexure – ‘CC’.

Table LXVII, appearing on page No.7 of DCR of MCGM is enclosed at Annexure – ‘DD’.

Draft Bye-laws

Page nos.42 and 43 of draft Bye-laws and DCR MCGM (1983) are enclosed at Annexures ‘EE’ and ‘FF’.

Circular

Circular no. CE/19168/I of 27-08-1971 issued by M.C.G.M. is enclosed at Annexure – ‘GG’.

If all the Bye-laws, sanctioned and Draft and Circular mentioned above are read together then one can conclude that area of land required to consume actual balance potential is 295 sq. yd. (241 sq. m.) as computed below:

Though the area of plot is 2,960 sq. yd., it is not possible to consume F.S.I. of more than 2,550 sq. yd. (Ref. Annexure – ‘BB’, Rule No.39(vii)) and in that case balance F.S.I. will be as under:

Permissible F.S.I.	=	1.33
F.S.I. that can be consumed	=	2,550 x 1.33 x 9
	=	30,524 sq. ft.
F.S.I. already consumed		
26,000 + 1,000 (Garages, etc.)	=	27,000 sq. ft.
Balance F.S.I.	=	30,524 - 27,000
	=	3,524 sq. ft.

Area of land required to consume actual balance potential

$$= \frac{3,524}{(9 \times 1.33)}$$

$$= \mathbf{295 \text{ sq. yd. (241 sq. m.)}}$$

The area of recreation space (Garden) to be kept vacant and un-built upon is equal to 450 sq. yd. (Ref. Annexure – ‘GG’).

Independent means of access to be provided having a width of 22’ 0” (Ref. Annexure – ‘BB’ Rule 38(ii))

Separate open spaces for each building to be provided (Ref. Annexure – ‘FF’)

The plan showing the existing main building, existing garages, open spaces surrounding the building and garden area is enclosed at **Annexure – ‘H’**.

- (i) ABVUA shows boundary of the land in question.

- (ii) ABCFA is the front open space for existing main building to be kept open and un-built upon (Ref. Annexure – ‘DD’)
- (iii) FEHGF, DCJID are the side open spaces of existing main building to be kept open and un-built upon (Ref. Annexure – ‘DD’)
- (iv) GJKNG is the rear open space to be kept open and un-built upon (Ref. Annexure – ‘BB’ Rule 38(vii)).
- (v) MLRQM is the garden area to be kept open and un-built upon (Ref. Annexure – ‘GG’):
 - (a) NMQQ’N, LKR’RL, Q’R’POQ’ area to be kept open and un-built upon (Ref. Annexure – ‘DD’)
 - (b) OPVUO is an area of existing covered garage.

As per Annexure – ‘BB’ Rule no.38(ii) it will be necessary to give the independent means of access of 22’ width for the construction to be carried out in the rear portion from existing plot of land. This is not possible as width on North is 13’ and on South, it is 10’ against the requirement of 22’.The deficiency is shown under area BTSJB and AWXGA. These are shown in layout plan at Annexure-‘H’.

It is not possible to construct a building in the front as well as in the rear portion as per Building Bye-laws in force. Only possibility is to construct it vertically.

There is a deficiency in the open space to the extent of about 300 sq. m. as per Mumbai Municipal Corporation Circular No. CE/3774/DP/BP of 14-10-1986. The additional construction will not be allowed without payment of premium.

The liability towards this payment will be ₹ 13,00,000/- as per rates of premium prevalent at the time of valuation.

As the span of the building is about 62’, heavy external structure will be required for consumption of balance F.S.I. The additional cost over and above the normal cost is estimated at ₹ 250/- per sq. ft. which works out to $295 \times 9 \times 1.33 \times 250 = ₹ 8,82,787/-$

The local inquiry revealed that three parcels of land admeasuring 300,325 and 450 sq.yd were sold at Rs.10,500/-,9500/-,9750/- sq.yd .resepectively in 1986-

87 in the vicinity of land in question. Therefore value of land at ₹ 10,000/- per sq. yd. is considered to be fair and reasonable.

Area of land required for consumption of balance potential is 295 sq. yd.

Value of land (balance potential) works out as under:

	=	295 x 10,000	
	=	29,50,000/-	(b)
Cost of deficiency in open Space	=	13,00,000/-	(c)
Cost of heavy external structure to be constructed	=	8,82,787/-	(d)
Value of property	=	(a) + (b) - (c) - (d)	
	=	23,10,000 + 29,50,000 - 13,00,000 - 8,82,787	
	=	30,77,213/-	
		Say Rs. 30,77,000/-	

Annexure – ‘AA’

Municipal Corporation of Greater Mumbai

C I R C U L A R

No. CE/1234/DPC of 29-04-1985

Sub: Implementation of the Draft Development Plan and the Development Control Rules. Rules vis-à-vis permission for development of the properties.

In modification to the Circular under No.CE/1234/DPC, dated 26-4-1985 issued by the CH.E.(D.P.) enunciating the policy to be followed in respect of the application of the stringent of the two sets (viz. sanctioned and draft) of the D.C. Rules and the Building Bye-laws, it has been decided to apply these regulations in respect of the building proposals that may be received on and from 30th April, 1985. In short, wherever the proposals have been submitted up to 29th April, 1985 (including) the building proposals may be scrutinized as per the sanctioned Development Control Rules.

Sd/- 29-4-85
DIR. (E.S. & P.)

Sd/- 29-4-85
ADMINISTRATOR

Annexures – ‘BB’, ‘CC’ and ‘DD’

3530 Reprinted in 1981

The Development Control Rules for Greater Mumbai

(As modified and sanctioned by the Government of Maharashtra)

(As amended up to 1-8-78 with subsequent modifications as appendices)

Annexure – ‘BB’

(Refer Para 4.3)

38 (ii) If the means of access serves an area 1,500 sq. yd. or more but less than 5,000 sq. yd. or its length from a street is 200 ft. or less than its width shall not be less than 22 ft.

38 (vii) In the areas of Suburbs and Extended Suburbs, the width of such means of access as required under clause (i), (ii) and (iii) may be permitted to be reduced to 15’, 18’ and 22’ respectively, provided all the buildings which have the means of access serves are on one side only and have in no case a height more than 80 ft.

Annexure - ‘CC’

Layouts or Sub-divisions – (a) Layouts or sub-division in residential and commercial zones.

39 (ii) In any such layout or sub-division 15 per cent of the entire holding area shall be reserved for a recreational space which shall be as far as practicable in one place.

39 (iii) No such recreational space shall admeasure less than 450 sq. yd.

39 (v) No independent plot in a sub-division shall have an area less than 400 sq. yd. and width less than 50 ft.

39 (vi) Every such plot and the recreational space shall have an independent means of access.

39 (vii) For the purpose of F.S.I., the net area of the plot shall only be considered. In case of layout proposals such net area shall be calculated after deducting from the gross area of plot, the area covered by means of access and recreational space.

In case of plots, the area of which varies from 2,550 sq. yd. to 2,999 sq. yd., the floor space index shall be allowed only over an area of 2,550 sq. yd. (Refer Para 4.1)

Annexure – ‘DD’

Para 3.1.3

Table - LXVII

Required Open Spaces for the Different Height of Building

<i>Height of building above Ground level</i>				<i>Required open spaces</i>	
I				II	
Feet				Feet	
Up to	30	..	..	..	12
	39	..	..	..	15
	45	..	..	..	17
	51	..	..	..	19
	54	..	..	..	20
	60	..	..	..	22

69	..	..	..	25
78	..	..	..	28
80	..	..	..	30
90	..	..	..	30
100	..	..	..	30
110	..	..	..	32
120	..	..	..	34
130	..	..	..	36
140	..	..	..	38
150	..	..	..	40
160	..	..	..	42
170	..	..	..	44
180	..	..	..	46
190	..	..	..	48
200	..	..	..	50

N.B. If the length or depth of the building exceeds 120 feet add to column 11 (10 per cent of length or depth of building minus 12 feet).

Annexure – ‘EE’ and ‘FF’

4051 (Draft)

Building Byelaws and Development Control Rules for the Municipal Corporation of Greater Mumbai. 1983

Annexure – ‘EE’

15. OPEN SPACES, AREA AND HEIGHT LIMITATIONS

15.1 **Exterior Open Spaces** – The provisions for open spaces at the front, side and rear of the buildings, depending upon occupancy, plot size, nature of development (namely row-building, semi-detached and detached), width of road fronting the plot, the locality shall be as given in Appendix N.

15.1.1 Buildings shall be set back at least 3 m from internal means of access in a layout of buildings.

15.1.2 **Buildings Abutting Two or More Streets** – When a building abuts two or more streets, the set backs from the streets shall be such as if the building was fronting each such street.

15.1.3 **Open Spaces for Height of Building** – The open spaces at sides and rear shall be provided as per Table 4.

15.1.4 **Open Spaces to be Provided for the Full Consumption of F.A.R.** – The open spaces to be left at the sides and rear shall conform to the height necessary to consume full F.A.R. permissible for the occupancy in the zone, provided that smaller open spaces

that are required under Byelaw No.15.1 would be permissible if the height of the building is restricted permanently to any smaller height. The Authority may permit smaller set back and permit additional floor area to the limit of 10 sq. m. over the permissible F.A.R. to avoid structural difficulties or great hardship, but so as not to affect adversely the light and ventilation of adjoining buildings or part thereof.

exterior open space the width of such exterior open space as given in column (3) may be reduced by 1 m subject to a minimum of 3 m and a maximum of 8 m. No further projections shall be permitted (see Byelaw No.15.4)

Note 3 - If the length or depth of the building exceeds 40 m, add to column (3) 10 per cent of length or depth of building minus 4.0

TABLE 4 – OPEN SPACES FOR DIFFERENT HEIGHTS OF BUILDINGS FOR LIGHTING AND VENTILATION

Sl. No. Left (1)	Height of Buildings in m (2)	Open to be around building excepting front of plot in m (3)
1.	10	3
2.	15	5
3.	18	6
4.	21	7
5.	24	8
6.	27	9
7.	30	10
8.	35	11
9.	40	12
10.	45	13
11.	50	14
12.	53	Above 16

Note 1 - For buildings above 24 m in height, there shall be a minimum front open space of 6 m.

Note 2 - Where rooms do not derive light and ventilation from

Annexure - 'FF'
(Refer para 4.4)

15.1.6 Open Spaces Separate for Each Building or Wing - The open spaces required under these Bye-laws shall be separate or distinct for each building and where a building has two or more wings, each wing shall have separate or distinct open spaces according to these Bye-laws for the purpose of light and ventilation of the wings.

Annexure – 'GG'

Rota:1700(Gen:235/2.9.71)-64949

Municipal Corporation of Greater Mumbai

CE-34 (Bldg-13)
1971.
1971-72

No. CE/19168/I of 27-8-

Subject: F.S.I. in respect of means of access for
holdings having less than 3000 sq. yds.
in area.

When there are two or more buildings on a holding of less than 3000 sq. yd., it is necessary that a separate access should be provided for the building or buildings at the rear portion of the holding from the public or private road in front. It has been decided that when the area of a holding is 2,550 sq. yd. or less and the party submits a Registered Undertaking, (so that it forms a Covenant of the holding), that there will be no sub-division of this holding at a future date, the F.S.I. should be given for the area covered by the access; but if the proposal is for sub-division, the area covered by the access should be deducted while calculating the F.S.I. permissible.

When the area of the holding is **between 2,550 sq. yds. and 2,999 sq. yd.**, recreation ground of an area equivalent to 15 per cent of the area of the holding should be kept vacant and un-built upon. Till the Development Control Rules are changed, the F.S.I. over this recreation ground area should be given.

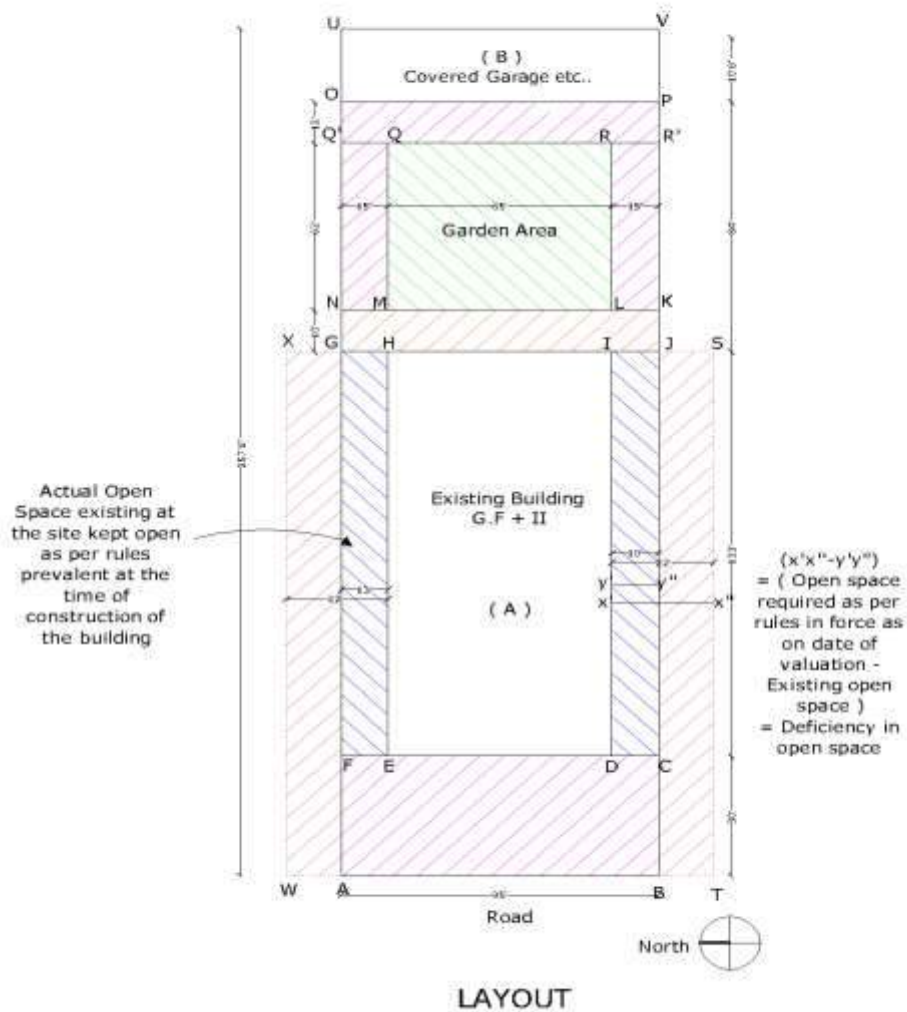
Sd/- 12-8-71
C.E.

No. CE/19168/I of 27-8-1971.

All Architects / All dy. C.ES. / All W.Os. / E.E.D.P. etc.

Copy forwarded for information and guidance please.

Sd/-
For C. E.



There are two buildings A and B standing on land.

For carrying out additional construction following conditions laid down in Development Control (DC) Rules for Greater Bombay are to be complied with.

- a. As area of plot is 2,960 sq. yd. Rule 39 (vii) (Annexure – CC) is to be complied with, according to which if area of plot is between 2,550 sq. yd. and 2,999 sq. yd. the FSI will be allowed for 2,550 sq. yd
- b. As per Circular No. CE/19168/I of 27.08.1971 (Annexure – GG) issued by Municipal Corporation of Greater Bombay when an area of plot is between 2,550 sq. yd. and 2,990 sq. yd., recreation ground of an area equivalent to 15% of area of holding should be kept open and un-built upon.

In our case, 15% of 2,960 sq. yd. works out to 444 sq. yd.

- c. As per D.C. Rule 38 (ii) (Annexure – BB), if means of access serves an area 1,500 sq. yd. or more but less than 5,000 sq. yd. or its length from a street is 200 feet or less, then its width shall not be less than 22 feet (Against 22 feet) we are having 13 feet on North (East West) and 10 feet on South (East-West)) indicating there is a deficiency in the open space and construction will not be allowed without paying premium for deficiency in open space.
- d. The deficiency in the open space is to the extent of about 300 sq. m. as per Mumbai Municipal Corporation Circular No. CE/3774/DP/BP of 14-10-1986. The additional construction will not be allowed without payment of premium.

The liability towards this payment will be ₹ 13,00,000/- as per rates of premium prevalent at the time of valuation.

ANNEXURE- I

Type of construction:

- | | | | |
|----|---|---|---|
| 1. | No. of floors and height of each floor. | : | Ground and two upper floors. Height of each floor is 10'. |
| 2. | Plinth area floor wise (as per IS 3861-1966) | : | Total built-up area of all the floors of the building is 26,000 sq. ft.

Built-up area of rear building (covered garage) is 1,000 sq. ft. |
| 3. | Year of construction | : | As given under sr.no.41 of Form – O1 |
| 4. | Estimated future life | : | 50 years from 1987 |
| 5. | Type of construction – load bearing walls / RCC frame / steel frame | : | Load bearing walls. |
| 6. | Type of foundations | : | Foundation drawing is not available and hence same are presumed to be random rubble masonry. |
| 7. | Walls | : | Thickness of wall is varying from 15 inches to 27 inches including thickness of plaster. |
| 8. | Partitions | : | Brick masonry in cement mortar. |

9. Doors and windows : Teak wood double shutters paneled doors/ flush type doors. Windows are glazed fitted with grille. The doors have artistic finish.
10. Flooring : Mainly marble / mosaic (partly)
11. Finishing : Walls are internally painted by plastic emulsion paint.
12. Roofing and terracing : R.C.C. roof slab with waterproofing finish
13. Special architectural or decorative features if any : -
14. (i) Internal wiring surface or conduit : Concealed
: Medium class
- (ii) Class of fittings superior / ordinary / poor

B. Valuation highlighting Effects of Covenants of Lease on Value

Facts of the Case

The clients purchased a commercial office premises in New Marine Lines area, near Patkar Hall and Bombay Hospital at ₹ 300/- per sq. ft. in 1982.

Valuation was required for Income-Tax purpose. According to the Income-Tax Officer (ITO), the purchase price was too low.

The client requested a valuer to issue a certificate stating that value of property was ₹ 300/- per sq. ft. It was explained to the clients that mere issuing a certificate will not be of any help but a detailed report after thoroughly examining the relevant facts will be of real use.

In this case, to protect the client / serve his purpose, it was necessary to carry out a thorough exercise in order to satisfy the ITO.

The client furnished the documents by which the rights in the commercial premises was acquired by him. While going through the documents, the following facts were noticed and the clients' explanation was sought:

- (a) The multistoried building was constructed on a lease-hold land.
- (b) Whether the purchaser had gone through the lease deed.

The client replied that he was not aware of those details. He had signed the document without reading it. The client was a highly educated professional. This is mainly due to fear on the part of the purchaser that if he does not sign the document then somebody else would get the premises and hence people take risk.

The client was informed that it would not be possible to proceed further without going through the lease document. So the certified copy of lease deed was obtained from the Office of Sub-Registrar, Mumbai.

While going through the lease deed it was found that the lease was to expire in the year 2000 giving unexpired period of lease 18 years and there was no renewal clause.

One of the covenants of lease was that the entire property to be delivered up i.e. to surrender to the lessor on expiry of lease, free of cost by lessee.

In order to substantiate the case, research on judicial pronouncements on such covenants was made and case laws by Supreme Court were identified, upholding that such covenants are valid covenants.

In the same building, other clients also had acquired the premises. As an abundant precaution, they were interviewed to find out whether they were aware of lease of land referred in the agreement by which they purchased the property. They also had signed the document without reading the contents of document. This is indicative that buyers were not falling under the category of **'willing, knowledgeable and prudent buyers'** as they had signed the document without knowing its contents.

This information was collected as an abundant precaution as the transactions had taken place in the same building at the higher rate and if same are relied upon by Income Tax department then it can be argued that these transactions are not by **'willing buyers'** and under the Income Tax Act - Fair Market Value to be computed must satisfy the criteria of **'willing buyers' and 'willing sellers'**.

Luckily, the clients' problem was solved without placing this argument.

The Income Tax Officer accepted the valuation.

- 1.0** As per the instructions from ABC, inspection of premises in a building located at New Marine Lines, near Patkar Hall and Bombay Hospital, Mumbai – 400 020, was carried out for estimating the “Fair Market Value” thereof.

Purpose for which valuation is made:Income Tax

Date as on which valuation is made: 31.03.1982

Date of inspection of the property: 03.04.1982

Date of report: 25.05.1982

2.0 Locational aspects of the building

2.1 The building is located very near to Churchgate and Marine Lines suburban western railway stations. Mumbai C.S.T. - suburban central and harbour line railway stations are also nearby.

2.2 Locality is served by BEST city bus routes for western, eastern and central suburbs and Greater Mumbai.

2.3 Income-Tax Appellate Tribunal, Income-Tax and other Government offices are at a close distance.

2.4 Hospitals, cinemas, retail shopping market, banks' headquarters, cafeteria, central post & telegraph offices, Bombay Stock Exchange, 4 and 5 star hotels, High Court, City Civil Court, Small Causes Court, University of Mumbai are within a distance of 1 km.

3.0 Particulars of property

Property consists of a commercial office premises located in a building constructed on lease hold land as per the details given hereinafter.

3.1 Land

It is a lease-hold land.

Details of Lease Agreement:

By an indenture of lease dated 17-10-1902 made between trustees for the improvement of the City of Bombay, the land in question was leased for a term of 99 years from 10-10-1901 at yearly rent of ₹ 3,000/- .

Whereas pursuant to the City of Bombay Municipal (Amendment) Act, 1933, all the property interests rights and liabilities of every nature whatsoever of the Board including the said land, hereditaments and premises are now vested in Municipal Corporation of the City of Mumbai. Important clauses of lease are reproduced below:

Clause No.9

“Throughout the said term hereby granted at his own expenses to maintain and repair the drains, sewers, gutters leading from the said buildings and premises in accordance with Bombay Municipal Acts for the time being in force without requiring any notice in that behalf from the Board or any other person or persons whatsoever”.

Clause No.16

“Throughout the said term to keep all and every building or buildings already erected or which may be erected on the land hereby demised insured in the joint names of the Board and of the Lessee against lost or

damage by fire in a sum equivalent to the cost of the building (including foundation and plinth) in some respectable Insurance Office to be approved by the Board or the Secretary of the Board and all times when required to be produced the Policy of such insurance and also the receipt for payment of such insurance for then current year provided”.

Clause No.17

“Subject as hereinafter mentioned at the expiration or sooner determination of the said term **to quietly deliver up to the Board the said premises and all the erections which shall have been built thereon during the said term and all drains and appurtenances together with all fixtures, windows, doors, shutters, fastenings, water closets, fixed presses, shelves, pipes, pumps, rail poles, locks and keys and all other fixtures which during the last seven years of the said term shall have been fastened to the said buildings** and premises or any part (so maintained, paved and cleansed as aforesaid and in all respect in such state and condition) thereof in such good and substantial repairs and condition as shall be consistent with the due performance of the several covenants and provisos herein before contained”.

Clause No.18

“During the continuance of this demise not to assign the hereby demised premises or any part thereof without the consent in writing of the Board first”.

3.2 Type of construction of the building

No. of floors and height of each floor.	each	Ground floor and six upper floors Height of premises under consideration : 10'
Plinth area floor wise (as per IS 3861-1966)	:	Carpet area of the premises is 450 sq. ft.
Year of construction	:	1972 – 74
Estimated future life	:	53 years; but due to covenant premises is to be delivered up to the lessor within 18 years.

Type of construction – load bearing walls / RCC frame / steel frame	:	R.C.C. framed structure.
Type of foundations	:	R.C.C. footings for R.C.C. columns
Walls	:	9” thick walls in brick masonry in cement mortar.
Partitions	:	4½” brick masonry in cement mortar.
Doors and windows	:	Timber door frames with flush shutters. Aluminium windows.
Flooring	:	Cement mosaic tiles with half tile skirting.
Finishing	:	Walls are finished with cement mortar plaster and painted with plastic emulsion paint.
Roofing and terracing	:	R.C.C. roof and china mosaic waterproof tiling in terrace.
Special architectural or decorative features if any	:	-----
(i) Internal wiring surface or conduit	:	Concealed wiring
	:	Ordinary
(ii) Class of fitting superior / ordinary / poor	:	

4.0 For estimating the “Fair Market Value” of immovable property under valuation, the following major points have to be taken into consideration:

4.1 Lease expires on 10-10-2000

4.2 Balance period of lease is only about 18 years.

4.3 There is no renewal clause. After the expiry of lease period, lessees are required to quietly deliver up to the premises to the lessor, i.e. Municipal Corporation of Greater Mumbai.

It is noteworthy to mention that the Supreme Court in the following cases:

Kanji Manji vs. Trustees of Port of Mumbai (AIR 1963 SC 468)
and
Dr. K.R. Dhairawan & Others vs. J.H. Thakur & Others
(AIR 1958 SC 789)

has held that such a covenant to quietly deliver up to the premises to the lessor is a valid covenant.

- 5.0** The Supreme Court has observed in the case of Raghubans Narain vs. Uttar Pradesh Govt. AIR 1967 SC 465, that Market Value means “the price that, the willing purchaser would pay to a willing seller for a property having due regard to its existing conditions with all its existing advantages and potential possibilities” and it is further observed in R.C. Cooper vs. Union of India, (1970) AIR SC 564 that, this value is “unaffected by the special needs of a particular purchaser”.

The prudent purchaser will definitely take into consideration the risk involved in purchase of such a property as possession has to be handed over by October, 2000 i.e. after 18 years, as lease expires in the year 2000. The purchaser will be in a position to derive the benefit of the property for a limited period of 18 years and he will pay the price accordingly.

- 6.0** Comparison of the property in question (PQ) with commercial premises on ownership basis available in Nariman Point (NP) at ₹ 900/- per sq. ft. of carpet area. There are several factors of comparison. However, property under consideration is highly adversely affected due to covenants in the lease and therefore comparison is centered around factors affecting lease.

NP area is recently developed commercial area. The commercial buildings in this area are developed on land taken on lease for a period of 99 years in early seventies (i.e. about 10 years prior to date of valuation) and further renewable for 99 years. NP area is located at a distance of less than one km distance from PQ.

<u>Factors</u>	<u>PQ</u>	<u>NP</u>	<u>Remarks</u>
Balance period of lease in years	18	85	- 20% for PQ
Further renewal	Nil	99	- 20% for PQ
On expiry of entire building to be handed over to lessor free of cost	Yes	No	- 25% for PQ
Total			- 65%

PQ is in the disadvantageous position when compared with all the three factors with premises available in NP and combined effect is 65% and if value of PQ is derived from sale instances of NP at ₹ 900/- per sq. ft. then value of PQ works out as under-

$$\begin{aligned}
 &= 450 \times 900 \times \left(\frac{100 - 65}{100} \right) \\
 &= 450 \times 900 \times 0.35 \\
 &= ₹ 1,41,750/-
 \end{aligned}$$

Say, 1,42,000/-

7.0 Valuation by income approach

Local inquiry revealed that rentals for office premises in New Marine Lines area were prevailing as under:

- (i) An office premises on ground floor having carpet area of about 100 sq. ft. on rear portion of a building (third from the building under consideration) on the same side of the road on which building under consideration is located was given on rent at ₹ 600/- per month with a deposit of ₹ 6,000/- in August 1981. This building is well comparable with the building in which PQ is located.
- (ii) Premises on upper floors of the same building where PQ is located were available at ₹ 4 to 5 per sq. ft. per month of carpet area.

The gross rent per month is considered at ₹ 4.5/- per sq. ft. of carpet area i.e. ₹ 54/- per sq. ft. per year.

Gross yearly rental income	=	₹ 450 x 4.5 x 12
	=	₹ 24,300/-

Outgoings

- i. Municipal taxes
- ii. Maintenance
- iii. Repairs
- iv. Bad debt, vacancy and insurance
- v. Non-occupancy charges as premises is let out and not occupied by owners

The total outgoings are considered at 30% of gross annual rent.

The **'willing buyer'** will certainly take into consideration the above outgoings while deciding the purchase price which is based on net rent available.

The net rent works out to 24,300 x 0.7	=	₹ 17,010/-
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The discussions with real estate brokers dealing in outright sale as well in rental premises in the same area revealed that return available from such property is in the range of 8 to 10%.

YP on dual rate for 18 years (balance period of lease) is considered at 9% and 3% is 7.535

Value of interest of the client	=	17,010 x 7.535
	=	1,28,170/-
		Say, ₹ 1,28,000/-

Value of property by income approach works out to ₹ 1,28,000/-

Summary of valuation

Valuation by market approach	=	1,42,000/-
Valuation by income approach	=	1,28,000/-

C. Valuation of a Commercial Premises for Sale

Facts of the Case (Illustration)

The clients wanted to sell their office premises having built-up area of about 7,500 sq. ft. The clients instructed to carry out intensive market survey.

The land was obtained on lease by the developer from the Govt. of Maharashtra.

The lease agreement in respect of the land taken on lease by the developer from the Govt. of Maharashtra had not been executed.

The data regarding sales of premises having apparent consideration exceeding ` 75 lakhs for the period 1999-2002 were collected to ascertain demand for such a large premises.

Occupier: ABC

1.0 ABC appointed a valuer to estimate value of their interest in property referred under Para 2.0 of this report.

2.0 Particulars of property under consideration

Premises having built-up area of about 7,500 sq. ft., in a commercial building at Cuffe Parade, Mumbai – 400 005.

3.0 Purpose for which valuation is made : To estimate 'Market Value' for sale.

4.0 Date as on which valuation is made : 25th August, 2002

5.0 Date of inspection of premises : 26th August, 2002

Date of report: 20th September 2002

6.0 The clients have put in valuer's hands the following documents:

6.1 The Resolution passed by the Govt. of Maharashtra for allotting land to the developer.

6.2 Draft of agreement to occupation lease to be entered between the developer and ABC.

Note:

It is worthwhile to give here difference between 'building lease' and 'occupation lease'. When lessor gives an open plot of land on lease on certain terms and conditions on which lessee constructs a building is known as a building lease. When lesser owns a built-up premises and the built-up premises is given on lease is known as occupation lease.

The Government of Maharashtra has given a plot of land on lease to the developer for construction of a building. Hence the agreement between Govt. of Maharashtra and the developer is for the building lease.

The developer constructed a multi-storied building on land taken on lease and leased the built-up premises to the clients. This is an occupation lease.

7.0 Definition of 'Market Value' used

As per Para 45 of report of Law Commission of India for the year 1958.

8.0 Procedure adopted for valuation

- 8.1 Inspection of premises was carried out.
- 8.2 The office of the developer was visited.
- 8.3 The data regarding sales of premises in Cuffe Parade and Nariman Point area from 1999 to 2002 were collected.
- 8.4 The data regarding premises given on leave and licence in near by area were also collected.

9.0 Information collected from the office of the developer

- 9.1 The lease agreement in respect of land taken on lease by the developer from the Govt. of Maharashtra has not been executed.
- 9.2 ABC has not executed agreement to lease with the developer in respect of the premises occupied by them.
- 9.3 The following premises in the building are lying vacant and available on lease/ leave and licence.

Location of Premises	Super built-up area in sq. ft.	Vacant since
7 th floor	1,460.75	4 years
7 th floor	1,442.45	4 years
11 th floor	3,640.00	2 years
11 th floor	2,810.00	2 years
12 th floor	690.00	3 years
12 th floor	6,296.00	3 years
12 th floor	1,310.00	3 years

- 9.4 In the building under consideration the premises were taken on rent by multinational companies at ₹ 300/- to ₹ 350/- per sq. ft per month in the year 1994-95. At present due to lack of demand in spite of offering the premises at ₹ 100/- per sq. ft (negotiable), the premises are vacant as indicated above. During the year 1999, rent prevailing in this building

was ₹ 140/- per sq. ft. of super built-up area per month. This is indicative that the rents in 1994-95 were much higher compared to 1999.

9.5 In the event of premises given on leave and licence the developer will charge non-occupancy charge at ₹ 10/- per sq. ft. per month.

9.6 In case of premises in question, the possession is already given to the clients. It is also agreed that the total period of lease will be 60 years and balance period is 35 years from 2002, i.e. lease will expire some time in the year 2037; but agreement is yet to be executed.

10.0 The developer has taken the land on building lease from the Government of Maharashtra. The vital clauses of draft lease agreement are given below:

10.1 The lease will be for a period of 99 years from the date of possession, renewable for only one term of 99 years on the same terms and conditions but on such ground rent as may be revised by the Government.

10.2 The land shall be used by the lessees only for erecting or constructing buildings or structures thereon to house or accommodate either for its own use or for letting out or selling them on ownership basis.

11.0 The agreement between our clients and developer is also not registered. The vital clauses of draft lease agreement between the developer and clients are given below:

11.1 The developer hereby agrees to grant and the lessees hereby agree to accept a lease of the office premises admeasuring 7,500 sq. ft. built-up or thereabouts, on upper floors of the building for a term of 60 (sixty) years commencing from the date on which the said premises are ready for occupation which in this case is 1990 or so.

11.2 The lessees shall not transfer, assign, sell, mortgage, charge or encumber in any manner or otherwise dispose of the demised premises or any part thereof, nor shall they let, sub-let, underlet or allow to be occupied by any other party, the demised premises or any part thereof without the permission in writing of the developer being first had and obtained and the developer will be entitled to refuse to give such

permission without being bound to give any reason for such refusal **but such permission will not be unreasonably refused.**

11.3 On the expiry of the term hereby created, this lease shall be renewed at the option of the lessees for such further period as may be co-terminus with the expiry of the lease of the land granted to the developer by the Government of Maharashtra.

11.4 The stamp duty and the registration charges payable on this lease shall be borne and paid by the sub lessees.

12.0 The transactions of the premises in the buildings in Nariman Point and Cuffe Parade area are enclosed at **Annexure – ‘A’**. All these buildings are developed on land taken on lease from the Government of Maharashtra for a period of 99 years, balance period of lease in each case is more than 50 years. There is a renewal clause for a further period of 99 years.

12.1 The graphs showing transactions of immovable property (each exceeding ₹ 75 lakhs) in city of Mumbai during the years 1999 to 2002 is enclosed at **Annexure – ‘B’**. It is observed that number of transactions have reduced from **94** in March 2001 to **20** during May 2002 indicating that demand for property is decreasing.

12.2 The graph showing transactions of immovable property (each exceeding ₹ 75 lakhs) in Nariman Point and Cuffe Parade areas during the years 1999 to 2002 is enclosed at **Annexure – ‘C’**.

12.3 The graph showing the rate at which transactions have taken place in the building located in the Cuffe Parade area during the years 1999 – 2000 is enclosed at **Annexure – ‘D’**.

Note: The transactions referred in Para 15.1 to 12.3 above are the transactions of commercial office premises.

13.0 The demand for the large premises is very less which is evident from following data collected for 71 properties (each exceeding ₹ 75 lakhs) transacted during 1999 to 2002 in Nariman Point and Cuffe Parade area.

Range of area of premises sold	No. of premises sold
Up to 1,000 sq. ft.	11
1,001 - 2,000 sq. ft.	29

2,001 - 3,000 sq. ft.	11
3,001 - 4,000 sq. ft.	05
4,001 - 5,000 sq. ft.	05
5,001 - 6,000 sq. ft.	01
6,001 - 7,000 sq. ft.	00
7,001 - 10,000 sq. ft.	05
Above 10,000 sq. ft.	04
Total	71

- Note:** a. 51 out of 71 (72%) property indicated above are having area less than 3,000 sq. ft.
b. There are only five properties having built-up area exceeding 7,000 sq. ft. but less than 10,000 sq. ft. and these are the properties sold by a private sector bank near Akaswani Theatre in Churchgate reclamation area.

14.0 Assumptions and limiting conditions

- 14.1** ABC shall ensure to acquire clear and marketable title without any encumbrances within a month.
- 14.2** Data on payment of unearned increment was not available and hence it could not be computed. The valuation is without considering unearned increment payable, if any.
- 14.3** The structural survey is out of scope of terms of reference. It is assumed that the building is structurally sound.
- 14.4** It is also assumed that the building is constructed as per building By-laws and there are no violations of any rules and regulations.
- 14.5** It is assumed that the sale and rental instances are of arms length transactions.
- 14.6** The premises referred under sale and rental instances have been inspected from outside as they could not be inspected from inside.
- 14.7** The terms and conditions mentioned under Para 10.0 for building lease shall not be altered in the final lease.
- 14.8** The terms and conditions mentioned under Para 11.0 for occupation lease shall not be altered in the final lease.

15.0 Type of construction

- (i) The building is a R.C.C. framed structure with R.C.C. beams, columns and roof.

- (ii) As the drawings are not available, foundations are assumed to be with piles.
- (iii) Superstructure is assumed to be brickwork with 15" thick external and 9" thick internal walls with plaster in cement mortar and painted.
- (iv) The premises in question is with teakwood paneled doors and teakwood framed glazed windows. The flooring is of mosaic tiles. Electrical and plumbing are concealed. Following sanitary installations are provided in the premises.

No. of water closets	-	4
No. of lavatory basins	-	4
No. of urinals	-	2
No. of sinks	-	1
- (v) The building is served by the passenger and goods lifts.
- (vi) The building was constructed around 1990.
- (vii) The economic balance life of the building is considered to be 45 years subject to proper maintenance, use and design.

Built-up area (BUA) of the premises is about 7,500 sq. ft.

16.0 Locational aspects of the premises

- 16.1** The premises is located in a commercial building in Cuffe Parade area.
- 16.2** The building is constructed on reclaimed land of Backbay Reclamation area. The entire building is used for commercial purpose as offices, by leading corporate houses.
- 16.3** Colaba area of the city of Mumbai is nearby.
- 16.4** Nariman Point, Churchgate Reclamation and Fort area – the main C.B.D. of Mumbai are located at a distance of about 2 km. on north.
- 16.5** The locality is served by BEST buses connecting to various parts of city of Mumbai, taxis and private vehicles.

- 16.6** The suburban trains for western as well as central suburbs of Mumbai are available from Churchgate and Chatrapati Shivaji Terminus. These two railway stations are at a distance of about 2 to 3 km.
- 16.7** Restaurants, market, banks and other facilities are available nearby.
- 16.8** The building under consideration is on the South end of Mumbai and sea facing.
- 16.9** Employees working in this area have to commute from the long distances mainly by suburban trains. From Churchgate and Chatrapati Shivaji Terminus they have to commute either by bus or by taxi. This is an adverse factor for the employees working in this area.

17.0 Valuation is carried out by market approach

The building lease between Govt. of Maharashtra and the developer is for 99 years with a renewal clause for a further period of 99 years.

The occupation lease between the developer and the clients is for 60 years with a renewal clause as may be co-terminus with building lease.

Thus, sub-lessees (the clients) have right of assignment and there is also a clause for renewal.

The details of the sales of commercial premises in Nariman Point and Cuffe Parade area are given at Annexure-‘A’.

As per situation, size, demand and taking into consideration facts mentioned above, value of premises at ₹ 7,000/- per sq. ft. of built-up area is considered to be fair and reasonable.

Built-up area of the premises is about 7,500 sq. ft.

$$\begin{aligned} \therefore \quad \text{Value of the premises} &= 7,500 \times 7,000 \\ &= ₹ 5,25,00,000/ \end{aligned}$$

18.0 General remarks

- 18.1** The lease agreement in respect of land taken on lease by the developer from the Govt. of Maharashtra has not been executed.

The lease deed between the developer and ABC is not registered as required under the Stamp Act.

The clients are advised to seek legal opinion for this and do the needful to clear their title in the property.

Our valuation is without taking into consideration the effect of liability on account of above two factors.

18.2 The rentals are reducing year by year which is likely to discourage the investment from the prudent investor.

18.3 In order to realize the rate estimated by us it would be desirable to sell the property by converting into number of small units, which are in maximum demand.

19.0 Estimated value ` 5,25,00,000/- (Rupees Five crore Twenty Five lakhs only.)

Annexure – ‘A’

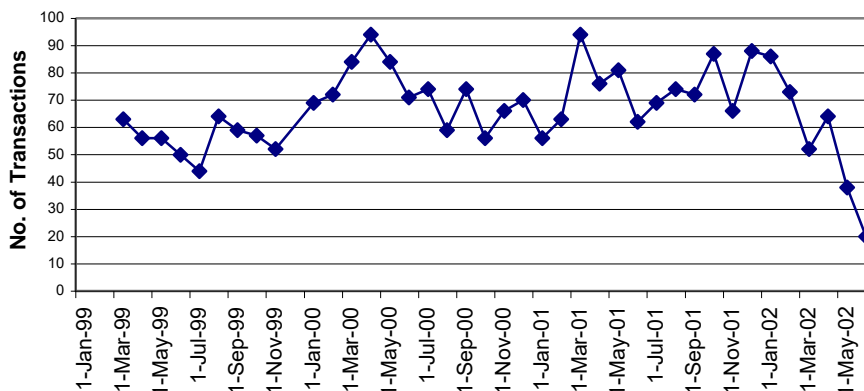
Transactions of the office premises in the buildings in Nariman Point and Cuffe Parade area.

Sr. no.	Premises Location	Built-up Area (BUA) in sq. ft.	Sale Price in ₹	Date of Transaction	Rate per Sq. ft. of BUA
A	Nariman Point				
1	10 th Floor	1,063	1,08,42,600	25 th May, 1999	10,200
2	10 th Floor	1,213	1,23,72,600	25 th May, 1999	10,200
3	10 th Floor	1,435	1,43,65,789	25 th June, 1999	10,011
4	8 th Floor	1,200	1,20,01,200	29 th July, 1999	10,001
5	7 th Floor	1,465	1,61,15,000	20 th October, 1999	11,000
6	6 th Floor	1,715	1,95,00,000	2 nd November, 1999	11,370
7	10 th Floor	1,325	1,78,87,500	5 th March, 2000	13,500
8	14 th Floor	7,687	9,52,00,000	30 th March, 2000	12,385
9	5 th Floor	1,640	2,83,80,000	30 th March, 2000	17,305
10	15 th Floor	5,000	9,00,00,000	21 st September, 2000	18,000
11	9 th Floor	1,425	1,67,16,000	9 th October, 2000	11,731
12	3 rd Floor	1,715	1,80,07,500	30 th January, 2002	10,500
13	7 th Floor	1,432	1,32,46,000	13 th March, 2002	9,250
	Cuffe Parade				
1	18 th Floor	3,100	2,79,00,000	28 th September, 1999	9,000
2	3 rd Floor	1,370	1,27,51,000	10 th November, 1999	9,307
3	18 th Floor	3,110	2,71,00,000	15 th April, 2000	8,714
4	1 st Floor	1,000	80,00,000	9 th April 2001	8,000

Note: Local oral inquiry revealed that all the above sale instances are located in the buildings developed by developers on land taken on lease from the Government of Maharashtra and having similar lease condition that of building under consideration.

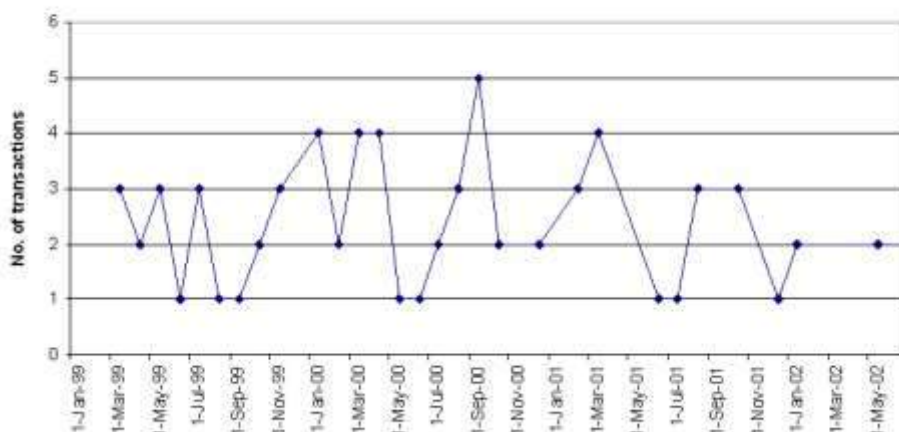
Annexure – ‘B’

Graph showing number of transactions of Commercial Property - office premises (each exceeding ₹ 75 Lakhs) in city of Mumbai during years 1999 to 2002



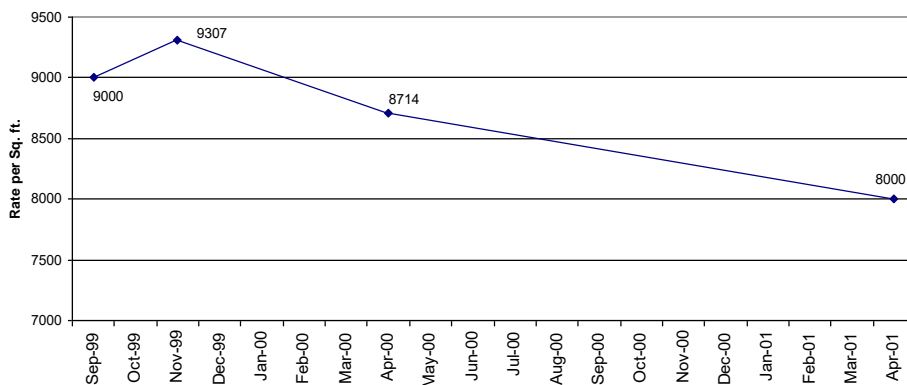
Annexure – ‘C’

Graph showing number of transactions of Commercial Property - office premises (each exceeding ₹ 75 Lakhs) in Nariman Point and Cuffe Parade area during years 1999 to 2002



Annexure – ‘D’

Graph showing price prevailing of Commercial Property - office premises (each exceeding ₹ 75 Lakhs) in the buildings in Cuffe Parade area during years 1999 to 2002



D. Valuation of Heritage Property

Facts of the Case (Illustration)

The clients appointed a valuer to carry out valuation of a property at Matheran, a hill station near Mumbai.

While carrying out the exercise, the valuer came across certain issues and same were brought to the notice of the clients.

The issues:

- (a) The New Master plan was under finalization. The property under consideration was earmarked for inclusion in a list of heritage building.
- (b) As the property is proposed to be included in heritage building its development will be subject to compliance and guidelines issued by concerned authority from time to time.
- (c) Under the circumstances till new Master Plan is finalized, it will not be possible to carry out any construction i.e. at least for next two years. This puts seller into situation where he may be prepared to sell at a lesser amount.

Valuation Report of a Bungalow at Matheran – 410 102

Lessee	:	ABC
Intending Purchaser	:	XYZ

1.0 XYZ appointed a valuer for valuation of a property mentioned under para 2.0.

2.0 Purpose for which valuation is made : Purchase of the property

3.0 Date as on which valuation is made : 1st September, 2002

Date of inspection of the property : 5th September 2002

Date of report: : 25th October 2002

4.0 Particulars of the property

- (i) Land and buildings located at Matheran Hill Station, District Raigadh, Maharashtra.

(ii) Demarcation of property:

North : Plot no. IJK
 South : Plot no. LMN
 East : Shivaji Road
 West : Government land of Matheran village adjacent to valley

(iii) The property is occupied by ABC as lessees.

(iv) Area of land, balance potential etc.:

a) Land bearing C.T.S. no. MNO admeasures 19,300 sq. m. (as per municipal records). As per extract from property register card, area of land is 19,400 sq. m. As per survey carried out by the valuer land area works out to 19,500 sq. m.

For the purpose of valuation, area of land taken into consideration is 19,500 sq. m.

Permissible FSI = 0.1
 Total permissible built-up area = 10% of plot area
 = 1,950 sq. m. (x)

Built-up area of buildings standing on land:

<u>Particulars</u>	<u>Built-up area in sq. m.</u>
(i) Bungalow (main building)	700.00
(ii) Guest house	70.00
(iii) Kitchen	30.00
(iv) Mali's quarters	90.00
(v) Toilet block	10.00
(vi) Horse stable	50.00
Total :	950.00

Existing total built-up area = 950 sq. m. (y)

Balance area available for construction subject to approval after the finalization of Master Plan and final fixation of F.S.I.

= (x) - (y) = 1,950 - 950 = 1,000 sq. m.

Technical specifications of main building (bungalow) under consideration:

Type of construction : Load bearing walls

No. of floors and height of each floor	:	Construction is on ground plus one upper floor Ground floor = 3.5 m First floor = 3.0 m.
Height of plinth (from inside it is leveled, but from outside it is having varying heights because of undulation of land)	:	Varying heights of 0.4 m, 0.8 m, 1.5 m, 2.0 m and 2.2 m
Superstructure	:	Laterite stone masonry with 520 mm thick walls.
Doors and windows	:	Wooden framed paneled doors, wooden framed partly paneled, partly glazed windows with grilles.
Flooring	:	Clay tile, marble mosaic tile and China mosaic.
Finishes	:	Plastered internally and externally. Internal walls are painted with oil paint and external walls have terracotta cement based paint.
Roofing	:	Wooden planks on wooden beams supporting floor of first floor. First floor has Mangalore tile roof on G.I. sheet supported by wooden king post truss.
Type of electrical wiring	:	Batten surface
Built-up area in sq. m.	:	Ground floor = 450 First floor = 250 Total : 700
Year of construction	:	Not available

Age of the building (in years) : Assumed to be at least 100 years based on the fact that the first owner of the property purchased the land and premises in 1898.

Estimated economic future life of the building (in years) subject to proper maintenance and design : 20

b) Details of miscellaneous buildings standing on the land:

- (i) Guest house
- (ii) Kitchen
- (iii) Mali's quarters
- (iv) Toilet block
- (v) Horse stable
- (vi) Brick retaining walls around the bungalow
- (vii) Steel tanks – 4 nos.

Built-up area = 250 sq. m.

(v) The clients have put in valuer's hands the following documents:

- (a) Extract from the property register card showing the names of lessees of rent free property owned by the Government.
- (b) Property tax bill for the year 2001-2002 dated March 2002.
- (c) Site plan of the property.
- (d) Survey map of the property.

Note: In absence of lease document terms and conditions on which property is leased could not be ascertained.

5.0 Locational aspects of the property

5.1 The property is located at a distance of about 8 km from Dastur Foothill of Matheran Hill Station and 4 km from market area of Matheran.

5.2 Amenities like markets, hotels, banks, hospitals, schools, and colleges are located within a distance of about 4 km.

5.3 The locality is served by horsebacks.

6.0 Procedure adopted for the purpose of the exercise

- a) Valuers of real estate, quantity surveyor, civil engineer, land surveyor and a personnel from client visited the site on 15th, 16th, 21st July, 2002 and 1st August, 2002.
- b) Meetings were held with following authorities:
 - Municipal authorities, Matheran
 - Asst. Director, Town Planning, Alibaug, Govt. of Maharashtra
 - Sub-Registrar’s Office, Karjat, Govt. of Maharashtra
 - Member of Heritage Conservation Society, Mumbai Metropolitan Regional Development Authority (MMRDA), Mumbai
 - Officials of MMRDA
 - Architect involved in identifying Heritage buildings of Matheran
 - Real estate brokers
 - Building material suppliers
 - Owners / caretakers of properties at Matheran
- c) Inspection of area / sites falling under following categories was carried out :
 - (i) Site under consideration
 - (ii) Property sold during the years 1992 to 2001
 - (iii) Property available for sale

7.0 Our above exercise revealed that:

- 7.1** All land at Matheran are owned by the Government of Maharashtra. The land in question is taken on rent free lease from the Government. As long as charity purpose is served, its status will remain as rent free lease.
- 7.2** As per the resolution dated 9th February, 1967 issued by the Collector of Colaba, transfer charges will be payable to the Govt. of Maharashtra by the lessee in the event of sale/transfer.

For permitting transfer/assignment of land otherwise that by way of gift to member of family or in favour of public trust for educational, charitable, religious or medical relief purpose, fee equal to 50% of

difference between the market value of land and 20 times the rent payable under lease should be charged.

7.3 Transfer charges are based on market value of land estimated by Town Planning and Valuation Department of the Government of Maharashtra.

7.4 In case the property is used for any purpose other than charity, permission from the Government is required.

The office of the Collector of Alibaug was contacted to ascertain the formalities to be completed for the use of the property in question from charity to any other use - as holiday home for the staff members of intending purchasers as well as present lessees. It was informed that an application is to be made to the Matheran Municipal Council for the change of user and the permission is generally granted. The normal condition imposed for such a transfer is to pay the rent as fixed by the authorities. The amount of rent will be decided on receipt of application.

7.5 Information received from Sub-Registrar's office, Karjat.

- For the purpose of levying stamp duty, the rate fixed by the Government for land in question is ` 990/- per sq. m.
- Stamp duty is charged at 11% of value estimated as above.
- Registration fee is 1% on total value of land with a maximum registration fee payable being ` 20,000/-.

7.6 If rate of land fixed by the Department of Town Planning, Alibaug, Government of Maharashtra is not acceptable for payment of Stamp Duty then an appeal u/s 32 of the Bombay Stamp Act, 1958 needs to be filed.

7.7 As per Development Plan of Matheran Hill Station, sanctioned vide Urban Development Department Notification No.TPS/1484/CR 367/86/2662/UD 1 dated 16-01-1987 which came into force w.e.f. 01-03-1987, land under valuation is earmarked for residential use.

7.8 Ministry of Environment and Forests, Government of India, New Delhi vide notification dated 6th February, 2002 have made draft proposals as under:

- To notify Matheran and surrounding region as an Eco-sensitive Zone. The eco-sensitive zone shall consist of Matheran Hill Station Municipality and its environs.
- The following activities are proposed to be regulated in the eco-sensitive zone.

7.8.1 Master Plan for eco-sensitive zone

Master plan for the eco-sensitive zone shall be prepared by the State Government under the Maharashtra Regional and Town Planning Act 1966, within a period of two years from the date of publication of this notification and approved by the Ministry of Environment & Forests in the Government of India. Pending the preparation of and approval by the Ministry of Environment & Forests to the Master Plan for eco-sensitive zone there shall be no increase in the existing parameters of permissible floor area ratio, permissible height, permissible maximum number of storeys and permissible coverage in Matheran Municipal limits. Stilts, Mezzanines and basements shall not be permitted in Matheran Municipal limits. **There shall be a total ban on new construction in the Matheran Municipal council area.**

7.8.2 Industrial units

Location of industries shall be as per the guidelines drawn up by Government of Maharashtra as well as guidelines issued from time to time by Ministry of Environment & Forests. Only non-polluting, non-hazardous small scale and service industries, floriculture, horticulture or agro based industries, producing products from indigenous goods from the eco-sensitive zone shall be permitted.

7.8.3 Quarrying and mining

These activities shall be banned and no fresh mining lease shall be granted in the eco-sensitive zone.

7.8.4 Trees

There shall be no falling of trees whether on Forest, Government, Revenue or private lands within the eco-sensitive zone without the permission of the appropriate authority.

7.8.5 Tourism

Tourism activities shall be as per Tourism Master Plan. There shall be a ban on new and additional tourism facilities like hotels, restaurants, inns, lodging and boarding houses, etc. within Matheran Municipal council area till the Municipal Master Plan is approved by the Ministry of Environment & Forests.

7.8.6 Natural heritage

The sites of valuable natural heritage in the zones shall be identified, particularly rock formations, waterfalls, pools, gorges, etc. and plans for their conservation in natural setting shall be incorporated in the Master Plan. Strict guidelines shall be drawn up by the State Government to discourage construction activities at or near these sites including under the garb of providing tourist facilities. All the pool reserve areas in the zone shall be preserved.

7.8.7 Man made heritage

The buildings, structures, artifacts, areas and precincts of historical, architectural, aesthetical, and cultural significance shall be identified and plans for their conservation particularly their exteriors (and wherever deemed appropriate their interiors also) shall be prepared and incorporated in the Master Plan within one year from the date of publication of this notification.

7.8.8 Development

Development or construction activity at or around heritage sites (both natural and man-made) shall be regulated in accordance with the Model Regulation on Conservation of natural and man-made Heritage formulated by the Ministry of Environment & Forests in 1995 as amended from time to time and circulated to all State Governments and Union Territory Administrations or any other statutory provisions of the State Government whichever is stricter.

7.8.9 Ground water

Extraction of ground water shall be permitted only for the bona fide agricultural and domestic consumption of the occupier of the plot.

7.8.10 Use of plastics to be banned.

7.8.11 Protection of hill slopes

The Master Plan shall indicate areas on hill slopes where construction shall not be permitted and there shall be no construction on steep hill slopes or with a high degree of erosion.

7.8.12 Discharge of effluents

The discharge of any untreated effluent is prohibited within the eco-sensitive zone.

7.8.13 Solid wastes

The local authorities shall draw up plans for effective disposal of solid wastes.

7.8.14 Natural springs

Strict guidelines shall be drawn up by the State Government to ban development activities at or near these areas.

7.8.15 Traffic

No vehicular traffic shall be permitted within the municipal limits of Matheran except ambulance and fire engine.

- 7.9** At present, the property does not fall under heritage property. The bungalow under consideration is proposed to be included in heritage building, Grade II-A.

The Government of Maharashtra has introduced Heritage Regulation for Heritage buildings.

No development or redevelopment, additions, alterations, repairs, renovation, replacement of special features or demolition of whole or

part of said listed heritage buildings shall be allowed except with prior permission.

For Grade II-A heritage buildings internal changes, and adaptive reuse will be generally allowed, but external changes will be subject to scrutiny. Care must be taken to ensure the conservation of all special aspects for which it is included in Heritage Grade-II. Development permissions for the changes would be given by the Planning Authority in consultation with a subcommittee of the Heritage Conservation Committee.

8.0 Definition of 'market value' used

As per Para 45 of report of Law Commission of India for the year 1958.

9.0 Instances of properties sold and asking prices for some properties available for sale were collected and also inspected

9.1 Instances of properties sold

A. Property sold prior to notification dated 6th February, 2002 issued by the Ministry of Environment and Forests, Govt. of India, New Delhi as referred under Para 7.0.

9.1.1 Property consisting of land admeasuring about 8,903.10 sq. m. with two bungalows was sold for ` 27,00,000/- in the year 1992. This property is about 0.5 km away from market area, 3.5 km away from Dastur Foothill of Matheran and about 2.5 km away from property under consideration.

As old buildings are demolished and new buildings have been constructed after the purchase of property, it is assumed that 90% of the sale price is for land that is say ` 24,30,000/-. Land rate works out to about ` 270/- per sq. m. **Source: Municipal records**

9.1.2 Property consisting of land admeasuring about 6,000 sq. m. with two bungalows was sold in the year 1996, for ` 40 lakhs. This property is on the bazaar area having frontage on the main road; about 3 km from the property under consideration.

As old buildings are demolished and new buildings have been constructed after the purchase of property, it is assumed that

90% of the consideration is towards land which works out to ` 36,00,000/-; land rate works out to ` 600/- per sq. m.

Source: Oral enquiry

- 9.1.3** Property consisting of land admeasuring about 3,440 sq. m. with a very old bungalow was sold in 2001 for ` 13,00,000/-. This property is about 0.5 km away from market area, 3.5 km away from Dastur Foothill of Matheran and about 2.5 km away from property under consideration.

As property consisted of a very old bungalow, 90% of sale price is considered for land, say, ` 11,70,000/-; land rate works out to about ` 340/- per sq. m. **Source: Oral enquiry**

- 9.1.4** Property consisting of land admeasuring about 20,240 sq. m. with a bungalow having a built-up area of about 1,400 sq. m. was sold in 2001 for ` 70,00,000/-. This property is about 2 km away from market area, 5 km away from Dastur Foothill of Matheran and about 3 km away from property under consideration. It is near Charlotte Lake, this lake is famous lake of Matheran and having tourist attraction.

In this case, the bungalow was 150 years old in dilapidated condition and therefore 90% of sale price is considered for land which gives a land rate of about ` 310/- per sq. m.

Source: Oral enquiry

- (B)** Asking prices for property available now

- 9.1.5** A hotel is available near Alexandria point with following particulars:

Land area	=	15,000 sq. m.
Buildings	=	1,200 sq. m.
No. of rooms	=	30
Asking price	=	1.5 crores

This property is about 1.5 km away from market area, 6.5 km away from Dastur Foothill of Matheran and about 1.5 km away from property under consideration.

- 9.1.6** Timberstock bungalow admeasuring about 25,000 sq. m. with building having built-up area of about 400 sq. m. is available for sale at 40,00,000/-. This property is about 3.5 km away from

market area, about 0.3 km away from property under consideration.

10.0 Matheran is a hill station and most of the property derive the benefit of economic return from tourism which includes hotels, restaurants and the like.

Our local inquiry revealed that large number of hotels are available for sale in the bazaar area due to economic downward trend in tourism at this moment.

11.0 Value means present worth of future benefits.

The purchase consideration of the buyer will be on the basis of future periodic return available from the property.

12.0 There are three approaches to value

- Market approach
- Cost approach
- Income approach

Market approach - In this approach, data of sales of property in the vicinity are collected and these sale instances are compared with relative merits and demerits to estimate the value of subject property.

Cost approach - This approach is applied primarily with regard to service property like school, jail, etc. which are generally not sold.

Income approach - In its simplest form is the present worth of future benefits accruing to the purchaser of specific interest or rights in the property. In this approach income forecast has to be made.

Now let us examine the applicability of each of the above approaches to property under consideration.

All the sale instances mentioned under paragraph no. 9.0 are for property transacted prior to the notification dated 6th February, 2002.

These sale instances are not helpful in estimating objective valuation.

Cost approach is also not helpful because while carrying out valuation by this approach, value of land need to be worked out by sales comparison method.

There are no sales of land after notification issued in February 2002.

Income approach will require income projection for a few years. Local inquiry revealed that location is not suitable for hotel business unless extraordinary attraction is created which is not available in Matheran. This has adverse effect in projecting cash flows.

Under such circumstances, it is difficult to estimate exact number due to various facts mentioned under foregoing paragraphs.

There are two properties available for sale mentioned under paragraphs 9.1.5 and 9.1.6.

The property referred under paragraph 9.1.5 consists of hotel with 30 rooms capable of giving economic return as infrastructure to run the hotel is available. Area of land is about 15,000 sq. m. and the built-up area of rooms constructed is about 1,200 sq. m; whereas property in question is land with an old building requiring repairs before putting into any use.

The property referred under paragraph 9.1.6 consists of land admeasuring about 25,000 sq. m. with about 80 years old building having built-up area of about 400 sq. m. The property could not be inspected from inside.

In order to generate economic return, the investor will have to incur heavy expenses.

In view of facts mentioned above the property in question is more comparable to Timberstock bungalow referred under paragraph 9.1.6.

Therefore, value of the property in question is derived from the asking price of ` 40,00,000/- from the property mentioned under paragraph 9.1.6.

In order to ascertain whether the asking price is reasonable or not a meeting was held with an investor having his property near Rugby Hotel, Matheran. He was of the opinion that ` 40,00,000/- is reasonable.

However, we feel that the price could be reduced up to 15% after negotiations. The owner of Timberstock bungalow first quoted ` 45,00,000/- and now has come down to ` 40,00,000/-. If one goes with bag full of money further reduction cannot be ruled out.

13.0 Assumptions and limiting conditions

- Titles of Timberstock bungalow and property in question are marketable and clear.

- Both the properties – are free from all encumbrances.
 - Due to urgency expressed by the clients the information from various authorities is orally collected and relied upon.
 - Details of rent charged by lessor are not available.
- 14.0** Value of property on ‘as is where is’ basis in the range of ` 35,00,000/- to ` 40,00,000/- is considered to be fair and reasonable subject to our remarks in paragraph no. 16 and 17.
- 15.0** Property in question is proposed to be included in the Heritage building. Once it is included in the Heritage building no changes in the exterior will be allowed and it will be necessary to keep exterior as per the requirement. It is necessary to carry out repairs of exterior portion.

For this purpose, structural engineer’s opinion be obtained.

For the purpose of levying the stamp duty rate fixed at present is ` 990/- per sq. m., which gives a value of land $19,500 \times ` 990 = ` 1,93,05,000/-$; which is very much on the higher side.

Stamp duty on value of land as per land rate fixed by the authorities works out to-

$$\begin{aligned} &= \frac{11}{100} \times 1,93,05,000 \\ &= 21,23,550/- \text{ which is also on the higher side.} \end{aligned}$$

- 16.0** The clients have earned a commendable reputation in hotel industries worldwide. It is recommended that a blue print be prepared for taking maximum benefit out of the property in question by the clients. Value of business be estimated by D.C.F. technique. From that residual value of the property in question on ‘**as is where is**’ basis be worked out.

Value of property on ‘**as is where is**’ basis indicated in paragraph 14.0 of this report and residual value of property estimated from D.C.F. technique be compared and out of the two values, whichever is beneficial to the clients be adopted.

17.0 General remarks

- 17.1** Various issues mentioned under paragraphs 7.8 have direct bearing on marketability of the property. These issues contribute to adverse effect on marketability.
- 17.2** As the property is proposed to be included in Heritage building, its development will be subject to compliance and guidelines issued by concerned authority from time to time.
- 17.3** Under the circumstances till the New Master Plan is finalized it will not be possible to carry out any construction i.e. at least for two years. This puts the seller into situation where he may be prepared to sell at a lesser amount. However, this will depend on eagerness of the parties to the transaction.

E. Valuation of premiss for purchase by a Licensee

Facts of the Case

The clients (licensee) were occupying a commercial premises on the ground floor of a first class building in Nariman Point area of Mumbai city from January 1988 for a period of 10 years.

As per terms of the agreement after the period of licence is over, the licensor will sell the premises to the licensee. For this purpose, clients approached a valuer to estimate the value of their rights in the property occupied by them.

While going through the leave and licence agreement and reading the same with relevant provisions of Bombay Rent Control Act, it was prima facie felt that the actual relationship between licensor and licensee is that of a landlord and a tenant. This fact was brought to the notice of the clients and it was suggested that it would be better to take legal opinion to establish their rights in the premises so that proper valuation can be carried out. The clients agreed to take the legal opinion.

According to the legal opinion, the licensees (the clients) were statutory tenants of landlord (licensor).

It is pertinent to point out that the clients had paid the deposit amounting to ` 3.50 crores at the time of taking premises on leave and licence basis in January, 1988.

The clients also requested the valuer to carry out valuation of the premises on the basis of vacant possession even if it is established that they are the statutory tenants.

Valuation was carried out by both market as well as income approaches.

**Valuation Report of a Commercial Premises
at Nariman Point, Mumbai – 400 021**

Owner : ABC (Licensor)
Occupant : DEF (Licensee)

1.0 DEF appointed a valuer to estimate 'Market Value' of their rights in a commercial premises occupied by them under leave and licence agreement.

2.0 Particulars of property under consideration

Ground floor premises having built-up area of 10,000 sq. ft. located in a first class building in Nariman Point, Mumbai - 400 021.

The developer obtained the land on lease from Government of Maharashtra (GOM) for a period of 99 years some time in late seventies. The lease has a renewal clause for a further period of 99 years. The developer constructed a multistoried commercial building and sold individual premises. The purchasers of the premises formed the co-operative society. The licensor is one of the purchasers who acquired the premises on ownership basis from the developer.

The copy of lease deed between the developer and the GOM was not available. We were orally informed that in the event of sale or transfer unearned increase is payable to the lessor. In absence of the lease document, unearned increase could not be quantified.

3.0 Statement showing net monthly compensation, service charges for air conditioners, etc. borne by the licensee:

Net monthly compensation in `	Monthly service charges in `
For first five years (1.1.1988 to 31.12.1992)	
6,50,000	5,00,000
For balance period of licence expiring on 31 st December 1997	
10,50,000	8,00,000

Net compensation per month received
by licensor as on date of valuation = 10,50,000 + 8,00,000
= ` 18,50,000/-

Yearly compensation works out to = ` 2,22,00,000/-

4.0 Purpose for which valuation is made : For purchase by the licensees

5.0 Dates as on which valuation is made : 31st December 1997

6.0 Date of inspection of property : 28th April, 1998

Date of report: : 29th May 1998

7.0 The clients furnished the following papers

- Leave and licence agreement entered into between ABC and DEF.
- Plan of the premises.

8.0 Locational aspects of property

8.1 It is located in the posh commercial locality of city of Mumbai.

8.2 The locality is served by public transport like taxis, BEST buses and private vehicles.

8.3 Suburban western and central railway stations - Churchgate and Chhatrapati Shivaji Terminus are located at a distance of about 1 to 2 km.

8.4 Banks, post office and cafeteria are in the vicinity.

8.5 Government offices - central as well as state like - Sachivalaya, Income Tax are located close by.

8.6 High Court, City Civil Court, Reserve Bank of India, Mumbai Port Trust are easily approachable.

8.7 The premises is located on ground floor and is in interior from front boundary of the plot.

9.0 Type of construction

9.1 The building is having construction on ground plus 14 upper floors.

9.2 This is a R.C.C. structure with R.C.C. beams, columns and roof.

9.3 Superstructure is in bricks in cement mortar. Walls are with cement plaster and painted with plastic emulsion paint.

- 9.4 Aluminium glazed windows / rolling shutters are provided.
- 9.5 Flooring is of marble.
- 9.6 Electrical wiring is concealed.
- 9.7 Floor to roof height is 10' 4".
- 9.8 Building is served with lifts of OTIS make, each having a capacity of 1,000 kg for 15 persons. Lifts are automatic.
- 9.9 Building is about 15 years old. Estimated economic balance life is considered to be 35 years provided the building is of sound design and shall be properly maintained in future.

10.0 Important term leading to exercising the right to sale to occupant by the licensor

The licensors exercised their right to sale the premises to licensee as per terms of leave and licence agreement.

11.0 Approach to valuation

11.1 Value means present worth of future benefits. In valuation exercise the rights of the parties to the transaction are valued and not the land and building as such. If it is not valued like this then it will amount to brick mortar valuation.

11.2 In order to decide the proper method of valuation, it is necessary to examine facts and circumstances of this case. Furnished below are the different aspects from which an opinion on methodology can be formed.

(a) The premises was not vacant from 31st December 1997 till today, but was in continued occupation and possession of the licensee (occupant).

(b) As per Bombay Rent Control Act, the licensee in occupation of premises is protected by provision of standard rent.

Section 7(2) (a) of Bombay Rent Act lays down that -

“No person shall claim or receive on account of any licence fee or charge for any premises or any part thereof, anything in excess of the standard rent and permitted increases (or, as the case may be, a proportionate part thereto), for such premises if they had

been let, and such additional sum as reasonable consideration for any amenities or other services supplied with the premises”.

Section 7(2)(b) of Bombay Rent Act lays down that -

“All the provisions of this Act in respect of the standard rent and permitted increases in relation to any premises let, or if let, to a tenant, shall mutatis mutandis apply in respect of any licence fee or charge and permitted increases in relation to the premises given on licence; and accordingly, the licensee or licensor may apply to the Court for the fixation of the licence fee or charge and permitted increases and the additional sum mentioned above”.

It is, therefore, evident that provisions concerning income from property to licensor, is controlled even in case where premises is given on leave and licence.

(c) In following two cases the Supreme Court have held that contractual rent cannot exceed standard rent or legal rent.

- In case of Corporation of Calcutta vs. Smt. Padmadevi (1962 AIR SC 151) the Supreme Court has held that reasonable expectation of rent cannot exceed legal expectation as provided in the Rent Act.
- In case of Diwan Daulatrai Kapoor vs. N.D.M.C. (122 ITR 700) Supreme Court held that annual letting value cannot exceed standard rent.

(d) Section 13A-2 of Bombay Rent Control Act is expressly applicable to licenced premises for **residential purposes only**, so as to entitle the licensor to recover the possession of the premises given on expiry of licence. **There is no other corresponding provision in the Bombay Rent Act that entitles the recovery of possession of premises meant for occupation other than residential purpose.** In view of this provision, premises under consideration which is used for commercial purpose, is a licensed property for which there is no legal provision for summary eviction. In other words, the provision of section 13A-2 cannot be invoked in this case.

(e) In case of R.C. Cooper vs. Union of India (AIR 1970 SC 564) Supreme Court, has observed that -

(i) The method of capitalization of rental value with an appropriate multiplier is a satisfactory method of valuation of land and buildings.

(ii) The market value may be determined from sales of comparable properties, proximate in time to the date of acquisition, similarly situate, and possessing the same or similar advantages or disadvantages. Market value is the price the property may fetch in the open market if sold by a willing seller unaffected by the special needs of a particular purchaser.

(iii) Capitalization may be made of the net annual profit out of the property at a rate equal in normal cases to the return from gilt-edged securities. Ordinarily, value of the property may be determined by capitalizing the net annual value obtainable in the market at the date of the notice of acquisition.

(f) From the sale instances referred under Para 12.0 it is observed that the highest price prevailing in Nariman Point area for outright purchase for commercial premises was about ` 4,292/- per sq. ft. during the years 1988-89 when the premises under consideration was let for the first time.

Licensee paid a total sum of ` 3,50,00,000/- as advance compensation which amounts to about 80% price had it been purchased in 1988 at highest prevalent rate then.

12.0 As the clients requested us to give valuation also on the basis of vacant possession – the valuation for this purpose was carried out by sales comparison method.

Built-up area of premises is 10,000 sq. ft.

Characteristics of premises under consideration:

- (i) The premises is having substantially large area which involves heavy investment for purchase. Buyers of such premises are less.
- (ii) The premises is located on the ground floor and is away from front boundary of the plot and too much in interior lacking prominence for lucrative commercial user.
- (iii) It lacks vista.

For market approach, extensive research was carried out. More than 35 transactions of commercial premises in Nariman Point area were collected.

In order to ascertain, whether these transactions satisfy the criteria laid down in market value definition the parties to the transactions were contacted. From the discussions, it was found that certain transactions were between known parties and not satisfying the criteria laid down in market value definition. These transactions were dropped from the analysis.

The premises in question is located in the first class building of Nariman Point area. The transactions in the first class building have been considered and the same are tabulated below -

Sr. No.	Floor	Purchase price in `	Rate per sq. ft. of built-up area
		Built-up area in sq. ft.	
March, 1997			
1.	8 th Floor	$\frac{1,18,18,750}{775}$	15,250
April, 1997			
2.	3 rd Floor	$\frac{1,27,87,500}{775}$	16,500
December, 1997			
3.	1 st Floor	$\frac{2,25,00,000}{1,325}$	16,981
February, 1998			
4.	8 th Floor	$\frac{1,78,35,000}{1,230}$	14,500
5.	14 th Floor	$\frac{2,41,50,000}{1,770}$	13,644

All above transactions are for an area less than 15% of area under consideration except sale instance referred under sr. no. 5 which is about 18% of premises under consideration.

Considering the situation (inner location), substantially larger area, type of construction and prevailing rates in the locality, the rate of ` 11,500/- sq. ft. of built-up area is considered to be fair and reasonable for the office premises under consideration.

$$\begin{aligned}
 \text{Value of Property} &= \text{Built-up area} \times \text{rate} \\
 &= 10,000 \times 11,500/- \\
 &= ` 11,50,00,000/-
 \end{aligned}$$

13.0 Valuation by income approach

Valuation by income approach is carried out keeping in mind Section 13A-2 of Bombay Rent Control Act, according to which summary eviction is only available to residential premises given on leave and licence; whereas premises in question is a commercial premises, not only that, while granting the licence deposit taken by licensor amounts to 80% of prevalent highest rate at the time of entering into leave and licence agreement.

In view of the above, while estimating value by income approach the licensee is treated as a tenant protected under the Rent Control Act **(as outlined in the legal opinion obtained which is given at the end).**

Statement showing sale of ownership commercial premises in auction in Nariman Point area by Income-tax Department from the Year 1988-89.

Sr. No.	Date of Auction	Description of Property	Reserved Price in ` (lakhs)	Selling Price in ` (lakhs)	Built-up Area in Sq. ft.	Rate per Sq. ft.
1.	22-11-1988	Office on 5 th Floor	38.24	38.25	1,294	` 2,956/-
2.	27-03-1989	Office on 6 th Floor	58.40	69.20	1,612	` 4,292/-
3.	28-03-1989	Office on 16 th Floor	40.30	40.30	1,324	` 3,043/-
4.	15-05-1989	Office on 11 th Floor	21.25	22.50	663	` 3,393/-
5.	02-08-1989	Office on 9 th floor	36.40	36.40	1,014	` 3,589/-
6.	16-10-1989	Office on 6 th floor	24.75	24.75	856	` 2,891/-
7.	19-12-1989	Office on 7 th floor	24.90	24.90	639	` 3,896/-
8.	19-12-1989	Office on 6 th floor	24.40	24.40	585	` 4,170/-

Market value in 1988 by adopting the highest rate under sr. no. 2 above.

$$\begin{aligned}
 \text{Market value works out to} &= \text{Built-up area x rate} \\
 &= 10,000 \times 4,292 \\
 &= 4,29,20,000/-
 \end{aligned}$$

As per S.5(10)(iii-a) of Bombay Rent Act, net standard rent is calculated by allowing return at 15% on market value, which in this case works out to:

$$\begin{aligned}
 \text{Net standard rent per annum} &= 4,29,20,000 \times 0.15 \\
 &= \text{` } 64,38,000/-
 \end{aligned}$$

$$\text{Net rent charged per annum} = \text{` } 2,22,00,000/-$$

The net rent charged per annum is much higher than the standard rent. Therefore, if matter goes to the Court for fixation of standard rent, net contractual rent (2,22,00,000/- p. a.) will come down to level of the net standard rent (64,38,000/-).

In view of this, net standard rent is capitalised in perpetuity.

In order to select Y.P., discussions were held with real estate agents involved in rental transactions, sales of rented property as well as owner occupied commercial property in Nariman Point area. According to information available - the yield available in 1998 from commercial property was around 10-11%

Capitalizing the net standard rent at 10% in perpetuity, value of premises works out to –

$$\begin{aligned}
 &= 64,38,000 \times \frac{100}{10} \\
 &= \text{6,43,80,000/-}
 \end{aligned}$$

14.0 Summary of valuation

Valuation by market approach	:	11,50,00,000/-
Valuation by income approach	:	6,44,00,000/-

The difference in the market value by two methods is on account of –

- i. Valuation by market approach is on the basis of the vacant possession.
- ii. As the clients are protected under applicable Rent Control Laws, valuation by income approach is ` 6.44 crores.

As the status of the clients is that of a statutory tenant and clients intend to acquire the rights at market value and therefore it is appropriate to recommend buying at 6.44 crores.

Note:

In fact, value of premises by sitting tenants is very subjective. It is governed by the eagerness of landlord and tenant to transact the property.

In this case, value based on vacant possession is ` 11.5 crores.

As the property is occupied by the tenant, protected under the Rent Control Act, value has gone down by ` 5.06 crores.

This means value of tenants' right in the property is ` 5.06 crores. The landlord may or may not agree to acquire tenants' right at this price. Similarly, tenant may or may not agree to acquire landlords' right at ` 6.44 crore

This exercise also throws light on the fact that In valuation exercise, valuation is carried out for the rights of occupants, which is governed by the agreement between parties and applicable laws.

At times, it is difficult to ascertain what are the rights of the parties as per agreement and it becomes necessary to take legal opinion.

It is always desirable to take the legal opinion and carry out valuation under different scenario, which will help the client to take a decision.

Legal Opinion Incidental to Valuation

1. Whether the transaction is in essence a leave and licence or a lease:

Licence has been defined under section 52 of Indian Easement Act of 1882 which is fundamental to understanding as to whether a particular transaction amounts to a licence as distinguished from lease. In accordance with the same **any occupancy or right which does not amount to interest in the property can only be called a licence**. In other words, if a transaction creates an interest in the property it amounts to a lease and not a licence. Again, from successive judicial decisions we gather, when there is a transfer of possession for the purpose of enjoyment or for exclusive possession according to the operative intent of the parties, the transaction may be presumed to be a lease and not a licence:

- (i) T.K. Jacob vs. Gracykutty And Ors., (1991) AIR Ker 281
- (ii) P. Narayanan vs. The Managing Director, Kerala, (1991) AIR Ker 306
- (iii) Smt. Ramuben Bhimji and Others vs Padmabai and Others, (1991) AIR Bom 85
- (iv) Brahm Raj vs. Smt. Vidya Wati and Others, (1991) AIR P H 188

In this particular case, it is undisputed that exclusive possession was given to the occupant (licensee) for enjoyment of the premises in pursuance of the transaction. So, by no stretch of imagination can it be called a 'Licence' although the transaction was couched in that language.

In the next place, the definition of 'licensee' as given in section 5(4A) of the Bombay Rent Act clearly lays down that 'licensee' is a person who is in occupation under a subsisting agreement for licence given on a 'licence fee' or a 'charge'. But in the instant case, it is a 'monthly compensation' payable in advance every month at the agreed amount. The liability to pay all outgoing including lease rent to Government of Maharashtra, Municipal Taxes, Water and Maintenance charges payable to the Apex Co-operative Society is exclusively on the occupant (licensee) which shows that the nature of possession is exclusive and involves all the incidence of a lease-hold premises. There was also an advance compensation which is nothing but an advance rent paid in the form of a loan at the beginning of tenancy.

As regards the mode of payment of the said monthly compensation as laid down in the agreement, the said compensation is payable 'before the 5th day of each

calendar month according to the Gregorian Calendar'. This is exactly the mode prescribed for recovery of rent as contained in section 27 of the Bombay Rent Act according to which rent is payable by the month or year or portion of year, recovered according to the British Calendar. Since this is the only prescribed mode of recovery of rent, the method of payment as in agreement adds to the presumption that the monthly compensation is not 'licence fee' but rent. The intent of the parties is quite clear.

2. Even as a licensee, whether the occupant (licensee) is liable to be summarily evicted

The next question then arises is whether the occupant (licensee) is liable to be evicted under the provisions for ejection of a licensee as provided in section 13A-2 of the Bombay Rent Act, even taking him as a licensee under that Act, the agreement stipulates that the licensed premises should be occupied by the occupant (licensee) 'for its own use and occupation and for carrying on its own business' while section 13A-2(1) of the Bombay Rent Act entitles landlord to recover possession of licenced premises on expiry of licence given only for residence and impliedly not for occupancy for business. This excludes the application of the provisions for recovery of possession on efflux of the period of licence as contained in Bombay Rent Act in this particular case.

The only course for eviction available to the licensor is to take recourse to revocation of licence under section 60 of the Indian Easement Act, 1882. But in that case too, since the occupant (licensee) has incurred expenses for internal improvement of the premises and executed work of permanent character in furtherance of such improvement, the licence is not revocable as implied by clause (b) of section 60.

3. What is the status of occupation of the occupant (licensee), if the licensor's option to sale fails?

The contract for sale as contained in agreement is not a concluded contract, inasmuch as there is an uncertainty and ambiguity in respect of the amount of consideration money. The agreement has not laid down an ascertained figure of consideration money but only a contingency of the said figure to be determined. This leaves the entire contract incomplete that has to be made complete on the mutual consent of the parties after expiry of ten years of occupancy. What happens if the mutual consent is not reached and the attempt to conclude the contract fails? The agreement lays down specifically at its end that until the

exercise of the Licensor's option to sale, the relationship shall continue to be that of **licensor and licensee**. The exercise of option is not complete until the consideration money is ascertained in a manner fair and reasonable. According to the agreement the relationship remains that of **Licensor and Licensee** which the occupant (licensee) vindicates should be that of lessor and lessee or, precisely landlord and tenant.

F. Effect of Amendment to Rent Act on Rent Fetching Capacity of Property

Facts of the Case (Illustration)

The clients were occupying a residential premises admeasuring 3,500 sq. ft. Off Peddar Road, Mumbai - 400 026.

They had taken the premises on leave and licence basis some time in early seventies as per provisions of The Bombay Rent, Hotels and Lodging House Rates Control Act, 1947 (known as Bombay Rent Act), applicable then. They were paying a licence fee at the rate of ` 2,500/- per month. In the year, 1973, Bombay Rent Act was amended and licensees were granted protection as a tenant under the Rent Act and thus became a protected tenant. On becoming a statutory tenant they filed a suit for fixing the standard rent in 1973. The petition was decided in favour of the clients and standard rent was fixed by the Court at ` 1,050/- per month sometime in the end of 1998. The Maharashtra Rent Control Act, 1999 came into force from 1 April 2000 and as per this new Act, the clients were falling under the category of tenant, not protected under the Act. Under the changed circumstances the clients wanted to know the market rent which worked out to ` 2,18,750/- per month.

Report on Market Rent of Ownership Premises No. DEF, Ground Floor, Off Peddar Road, Mumbai – 400 026

Licensee : ABC

- 1.0** ABC appointed a valuer to estimate 'Market Rent' of an ownership premises mentioned in para 2.0 of this report.
- 2.0** Residential ownership Flat No. DEF, Ground floor, Off Peddar Road, Mumbai– 400026.
- 3.0** **Purpose for which valuation is made** : To estimate 'Market Rent
- 4.0** **Date as on which rental estimation is made** : 30th September, 2001
- Date of inspection of property** : 5th October 2001
- Date of report** : 7th November 2001

5.0 Particulars of the property

5.1 Property consists of an ownership residential premises.

5.2 Built-up area (BUA) of the premises is 3,500 sq. ft.

6.0 Type of Construction

- 6.1 No. of floors and height of each floor : Ground plus 10 upper floors.
Height: 10' 0" from floor to bottom of slab.
- 6.2 Built-up area of the flat : 3,500 sq ft
- 6.3 Year of construction : 1970
- 6.4 Estimated economic future life : 30 years. Subject to proper design, repairs and maintenance.
- 6.5 Type of construction : R.C.C framed structure
- 6.6 Type of foundations : Drawing is not available, assumed to be R.C.C. footings.
- 6.7 External walls : Bricks in cement mortar with 12" thick walls including plaster.
- 6.8 Internal partition walls : 6" thick brick walls.
- 6.9 Doors and windows : Wood work of doors and windows is of teakwood. There are panelled doors and glazed windows fitted with grilles.
- 6.10 Flooring : Marble flooring in rooms with 6" skirting, ceramic tile flooring in kitchen, 6' 0" height dadoes of glazed tiles in toilets.
- 6.11 Wall finishing. : Walls are internally and externally with cement plaster. Internal walls are finished with painting. External walls are sand faced.
- 6.12 Roofing : R.C.C. slab.

- 6.13** Internal wiring : Concealed.
- 6.14** Class of fittings : Medium

7.0 Locational aspects of the property

- 7.1** The property is located in high class residential area of Malbar and Cumballa Hill Division.
- 7.2** This is a well developed residential area.
- 7.3** All the amenities like schools, colleges, private and public hospitals, banks, post office, marketing centers, railway station, theaters, eating houses are available within a distance of about 2 to 3 kilometers.
- 7.4** The locality is served by BEST buses, taxis and private vehicles.

8.0 Assumptions and limiting conditions

- 8.1** Tenure of land is considered to be freehold.
- 8.2** Property is free from all encumbrances.
- 8.3** The building is constructed as per plans approved by the Municipal Corporation of Greater Mumbai.
- 8.4** The premises referred under sale instances have been inspected from outside as they could not be inspected from inside.
- 8.5** It is assumed that the sale instances are of arms length transactions.

- 9.0** In order to estimate the market rent prevailing in the locality, estate brokers operating in Peddar Road, Warden Road area were contacted and they informed that the rental operates on what is known as a package. The package means the total return expected by the landlord on the present market value and same is prevailing at 6% per annum.

Let us consider a hypothetical case of residential premises available on out right sale on ownership basis at ` 10,000/- per sq. ft. The gross rent expected by the landlord at 6% works out to ` 600/- per annum per sq. ft. If the area of the premises is 1,000 sq. ft., the rental will be ` 6,00,000/- per annum i.e. ` 50,000/- per month.

All the outgoings such as municipal tax, repairs, maintenance charges etc. will be borne by the landlord. If no deposit is taken then the rent will be ` 50,000/- per month.

The rent component of ` 50,000/- will get reduced on quantum of deposit. If the deposit is ` 10,00,000/-, ` 20,00,000/-, ` 30,00,000/- the monthly rental will be around ` 40,000/-, ` 30,000/-, ` 20,000/- respectively.

In view of facts mentioned above, the estimation of the market value of the premises in question needs to be carried out first.

10.0 General remarks

10.1 By an agreement entered into between XYZ as licensor and ABC – as licensees, the premises under consideration was taken on leave and licence basis by the licensee (ABC) at. ` 2,500/- per month in the year 1971.

10.2 ABC – the licensees filed an application for fixation of standard rent in the court of small causes at Mumbai in 1973. By the order of the Hon. Judge in December, 1998, the standard rent of the premises was fixed at ` 1,050/- per month as basic rent plus taxes, cess payable as per the circulars issued by Municipal Corporation.

10.3 As per section 3(1)(b) of the Maharashtra Rent Control Act,1999, the following entities are exempted (are not protected) from the operation of the Act:

- (a)** Multinational companies.
- (b)** Public limited companies having a paid up share capital of ` 1 crore or more.
- (c)** Banks

The ABC is a company having a paid up share capital exceeding ` 1 crore.

10.4 Therefore, rent is computed on the basis that the licensee is not a protected tenant, and premises will be available to the landlord once a notice to quit is served.

11.0 Approach to estimation of rent

First step is to estimate 'market value' of the premises. The local inquiry revealed that following ownership residential premises are **recently** sold in Malabar and Cumballa Hill Division, the area in which flat under consideration is located:

- (i) Flat admeasuring 1,480 sq. ft. on second floor in a building near Jaslok Hospital on Peddar Road is sold for ` 1,50,00,000/- giving a rate of ` 10,135/- per sq. ft.
- (ii) Flat admeasuring 1,088 sq. ft. on 9th floor of a building close to building referred under (i) above, is sold for ` 1,32,00,000/- giving a rate of ` 12,132/- per sq. ft.
- (iii) Flat admeasuring 1,030 sq. ft. on 2nd floor of a building near Allhabad Bank building on Peddar Road is sold for ` 1,20,00,000/- giving a rate of ` 11,650/- per sq. ft.
- (iv) Flat admeasuring 964 sq. ft. in a building next to the building referred under (iii) above, is sold for ` 85,00,000/- giving a rate of ` 8,817/- per sq. ft.
- (v) Flat admeasuring 945 sq. ft. on 7th floor of a building near Jaslok Hospital on Peddar Road is sold for ` 1,15,02,000/- giving a rate of ` 12,171/- per sq. ft.
- (vi) Flat on 7th floor admeasuring 750 sq. ft with terrace admeasuring 330 sq. ft in a building near Jaslok Hospital on Peddar Road is sold for ` 1,00,00,000/- giving a rate of ` 12,000/- per sq. ft.
- (vii) Flat admeasuring 2,970 sq. ft. on 3rd floor of a building near Vama Showroom on Peddar Road is sold for ` 4,90,00,000/- giving a rate of ` 16,498/- per sq. ft.
- (viii) Flat admeasuring 1,266 sq. ft. on 3rd floor in a building at Oomer Park on Bhulabhai Desai Road is sold for ` 1,50,00,000/- giving a rate of ` 11,848/- per aq. ft.
- (ix) Flat admeasuring 1,120 sq. ft on 16th floor of a building on Bomanji Petit Road is sold for ` 1,18,00,000/- giving a rate of ` 10,535/- per sq. ft.

- (x) Flat admeasuring 823 sq. ft. on 8th floor of a building near Breach Candy Hospital on Dr. Rajat Ali Patel Road is sold for ` 1,14,00,000/- giving a rate of ` 13,851/- per sq. ft.
- (xi) Flat admeasuring 1,950 sq. ft. in a building near Breach Candy Hospital on Bhulabhai Desai Road is sold for ` 2,90,00,000/- giving a rate of ` 14,871/- per sq. ft.
- (xii) Flat admeasuring 1,140 sq. ft. on 2nd floor of a building near Breach Candy Hospital is sold for ` 1,60,00,000/- giving a rate of ` 14,035/- per sq. ft.
- (xiii) Flat admeasuring 2,263 sq. ft. on 5th floor in Mafatlal Park on Bhulabhai Desai Road is sold for ` 4,75,00,000/- giving a rate of ` 20,989/- per sq. ft.
- (xiv) Flat admeasuring 1,014 sq. ft. on 14th floor in a building on Bhulabhai Desai Road is sold for ` 1,15,00,000/- giving a rate of ` 11,341/- per sq. ft.

As per the situation, size, conditions prevailing and taking into consideration sale instances referred above, the value of premises at ` 12,500/- per sq. ft. of BUA is considered to be fair and reasonable.

Value of premises works out to = 4,37,50,000/-
(i.e. 3500 x 12500)

The package at 6% works out to = 26,25,000/-

i.e. $\left(4,37,50,000 \times \frac{6}{100} \right)$

∴ The gross monthly rent works out to = 2,18,750/-

G. Valuation on Highest and best use analysis

Facts of the Case

The property consists of a large industrial land with number of factory buildings constructed over it with vast open land.

The clients wanted to restructure the operations carried out in the property. Prima facie, they had an impression that value of land and building would be higher than the income earned from the operations carried out from the property.

The clients wanted a quick exercise with rough estimate.

The purpose of the exercise being restructuring of undertaking, it was necessary to find out the best use of the property and therefore **utility** of property from various options was examined.

The various options considered are given below:

- a) Valuation on '**as is where is**' basis by estimating value of land and computing depreciated replacement cost of buildings.
- b) Valuation on '**alternative use**' basis:

For this purpose, following options are considered:

Option no.1

- (a) Letting out existing built-up premises for warehousing of iron, steel and cotton.
- (b) Letting out open space for storage of empty containers.

Option no.2

- (a) Demolishing all the existing buildings and letting out entire open land for empty containers.

Option no.3

- (a) Letting out all existing buildings for warehousing purposes as per Option No.1.
- (b) Constructing service industrial estate by utilizing balance F.S.I. and selling them on ownership basis.

Option no.4

- (a) Demolishing all the existing buildings, constructing service industrial estate, and selling built-up premises on ownership basis and estimating land value by residual method.

Conclusion - The highest value is generated by residual method under Option – 4.

Part – I

Executive Summary of Valuation Report of Immovable Property at Sewri, Mumbai – 400 015

Clients : ABC

1.0 ABC, appointed a valuer to estimate 'Present Market Value' of assets mentioned under Para no. 2.0 of this report for restructuring.

2.0 **Details of property under consideration**

Industrial land and buildings located at Sewri, Mumbai – 400 015.

3.0 **Date as on which valuation is made** : 31st December, 1992.

4.0 Inspection of the property was carried out during the month of January, 1993.

5.0 The report is based on the following information furnished by the company:

- (i) Area of land;
- (ii) Layout plan, sectional plans and year of construction of buildings;
- (iii) Statement filed to Urban Land Ceiling Authorities and exemption obtained;

and inspection carried out.

6.0 **Important factors having direct bearing on value**

- (i) Size and magnitude;
- (ii) Limited marketability;
- (iii) Land is encumbered by buildings constructed over it.

7.0 **Basis of Valuation**

Valuation is carried out on following two basis:

- (i) 'As is where is' , and
- (ii) 'Alternative use'

The report is divided in following three parts:

- Part – I - Executive Summary
- Part – II - Valuation on 'as is where is' basis.

Part – III - Valuation on 'alternative use' basis.

7.1 Valuation on 'as is where is' basis

Valuation is carried out by cost approach.

Estimating land value by sales comparison method and computing depreciated replacement cost of buildings.

7.1.1 Land

While deciding value of land due regard is given to the following factors:

- i. Size and topography;
- ii. Zoning of land;
- iii. Statutory provisions governing land usage;
- iv. Type of tenure – Freehold or Lease-hold;
- v. Availability of infrastructure and civic amenities.

7.1.2 (a) The Supreme Court in case of *Chimanlal Hargovindas vs. Special Land Acquisition Officer, Pune*, reported at AIR 1988 SC 1652 has held that the factor can be discounted by making deduction by way of allowances at an appropriate rate ranging approximately between 20% to 50%, while deriving land rate of large plot of land from sale instances of small plot of land.

(b) The Punjab and Haryana High Court in case of *Mani Singh Avtar Singh vs. Inspecting Assistant Commissioner for Acquisition* (reported at 151 ITR 233) has observed that:

“We hold the price thereof accordingly mentioning lastly and addedly that the price of a plot built upon cannot compare favourably with that of an un-built plot on which the purchaser has the opportunity of exercising a wide choice of building. But in the former case, he is no chooser.”

7.2 Buildings

7.2.1 Depreciated Replacement Cost is computed.

7.2.2 The replacement cost of each structure (building) is estimated according to type of construction, specifications and amenities

provided for each building and on the basis of rates of building materials, labour and transportation charges prevailing in the locality and technology available on the date of valuation.

7.2.3 Depreciation is calculated on straight line method. For this purpose, economic balance life is estimated, keeping in mind type of construction and condition.

Scrap value is considered to be 10% of replacement cost.

7.2.4 Replacement Cost less Depreciation gives the Depreciated Replacement Cost (DRC).

7.2.5 Details about type of construction of buildings, specifications, technical data such as height of plinth, height of floor, built-up floor areas and working of Replacement Cost, Depreciation and DRC of one of the buildings as a sample is given in next para. Other buildings have been considered on the same basis.

7.2.6 Sample Calculation

Let us consider a case of a storage godown (Sr. no. 1.1 of Annexure-A of Part-II) having Replacement Cost of ` 300/- per sq. ft., built-up area of 1,000 sq. ft. and constructed in 1970.

Built-up Area	=	1,000 sq. ft.
Replacement Cost per sq. ft.	=	` 300/-
Replacement Cost	=	1,000 x 300
	=	` 3,00,000/- (a)
Age	=	23 years
Estimated economic balance life	=	17 years
∴ Total economic life	=	23 + 17
	=	40 years
Depreciation per annum on straight line basis	=	$\frac{(100 - 10)}{40}$
	=	2.25%

Depreciation for 23 years	=	51.75%
	=	0.5175 x 3,00,000
	=	` 1,55,250/- (b)
Depreciated Replacement Cost	=	(a) - (b)
	=	` 1,44,750/-

8.0 Valuation on 'Alternative Use' basis

8.1 For this purpose, the following options are considered:

Option no. 1

- (a) Letting out the existing built-up premises for warehousing of iron and steel and cotton.
- (b) Letting out the open space for storage of empty containers.

Option no. 2

- (a) Demolishing all the existing buildings and the letting entire open land for storage of empty containers.

Option no. 3

- (a) Letting out all existing buildings for warehousing purposes as per Option No.1.
- (b) Constructing service industrial estate by utilizing balance F.S.I. and selling them on ownership basis.

Option no. 4

- (a) Demolishing all the existing buildings, constructing service industrial estate, selling built-up premises on ownership basis and estimating land value by residual method.

8.2 Assumptions

- (a) Permission will be granted by the Urban Land Ceiling Authority and other concerned authorities for above use.
- (b) The floors of buildings are capable of taking load for warehousing purposes.
- (c) The Mumbai Port Trust will allow construction of service industrial estate.

9.0 General remarks

9.1 The land is obtained on lease from Mumbai Port Trust. First phase of lease has already expired on 31st March, 1990. Before the expiry of lease period lessee exercised the option to renew the lease and for that purpose intimated the lessor well in time as per the original lease agreement.

The balance period of lease is considered to be 46 years (49 years i.e. further extension of lease from 1st April 1990 less 3 years as the date on which valuation is made is 31st December 1992.)

9.2 As per the terms and conditions of lease, ground rent is to be renewed after the expiry of first phase. There is a dispute in the quantum of additional ground rent demanded by lessor. The matter is under litigation. **The liability towards payment of ground rent from 1st April, 1990 till date has not been deducted from the valuation.**

9.3 In order to utilize the property for warehousing purposes, it will be necessary to obtain licence from Municipal Corporation of Greater Mumbai. No allowance is made in the valuation for this purpose.

9.4 It will be necessary to make changes in certain buildings to make them suitable for warehousing. It will also be necessary to develop infrastructure for warehousing. No allowance is made in valuation for this purpose.

9.5 The buildings under consideration are specialized buildings having limited marketability and therefore their value is subject to potential profitability.

9.6 The land is not covered under Coastal Regulation Zone (CRZ).

10.0 Summary of valuation

10.1 Valuation on 'as is where is' basis:

(i) Value of land	=	1,750 lakhs
(ii) Value of buildings	=	350 lakhs
	Total	2,100 lakhs

10.2 Valuation on alternative use basis as per options indicated under Para **no. 8.1.**

Option No.1	:	1,930.00 lakhs
Option No.2	:	1,389.40 lakhs
Option No.3	:	2,334.76 lakhs
Option No.4	:	2,840.00 lakhs

Value of property recommended is 2,840 Lakhs.

Encl.: Detailed computation of value reported under Para 10.0 above.

Part – II

Valuation on 'as is where is' basis

1.0 The land is a lease hold land obtained on lease from the Mumbai Port Trust.

2.0 Details of plot under consideration

Plot at Sewri

Sr. No.	Rent Roll No. (R.R. No.)	Cadastral Survey No.	Date of Lease	Date of Commencement of Lease	Area in Sq. m.
1.	Abcd	XX	20-02-1945	01-03-1940	50,000

Note: Date of expiry of lease is 31-03-1985.

3.0 Locational aspects of the property

3.1 It is located on the East side of Sewri railway station.

3.2 The area is surrounded by industrial and warehousing activity.

3.3 Due to presence of depots of Hindustan Petroleum Corporation Ltd. and Bharat Petroleum Corporation Ltd., there is always a traffic jam by trucks.

3.4 The main marketing centres, banks, cinema houses, schools, colleges and good restaurants are at a distance of about 2 to 3 km.

3.5 It is convenient to approach various parts of city by public transport.

4.0 The Company has provided lease agreement for entire land admeasuring 50,000 sq. m.

5.0 The vital covenants of lease are as under

- 5.1** Not to alter or add to the buildings without the consent of lessor.
- 5.2** To observe Trusts', Municipal and other rules for construction of buildings.
- 5.3** Not to use the land for any other purposes than permitted user.
- 5.4** Not to affix or display signboards, sky signs or advertisements, etc.
- 5.5** At the expiration or on determination of the said term quietly deliver up to the lessors, demised premises together with all erections and buildings thereon and all drains and appurtenances in such good and substantial repair condition.
- 5.6** Lessors can re-enter the premises on nonpayment of rent or breach of covenants by lessee.
- 5.7** Lessors to grant a new lease for said premises for a further period of forty nine years provided there is no breach of any of the covenants. The terms and conditions of the new lease shall be same as present lease except proviso of monthly rent. The monthly rent to be fixed having regard to the letting value of the land demised and the letting values of similar sites in the vicinity and without regard to any expenditure incurred by the lessee.

6.0 As per the terms of lease, rent to be charged as per letting value of similar premises after the expiry period of 1st Phase.

7.0 Land is covered under the Urban Land (Ceiling and Regulations) Act, 1976 and the same is exempted under section 20 of the said Act.

Joint Director of Industries and Ex-officio Dy. Secretary to the Government of Maharashtra, General Administration Department has exempted excess vacant land under section 20 of the Urban Land Ceiling Act.

Vital terms of the said exemption order are reproduced below:

- (1) The land exempted under this exemption order shall be used by the said person for his own benefit for the purpose of industry and for no

other purpose. Any change made in the use of the land shall amount to a breach of these conditions.

- (2) The said person shall make full utilization of the land so exempted for the purpose aforesaid. He shall commence building construction within a period of five/ten/fifteen years from the date, failing which the exemption shall stand withdrawn. If only a part of the land is utilized and a part remains unutilized then exemption for the part, which remains vacant at the end of the period of five/ten/fifteen years, shall be deemed to have been withdrawn.
- (3) The said person shall not transfer the exempted land (with or without buildings thereon or any part thereof) to any other person by way of sale, mortgage, gift, lease or otherwise, except for the purpose of mortgage in favour of any financial institution specified in sub section (1) of section 19 of the Urban Land (Ceiling and Regulation) Act, 1976.
- (4) Notwithstanding anything contained in any of the preceding clauses of this order, if the said person desires to transfer the exempted land (with the buildings thereon, if any) to any other person, by way of sale, mortgage, gift, lease or otherwise, he shall apply to the State Government for prior permission for such transfer, and such application shall contain such particulars as the State Government may require; on receipt of such application the State Government may after holding such enquiry as it may deem fit grant the necessary permission subject to such conditions as the State Government may deem fit to impose including a condition that the transferor shall deposit with the State Government the difference between the market price of the land so exempted under this order and the price at which it would normally have been acquired under the said Act, and in case of any land situated in any M.I.D.C. area, the difference between the premium for the lease charged by the M.I.D.C. at the time of transfer and the premium paid by the transferor to the M.I.D.C. at the time of allotment of the land to the transferor by the M.I.D.C. and such other conditions as the State Government may deem fit to impose. The State Government's determination of the market price of the land at the time of transfer and the price at which the land normally would have been acquired under the Act, shall be final.

Remarks on the above condition:

The above condition is the part of the Exemption Order. The order issued by any authority must satisfy the following conditions:

- (a) It should be a speaking order
- (b) Vagueness and arbitrariness has no place in such order.

The above criterion have not been fulfilled as explained below

Firstly, it is not sure whether condition of disposition amount by transferor shall be imposed or not – because it stipulates the State Government may impose.

Secondly, it is silent on the interest to be paid on deposit.

Thirdly, it stipulates that the State Government’s determination of market price shall be final.

Fourthly, land under consideration is absolutely on different footings, it is neither freehold nor obtained from MIDC but a leasehold land with covenants. Hence, issuing common cyclostyled order is not proper.

The clients were advised to take legal opinion.

The effect of the above conditions in valuation is not considered at this stage.

Note: In this regard, the observation of the Gujarat High Court in case of Pradhumanbhai Mohanlal Patel vs. State of Gujarat & Others - 2003 (1) GLR 454, on cyclostyled order passed by the authority is reproduced –

‘It is seen that this is a cyclostyled order. Only some gaps have been filled up and two sentences are added. This clearly shows total non-application of mind...’

‘Since the orders are passed without proper application of mind and since they are not speaking orders, the same cannot be sustained in the eyes of law. Therefore, the same deserve to be quashed and set aside only on the ground that the orders are not speaking orders.’

- 8.0** As per Development Plan 1981-2001 prepared by the Municipal Corporation of Greater Mumbai, land falls under Special Industrial Zone I-3. Permitted users in I-3 Zone as per Regulation 57 are as under:

Sub Regulation (2) of Regulation 57

Buildings or premises in the I-3 zone may be used for industrial and warehousing purpose.

Sub-Regulation (4) of Regulation 57

- a) Service industries and service industrial estates shall be permissible in the Special Industrial Zone (I-3 Zone).

- b) With the previous approval of the Commissioner and on such conditions as deemed appropriate by him, the existing or newly built-up area of units in the Special Industrial Zone (Zone I-3) (including industrial estates), reservations and even shifting industries excluding that of cotton textile mills, may be permitted to be utilized for an office or commercial purposes in the suburbs and extended suburbs, or for commercial purposes (excluding offices) in the Island City, as a part of a package measures recommended by the Board of Industrial and Financial Reconstruction (BIFR), Financial Institutions and Commissionerate of Industries for the revival / rehabilitation of potentially viable sick industrial units.

With the previous approval of Commissioner, any open land or lands or industrial lands in the Special Industrial Zone (I-3 Zone) (including industrial estate), excluding lands of cotton textile mills, may be permitted to be utilized for any of the permissible users in Residential Zone (R-1 Zone) or Residential Zone with shop line (R-2 Zone) or for those in the Local Commercial Zone (C-I Zone).

Note: Market survey revealed that there is a demand for service industrial estate as land is located exclusively in industrial area.

- 9.0** The Supreme Court in the case of Dr. K.N. Dhayraman & Others vs. J.R. Thakur & Others (1958 AIR SC 789) has held that the covenant in the lease under the Transfer of Property Act, 1882 to deliver up the premises after the expiry of lease period free of cost is a valid covenant.

Similar view was held by the Supreme Court in a case Kanji Manji vs. The Trustees of the Port of Bombay – AIR 1963 SC 468.

10.0 Valuation of land

- 10.1** It is a well-known fact in the market that land covered under the Urban Land Ceiling Act are sold. Number of transactions are taking place, which is evident from various projects developed by developers.
- 10.2** While deciding the value of land, it is presumed that the transfer will be allowed under the Urban Land (Ceiling and Regulation) Act, 1976.
- 10.3** The lands are too much in demand in city like Mumbai. Therefore, even in the buildings, where lease expires after 7 to 10 years, having no renewal clause and covenant to deliver up the premises after the expiry of lease period at free of cost, rate of built-up premises is more than ` 5,000/- per sq. ft. in prime location like New Marine Lines. Buyers purchase risky property at high price.
- 10.4** The land comprises of a large plot of land. It is not possible to get comparable sale instances of open plots with such a large area. Even transactions of small open plots of land have not taken place. Industrial galas/units are available on sale in near by industrial estate. Under the circumstances, the only option is to derive land rate from the rate of built-up industrial units. The industrial units available are of very small area compared to area of land in question. Moreover, the rates at which industrial units are available vary based on location of the units, i.e. maximum on ground floor and goes on decreasing depending upon upper floors.

Our enquiry revealed that the rates prevailing are as under:

- | | |
|--------------------|-----------------------|
| (i) Ground Floor | ` 1,500/- per sq. ft. |
| (ii) First Floor | ` 1,200/- per sq. ft. |
| (iii) Second floor | ` 1,000/- per sq. ft. |
| (iv) Third Floor | ` 800/- per sq. ft. |

The above rates include:

- (i) Value of right in land component
- (ii) Cost of construction
- (i) Brokerage
- (ii) Architect's fees
- (iii) Structural engineer's fees

- (iv) Municipal scrutiny fees
- (v) Developer's gross profit
- (vi) Development Levy payable to Municipal Corporation
- (vii) Contingencies, etc.

The industrial premises referred above are:

- (i) Constructed on land taken on lease from Mumbai Port Trust.
- (ii) Area is about 1,000 to 1,500 sq. ft.

In view of facts mentioned above, the rate of built-up premises is considered at ` 1,200/- per sq. ft. for deriving land rate.

Outgoings at 60% = 720/-

(Refer computation under option-III)

Value of right in land component = 1200 - 720
= 480 per sq. ft.

Land rate of 480/- per sq. ft. will work out to about ` 5,165/- per sq. m. and after taking into consideration largeness of land in question, value of land at ` 3,500/- per sq. m. i. e. at about 70% of ` 5,165/- is considered to be fare and reasonable.

The plot falls under the category of large plot and hence amenity space to be kept open and un-built-upon shall be 10% of the total area with a ceiling of 2,500 sq. m. (Ref.: Rule No.23 (2) (a) Development Control Regulations (DCR) Greater Bombay, 1991).

Permissible F.S.I. = 1.0 (Rule 32(3) of DCR)

Total area of land = 50,000 sq. m.

Open space requirement
as per Rule No.23(2)(a)
of M.C.G.B. = 2,500 sq. m.

Construction allowed	=	50,000 - 2,500	
	=	47,500 sq. m.	
	=	5,11,100 sq. ft.	(A)
Construction carried out	=	2,00,000 sq. ft.	(B)
Balance F.S.I.	=	(A) – (B)	
	=	3,11,100 sq. ft.	
	=	60%	

Note: As per Rule 32(5) of DCR, FSI for storage buildings (warehouses and godowns) in Island City is 0.5.

This will allow additional construction for storage buildings as under:

Total area of land	=	50,000 sq. m.
Land to be kept open as mentioned earlier	=	2,500 sq. m.
Balance land	=	47,500 sq. m.
Permissible construction	=	23,750 sq. m.
	=	2,55,550 sq. ft.
Built-up area of construction already existing	=	2,00,000 sq. ft.
Further permissible construction for warehousing	=	(2,55,550 - 2,00,000)
	=	55,550 sq. ft.
Further construction possible for Service Industrial Estate	=	3,11,100 sq. ft.

In view of facts mentioned above, option for construction of new/additional storage buildings is not considered in this exercise.

As per the situation of land, size of land, conditions prevailing and taking into consideration facts mentioned above, the value of land at ` 3,500/- per sq. m. is considered to be fair and reasonable.

Area of Land	=	50,000 sq. m.
Value of Land	=	50,000 x 3,500
	=	` 17,50,00,000/-

11.0 Valuation of buildings

Details of buildings standing on land are given at **Annexure – ‘A’**.

12.0 Summary of Valuation on ‘as is where is’ basis

(i)	Value of Land	=	1,750 lakhs
(ii)	Value of Buildings	=	350 lakhs
	Total		2,100 lakhs

Annexure – ‘A’

Valuation of Buildings

1.0 Buildings (structures)

There are following structures standing on the land:

Sr. No.	Particulars	Plan reference no.	No. of floors	Total built-up area of all floors in sq. ft.
1.1	Storage Godown	A	Ground	1,000
1.2	Production Building No.1	B	Ground + 4	40,000
1.3	Pump Room (Toilet Block)	C	Ground	1,400
1.4	Boiler House No.1	D	Ground	1,500
1.5	Diesel Generator Room	E	Ground	600
1.6	Production Building No.2	F	Ground + 4	18,000
1.7	Production Building No.3	G	Ground + 1	5,000
1.8	Production Building No.4	H	Ground + 3	10,000
1.9	Production Building No.5	I	Ground + 1	20,000
1.10	Production Building No.6	J	Ground	2,000
1.11	Production Building No.7	K	Ground + 1	50,000
1.12	Production Building No.8	L	Ground + 1	20,000
1.13	Production Building no. 9	M	Ground + Mezzanine + 1	10,000
1.14	Engineering and Laboratory Building	N	Ground + 2	15,000
1.15	Administrative Building	P	Ground + 2	3,000
1.16	Boiler House No.2	Q	Ground	2,500
Total built-up area of all the buildings				2,00,000

2.0 Name of the building : **Storage godown**
Plan reference no. - A

1.0 Type of construction : **Steel framed structure.**

1.1 No. of floors and height : **Construction is on ground floor only.**
of each floor **Height: 23' 0"**

1.2	(a) Foundation	:	Assumed to be B.B. pedestal in cement mortar to receive M.S. stanchion. (Drawing not available)
	(b) Height of plinth	:	3' 3"
1.3	Superstructure	:	Brick work in cement mortar with 9" thick walls.
1.4	Doors and windows	:	M.S. plate sliding door / Teak wood framed door, Teak wood framed glazed ventilators are provided.
1.5	Flooring	:	Heavy-duty industrial flooring.
1.6	Finishes	:	Walls are cement plastered - both internally and externally. R.C.C. work etc. are finished with smooth neeru internally and externally painted with water proof cement paint.
1.7	Roofing	:	R.C.C. slab on m.s. I - beams.
1.8	Type of electrical wiring	:	Open surface cable wiring.
2.0	Built-up area in sq. ft.	:	1,000
3.0	Year of construction	:	1970
3.1	Age of the building (in years)	:	23
3.2	Estimated economic balance life (in years)	:	17

3.3	Total estimated economic life (in years)	:	40	
	Built-up area	=	1,000 sq. ft.	
	Replacement Cost per sq. ft.	=	₹ 300/-	
	Replacement Cost	=	1,000 x 300	
		=	₹ 3,00,000/-	(a)
	Depreciation per annum on Straight line basis	=	$\frac{(100 - 10)}{40}$	
		=	2.25%	
	Depreciation for 23 years	=	51.75%	
		=	0.5175 x 3,00,000	
		=	₹ 1,55,250/-	(b)
	Depreciated Replacement Cost	=	(a) - (b)	
		=	₹ 1,44,750/-	
	(a) Replacement Cost	:	₹ 3,00,000/-	
	(b) Depreciation	:	₹ 1,55,250/-	
	(c) DRC	:	₹ 1,44,750/-	

All the remaining buildings were valued as above. Total depreciated replacement cost of all the buildings works out to ₹ 350 lakhs.

Part – III

Valuation on 'alternative use' basis

1.0 Various options considered for 'alternative use' are as under:

Option no. 1

- (a) Letting out the existing built-up premises for warehousing of iron and steel and cotton.
- (b) Letting out the open space for storage of empty containers.

Option no. 2

- (a) Demolishing all the existing buildings and letting out entire open land for empty containers.

Option No.3

- (a) Letting out all the existing buildings for warehousing purposes as per option no. 1.
- (b) Constructing service industrial estate by utilizing balance F.S.I. and selling them on ownership basis.

Option No.4

- (a) Demolishing all the existing buildings, constructing service industrial estate, selling built-up premises on ownership basis and estimating land value by residual method.

2.0 In order to ascertain prevailing rates for warehousing for different categories of materials for storage in nearby area as well as in other parts of Mumbai, inquiries were made with various sources and the information collected is given below:

I. Iron and steel

a. Sheet metal

7/- per tonne per week by CWC.

10/- per tonne per week furnished by:

- (i) Traders of iron and steel in Darukhana area.
- (ii) NT Co.

15/- per tonne per week by M/s. HP & Co.

b. Pipe material

15/- per tonne per week furnished by:

- (i) Traders of iron and steel
- (ii) M/s. H P & Co.
- (iii) NT

II. Cotton bales

15/- per bale per month by the NT.

13.20/- per bale per month by the CWC.

III. Plywood

6.50 per sq. ft. per month.

IV. General Warehousing rate is ` 10/- per sq. ft. per month.

V. Storage of empty containers

<u>Size</u>	<u>Rate</u>
20' x 8' x 8' 6"	` 5/- per day at Chembur – Mankhurd Link Road.
40' x 8' x 8' 6"	` 10/- per day at Chembur – Mankhurd Link Road.
20' x 8' x 8' 6"	` 10/- per day opp. Sewri railway station.
40' x 8' x 8' 6"	` 20/- per day opp. Sewri railway station.

3.0 Details of rates adopted and options considered for warehousing:

- (i) Sheet material – ` 10/- per Tonne per week of size 8'x4'.
- (ii) Cotton bale – ` 15/- per bale per month.
- (iii) Empty container in open land

20' x 8' x 8' 6" -	` 10/- per day
40' x 8' x 8' 6" -	` 20/- per day

4.0 Calculation of space required and gross revenue for storage of materials:

A. Sheet material

- (i) Size of sheet 8' x 4' (32 sq. ft.)
- (ii) Gross area required to store a sheet of size 8' x 4' after considering space required for loading/unloading/handling 12' x 8' (96 sq. ft.)

- (iii) Weight of material that can be stacked manually in an area of 12' x 8' 20 tonnes
- (iv) Weight of material that can be stacked by providing crane in an area of 12' x 8' 30 tonnes

Summary of gross revenue

- a. Storage facility without crane = 20 x 10 x 52
= 10,400/- per annum per 96 sq. ft.
= 108/- per sq. ft. per annum
Say 100/- per sq. ft. per annum
- b. Storage facility with crane = 30 x 10 x 52
= 15,600/- per annum per 96 sq. ft.
= 162/- per sq. ft. per annum
Say 150/- per sq. ft. per annum

B. Cotton bale

Size of cotton bale = 4' x 2' x 1½'
= 12 cu. ft.

Number of bales that can be stored per 1,200 cu. ft. of space
= 100

Rent for 100 bales per month = 1,500/-

Let us assume that bales are stored up to the height of 10'.

Net area occupied by 100 bales = 120 sq. ft.

As the bales are easy to handle, gross area is considered to be 25% more than net area = 150 sq. ft. which gives a rate of ` 10/- per sq. ft. per month.

C. Empty containers

20' x 8' x 8' 6" Container occupies an area of 160 sq. ft.

40' x 8' x 8' 6" Container occupies an area of 320 sq. ft.

Space required for storing the above containers after taking into consideration loading, unloading and handling area will be as under:

Size of container	Land area required for storage after considering loading, unloading and handling
20' x 8' x 8' 6"	24 x 12 = 288 sq. ft.
40' x 8' x 8' 6"	44 x 12 = 528 sq. ft.

About 40 to 45% area is utilized for loading, unloading and handling.

Lift on - off charges per lift are as under:

20' - ` 130/- per piece per lift.

40' - ` 260/- per piece per lift.

Lift on - off is done by a crane.

Maximum three number of containers can be stored one above other as per law.

Space required for storage of 20' x 8' x 8' 6" container = 160 sq. ft.

Number of containers that can be stored in 160 sq. ft. = 3

Let us assume that one container remains for two weeks. If lift on - off charges are distributed on a container then it works out to $\frac{130}{15}$ per container of 20' x 8' x 8' 6" i.e. about ` 9/- per day per container.

Rental per container per day with Lift on - off charges for 20' x 8' x 8' 6" = 10 + 9
= 19/-

Rate for 3 containers per day with Lift on - off charges for 20' x 8' x 8' 6" = 19 x 3
= 57/-
Say, 60/-

Rate for 3 containers per annum = 60 x 365
= 21,900/-

Open land required to store 3 nos. of
20' x 8' x 8' 6" container = 160 sq. ft.

Rent per sq. ft. per annum for 20' x 8' x 8' 6"

Container = $\frac{21,900}{160}$

Say, ` 140/-

Similarly rent per sq. ft. per annum for 40' x 8' x 8' container = 140/-

The rates indicated above are for **net area** and if the rates are worked out on **gross area** basis then the same will be ` 80/- per sq. ft. per annum.

5.0 The built-up area consists of:

(a) The buildings having construction on ground floor only are suitable for storage of iron and steel sheet material.

(b) The buildings having construction on ground and upper floors will be suitable for storage of iron and steel sheet material on ground floor and upper floors will be suitable for storage of cotton bales.

(c) Total built-up area of ground floor of all the buildings suitable for storage of iron and steel sheet = 1,25,000 sq. ft. (i)

(d) Total built-up area of upper floors and above, suitable for storage of cotton bales = 75,000 sq. ft. (ii)

Total : 2,00,000 sq. ft. (iii)

Total area of land = 50,000 sq. m.

= 5,38,000 sq.ft. (iv)

Built-up area of ground floor of all buildings = 1,25,000 sq. ft

Open area = (iv) – (i)

= 5,38,000 – 1,25,000

= 4,13,000 sq. ft.

Out of this, 2/3rd area can be used for storage of containers.

$$\text{This works out to } \frac{2}{3} \times 4,13,000 = 2,75,333 \text{ sq. ft.}$$

Say 2,75,000 sq. ft.

6.0 Valuation under various options

6.1 First option

- (a) Letting out the existing built-up premises for warehousing of iron and steel and cotton.
- (b) Letting out the open space for storage of empty containers.

Gross Revenue from option one:

Sr. No.	Details of Material to be stored	Rate per sq. ft. per annum	Area in sq. ft.	Gross Revenue per annum in `
1.	Iron and Steel Sheet	150	1,25,000	1,87,50,000
2.	Cotton Bales	75*	75,000	56,25,000
3.	Empty Containers	140	2,75,000	3,85,00,000
Total				6,28,75,000
				Say, 629 lakhs

* Instead of ` 120/- per sq. ft. per annum, average rate adopted is 75/- per sq. ft. as storage is on upper floors.

In order to work out net revenue, following out goings are to be considered:

- Municipal and other taxes
- Bad debt, vacancy
- Repairs
- Management cost

All the above out goings are considered at 60% and therefore net revenue works out to:

$$629 \times 0.4 = 251.6 \text{ lakhs}$$

Capitalizing net income at 12% and 3% on dual rate for unexpired period of lease of 46 years, Y.P. works out to 7.671

$$\begin{aligned} \text{Value} &= 251.6 \times 7.671 \\ &= 1,930.02 \text{ lakhs} \\ &\text{Say ` 1,930 lakhs} \end{aligned}$$

6.2 Second option

- (i) Demolishing all the existing buildings and letting out the entire open land for empty containers.

$$\begin{aligned} \text{Area of land} &= 50,000 \text{ sq. m.} \\ &= 5,38,000 \text{ sq. ft.} \end{aligned}$$

$$\begin{aligned} \text{Rate ` 80/- per sq. ft. per annum} &= 5,38,000 \times 80 \\ &= ` 4,30,40,000/- \end{aligned}$$

$$\text{Gross revenue} = \text{Say, ` 430 lakhs}$$

$$\begin{aligned} \text{Net revenue after considering} \\ \text{out goings at 60\% works out to} &= 430 \times 0.4 \\ &= ` 172 \text{ lakhs} \end{aligned}$$

Capitalizing the net income at 12% and 3% of dual rate for unexpired period of lease of 46 years, Y.P. works out to 7.671.

$$\begin{aligned} \text{Value} &= 172 \times 7.671 \\ &= 1,319.4 \text{ lakhs (A)} \end{aligned}$$

Estimated salvage value of buildings is considered at 10% of replacement cost.

Replacement cost is considered at ` 350 per sq. ft.

Total Built-up area of all the existing buildings is 2,00,000 sq.ft.

$$\begin{aligned} \text{Total Replacement cost of buildings} &= 2,00,000 \times 350 \\ &= 7,00,00,000/- \end{aligned}$$

$$\begin{aligned} \text{Salvage value} &= \frac{10}{100} \times 7,00,00,000 \\ &= 70,00,000/- \\ &= 70 \text{ lakhs (B)} \end{aligned}$$

$$\begin{aligned} \text{Total value} &= (A) + (B) \\ &= 1,389.4 \text{ lakhs} \end{aligned}$$

6.3 Third option

- (i) Letting out the existing built-up premises indicated in option 1 for iron and steel sheets and cotton bales 2,43,75,000
- Para 6.1 (a)**

- (ii) Constructing service industrial estate for balance F.S.I. 3,11,000 sq. ft (Say 3,00,000 sq. ft.) and selling built-up premises on ownership basis

Calculation of income by constructing service industrial estate for balance F.S.I. 3,00,000 sq. ft.

Residual method of valuation is adopted.

By this method, one estimates the maximum value of a development site to be offered for purchase. This check is worthwhile for a developer to acquire the site and proceed with development.

(A) The basic equation of residual method of valuation

In its simplest form, when residual method is used to assess the value of land, the residual valuation will estimate the maximum purchase price of a site by deducting the expected total costs of development, including an allowance to cover risk and profit from the expected price that the completed development could be sold for in the market.

Sale price of completed development = A

Cost of development (including profit allowance and other cost of development) = B

$C = A - B =$ Value estimate of land by residual method.

(B) Assumptions

- (i) Date of commencement of project - 1st June, 1993
- (ii) Construction to be completed in three phases, each phase of 1,00,000 sq. ft. in three years -

- (iii) Period for preparation of plans, submission of plans to municipal corporation for obtaining sanction/approval of plan - 1st June, 1993 to 31st May, 1994
- (iv) Date of commencement of booking of premises in Phase-I - 1st June, 1994
- (v) Date of completion of Phase-I - 31st May, 1995
- (vi) Date of commencement of booking of premises in Phase-II - 1st December, 1994
- (vii) Date of completion of Phase-II - 30th November, 1995
- (vii) Date of commencement of booking of premises in Phase-III - 1st June, 1995
- (ix) Date of completion of Phase-III - 31st May, 1996
- (x) Booking Rates Initial Payment at the time of booking including first installment
- | | | |
|-----------|-----------------------|---------------------|
| Phase-I | ₹ 1,500/- per sq. ft. | |
| Phase-II | ₹ 1,650/- per sq. ft. | ₹ 500/- per sq. ft. |
| Phase-III | ₹ 1,800/- per sq. ft. | ₹ 550/- per sq. ft. |
| | | ₹ 600/- per sq. ft. |
- (xi) Cost of Construction
- | | |
|-----------|---------------------|
| Phase-I | ₹ 400/- per sq. ft. |
| Phase-II | ₹ 450/- per sq. ft. |
| Phase-III | ₹ 500/- per sq. ft. |
- (xii) Expenses
- Brokerage at 2% of booking rate.
 - Architect fees at 5% of cost of construction.
 - Structural engineer's fees at 3% of cost of construction
 - Municipal scrutiny fees including miscellaneous expenses for obtaining various approvals at 5% of cost of construction

- (e) Developer's gross profit at 25% of sale proceeds.
- (f) Development levy for land admeasuring 10,000 sq. m. at ₹ 140/- per sq. m. of land area under development.
- (g) Contingencies, unforeseen expenses at 5% of sale proceeds.

(xii) Each phase is of 1,00,000 sq. ft.

(C) Calculation of feasibility

Particulars of Phase	Period	Sale Proceeds
Phase-I	1 st June, 1994 to 31 st May, 1995	1,00,000 x 1,500 = 15,00,00,000
Phase-II	1 st December, 1994 to 30 th November, 1995	1,00,000 x 1,650 = 16,50,00,000
Phase-III	1 st June, 1995 to 31 st May, 1996	1,00,000 x 1,800 = 18,00,00,000

Cost of construction phase wise

Phase-I	1,00,000 x 400	=	4,00,00,000
Phase-II	1,00,000 x 450	=	4,50,00,000
Phase-III	1,00,000 x 500	=	5,00,00,000

Money available at the time of booking from intending buyers by way of initial payment and first installment:

Phase-I	1,00,000 x 500	=	5,00,00,000
Phase-II	1,00,000 x 550	=	5,50,00,000
Phase-III	1,00,000 x 600	=	6,00,00,000

It is observed that more than cost of construction is available at the time of booking and hence balance amount can be invested in other form of investment for a period of at least six months and interest can be earned at 12%.

	01-06-1994 to <u>31-05-1995</u>	01-12-1994 to <u>30-11-1995</u>	01-06- 1995 To <u>31-05- 1996</u>
<u>Receipts</u>	Phase-I	Phase-II	Phase-III
	(` in lakhs)		
a. By sale proceeds			
b. By interest at 6% of (sale proceeds less money available at the time of booking)	1,500	1,650	1,800
	18	20	22
(A)	1,518	1,670	1,822
<u>Expenses</u>			
a. Cost of construction (xi)	400	450	500
b. Brokerage (xii) (a)	30	33	36
c. Architect's fees (xii) (b)	20	22	25
d. Structural engineer's fees (xii) (c)	12	14	15
e. Municipal scrutiny fees (xii) (d)	20	23	25
f. Developer's gross profit (xii) (e)	375	413	450
g. Development levy payable to Municipal Corporation (xii) (f)	14	82	90
h. Contingencias, etc. (xii) (g)	75	-	-
(B)	946	1,037	1,141
Net surplus (A) - (B)	572	633	681

Interest calculation for Phase - I (in lakhs)

Sale proceeds = 1,500/- (a)

Amount available at the time of booking = 500/ (b)

Cost of construction = 400/-

Rest of the payment will be available as per progress of the work.

Major expense is cost of construction, which is available at the time of booking.

Thus, we can safely assume that 300 lakhs will be available for six months during the year and interest can be earned on this amount which works out as under:

$$300 \times \frac{12}{2} \times \frac{1}{100} = 18$$

Similarly, interest calculations are made for Phase-II and Phase-III at 20 lakhs and 22 lakhs respectively.

In order to estimate today's value, net surplus will have to be deferred as under:

Phase-I	1 Years
Phase-II	2 Years
Phase-III	3 Years

Present Value (PV) of ` 1/- available at 9% works out as under:

Year	PV at 9%
1	0.917
2	0.842
3	0.772

Phase wise Present Value

Phase-I	572 x 0.917	=	524.52
Phase-II	633 x 0.842	=	532.99
Phase-III	681 x 0.772	=	525.73
	Total		1,583.24

Say, 1,583 lakhs (A)

This result gives the value of land by residual method and the same works out to -

$$\frac{15,83,00,000}{3,00,000} = 527.66/- \text{ per sq. ft. of F.S.I.}$$

$$= 5,677.69/- \text{ per sq. m. of F.S.I.}$$

Say 5,700/-

Computation of value from the income iron, steel and cotton:

Gross revenue from letting out the existing built-up areas indicated in first option (Para 6.1 (a)) 244 lakhs

Net Revenue after considering out goings at 60%

$$= 244 \times 0.4$$

$$= 98 \text{ lakhs}$$

Capitalizing the net income at 12% and 3% on dual rate for unexpired period of lease of 46 years, YP = 7.671

$$\text{Value} = 98 \times 7.671$$

$$= 751.76 \text{ lakhs} \quad (\text{B})$$

$$\text{Total Value} = (\text{A}) + (\text{B})$$

$$= 2,334.76 \text{ lakhs}$$

6.4 Fourth option

Demolishing all the existing buildings, constructing service industrial estate and selling built-up premises on ownership basis and estimating land value by residual method.

Under the third option, it was possible to construct service industrial estate having built-up area of 3,00,000 sq. ft. (3 phases of 1,00,000 sq. ft. each). Whereas under this option, it is possible to construct 80% more i.e. total 5,38,000 sq. ft. (3 phases as per third option and additional two phases of 1,20,000 sq. ft. each)

Furnished below is the statement showing, net surplus of Phase – I, II and III of 3rd option and projected figures of Phase – IV and V under 4th option on prorata basis.

Surplus as per third option

Phase-I	572 lakhs
Phase-II	633 lakhs
Phase-III	681 lakhs

Projected surplus for fourth option

Phase-IV	800 lakhs
Phase-V	950 lakhs

Present Value – Phase Wise

Phase-I	572	x	0.917	=	525 lakhs
Phase-II	633	x	0.842	=	533 lakhs
Phase-III	681	x	0.772	=	526 lakhs
Phase-IV	800	x	0.710	=	568 lakhs
Phase-V	950	x	0.650	=	618 lakhs
Total					2,770 lakhs

Add to this, the scrap value of existing buildings estimated at ` 70 lakhs.
Hence, value under 4th option works out to 2,770 + 70 = ` 2,840 lakhs

Summary of valuation under different options -

<u>Option</u>	<u>Value in (lakhs)</u>
'As is Where is' basis	2,100.00
'Alternative Use' basis	
First Option	1,930.00
Second Option	1,389.40
Third Option	2,334.76
Fourth Option	2,840.00

Value Recommended: 2,840 lakhs

1.3 Value of lessor's and lessee's interest in the property

Let us examine the certain provisions of the Land Acquisition Act, 1894.

S.3(a) defines land as under:

The expression "land" includes benefits to arise out of land, and things attached to the earth or permanently fastened to anything attached to the earth.

S.3(b) defines person interested as under:

Person interested includes all persons claiming an interest in compensation to be made on account of the acquisition of land.

Enquiry and Award as per S.11

Collector shall proceed to enquire into the objection which any person interested has stated pursuant to notice given u/s 9 to the measurements made u/s 8 and to the value of land at the date of publication of gazette u/s 4(1), and into the respective interest of the person claiming the compensation and shall make an

Award under his hand of –

- The true area of land
- The compensation which in his opinion should be allowed for the land
- The apportionment of the said compensation amongst all persons interested, especially when they are holding undivided shares in the property acquired.

S.3 (a), S.3 (b) and S.11 lead us to the following:

The total compensation is sum of value of interests of all persons having interests in the property.

Lessor as well as lessee are persons interested when lease hold property is acquired.

Market Value of their interest is to be estimated separately as on the date of notification.

The Act does not contemplate computing value of property as if it is free hold and then arbitrarily apportioning the same; but scientifically estimating value of right of each and every person interested in compensation.

Value of lessor's interest consists of:

- Capitalized value of the lease rent for the un-expired period of lease.
- Present value of right of reversion to the property on the expiry of lease period.

Value of lessee's interest consists of:

- Value of benefit to be derived for un-expired period of lease

ILLUSTRATIONS FOR COMPUTATION OF LESSOR'S AND LESSEE'S INTERESTS

Illustration no. I

A commercial land is given on lease.

Particulars of property as on date of valuation, 31 December 2009:

Area of land	:	500 sq. m.
Permissible FSI/FAR	:	1.0
Total built-up area of existing buildings	:	500 sq. m.
Balance FSI/FAR	:	Nil
Premium paid at the time of grant of lease	:	50,000/-
Date of agreement of lease	:	31st December, 1960
Date of commencement of lease	:	1st January, 1961
Period of lease	:	60 years i.e. up to 31.12.2021

Current ground rent per annum payable to lessor by lessee	:	3,00,000/-
---	---	------------

Lessee constructed a building by investing ` 1,00,000/- in 1961 and let out to various parties for a period, one day less than the period of lease of sixty years:

Gross rent received by the lessee per annum = 20,00,000/- (a)

Outgoings

Ground rent	=	3,00,000/-	
Property tax, etc.	=	3,00,000/-	= 6,00,000/- (b)

Net rent per annum (a) – (b) = 14,00,000/-

Scenario – 1

Terms and conditions of lease:

- a) There is no renewal clause.
- b) The unexpired period of lease is 11 years.
- c) After the expiry of lease period, lessee to surrender the property free of cost to lessor.
- d) Value of property as on 31st December, 2009
(Had it been vacant) = 3,00,00,000/-

Value of lessor's interest as on 31-12-2009

- (a) Capitalized value of ground rent for un-expired period of lease.

$$\text{Ground rent per annum} = 3,00,000/-$$

The ground is secured almost 7 times, as gross market rent received by the lessee per annum is 20,00,000/-.

That means that the ground rent is well secured. Therefore, rate of interest for capitalization is adopted at 5.0 %.

$$\text{Y.P. at 5 \% for un-expired period of 11 years} = 8.306$$

$$\begin{aligned} \text{Capitalized value of ground rent} &= 3,00,000 \times 8.306 \\ &= 24,91,800/- \quad (i) \end{aligned}$$

- (b) Value of right of reversion

The lessor will receive the property (land and building) worth ` 3,00,00,000/- on expiry of lease period of 11 years free of cost.

$$\text{Present value of ` 1/- at receivable after 11 years at 10\%} = 0.35049$$

Due to uncertainty, higher rate of capitalization i.e. 10% is adopted.

$$\begin{aligned} \text{Value of right of reversion} &= 3,00,00,000 \times 0.35049 \\ &= 1,05,14,700/- \quad (ii) \end{aligned}$$

$$\begin{aligned} \text{Value of lessor's interest} &= (i) + (ii) \\ &= 24,91,800 + 1,05,14,700 \\ &= 1,30,06,500/- \end{aligned}$$

Value of lessee's interest

Capitalized value of net rent for un-expired period of lease of 11 years:

Net rent received by lessee	=	14,00,000/-
Y.P. at say 11% for 11 years and redemption of capital at 3%	=	5.317
∴ Value of lessee's interest	=	14,00,000 x 5.317
	=	74,43,800/-

Scenario – 2

Instead of lessee surrendering at free of cost to lessor, the lessor will buy the property at ` 5,00,00,000/- after the expiry of lease period.

Other conditions remaining the same.

Value of lessor's interest as on 31-12-2009

- a) Capitalized value of ground rent for un-expired period of lease as estimated under Scenario – 1
- | | | | |
|--|---|-------------|-----|
| | = | 24,91,800/- | (a) |
|--|---|-------------|-----|
- b) The lessor will buy the property at 5,00,00,000/- after the expiry of lease period.
- Present value (PV) of ` 1/- at 10% for 11 years at
- | | | |
|--|---|---------|
| | = | 0.35049 |
|--|---|---------|
- PV of amount payable by the lessor after 11 years
- | | | | |
|--|---|---------------------|-----|
| | = | 5,00,00,000x0.35049 | |
| | = | 1,75,24,500/- | (b) |
- c) The lessor will start getting the gross rent of ` 20,00,000 after 11 years.
- | | | |
|----------|---|----------------------|
| Net Rent | = | 20,00,000 – 3,00,000 |
| | = | 17,00,000 |
- The above net rent is to be capitalized in perpetuity at 10 % and differed for 11 year 10 %.
- | | | | |
|---|---|--|-----|
| YP in perpetuity, differed for 11 year at 10% | = | 17,00,000 x $\frac{100}{10}$ x 0.35049 | |
| | = | 59,58,330/- | (c) |

$$\begin{aligned}
 \text{Value of lessor's interest} &= (a) - (b) + (c) \\
 &= 24,91,800 - 1,75,24,500 + 59,58,330 \\
 &= -90,74,370/-
 \end{aligned}$$

Value of lessee's interest as on 31-12-2009

a) Capitalized value of net rent for un-expired period of lease of 11 years as estimated under Scenario – 1 = 74,43,800/- (a)

b) PV of ` 5,00,00,000 receivable after 11 years at 11% = 5,00,00,000 x 0.31728 = 1,58,64,000/- (b)

$$\begin{aligned}
 \text{Value of lessee's interest as on 31.12.2009} &= (a) + (b) \\
 &= 74,43,800 + 1,58,64,000 \\
 &= \mathbf{2,33,07,800/-}
 \end{aligned}$$

Scenario – 3

Lease will be renewed for a further period of 99 years after the expiry of existing lease i.e. after 11 years at revised ground rent of ` 6,00,000/-

Revised gross rent receivable by lessee after 11 years is ` 25,00,000/-

Lessee will demolish the building and surrender the land after 110 years to the lessor.

Other conditions remaining the same.

Value of lessor's interest as on 31-12-2009

a) Capitalized value of current ground rent for un-expired period of lease as estimated under Scenario – 1 = 24,91,800/- (a)

b) Capitalized value of ground rent of ` 6,00,000/- in perpetuity differed for 11 years at 5%

$$\begin{aligned}
 \text{Capitalized value of ground rent in PP} &= 6,00,000 \times \frac{100}{5} \\
 &= 1,20,00,000/-
 \end{aligned}$$

The above amount is to be differed at 10% for 11 years

PV of ` 1/- receivable after 11 years at 10%	=	0.35049
Capitalized value of differed ground rent	=	1,20,00,000x0.35049
	=	42,05,880/- (b)
Value of lessor's interest	=	(a) + (b)
	=	24,91,800+42,05,880
	=	66,97,680/-

Value of lessee's interest as on 31-12-2009

(a) Capitalized value of net rent for un-expired period of lease of 11 years.		
Net rent received by lessee	=	14,00,000/-
Y.P. at say 11% for 11 years and redemption of capital at 3%	=	5.317
∴ Value of lessee's interest	=	14,00,000 x 5.317
	=	74,43,800/- (a)
(b) Capitalized value of net rent for extended period of lease of 99 years to be differed for 11 years.		
Net rent to be received by lessee	=	25,00,000 - 6,00,000
	=	19,00,000/-
Capitalizing net profit rent at 11 % in perpetuity and differing the same at 11% for 11 years	=	$19,00,000 \times \frac{100}{11} \times 0.31728$
	=	54,80,290/- (b)
Value of lessee's interest	=	(a) + (b)
	=	74,43,800 + 54,80,290
	=	` 1,29,24,090/-

Summary

Date as on which valuation is made: 31st December, 2009

<u>Scenario</u>	<u>Value of lessor's interest</u>	<u>Value of lessee's interest</u>
1	1,30,06,500/-	74,43,800/-
2	- 90,74,370/-	2,33,07,800/-

3

66,97,680/-

1,29,24,090/-

Note: It is observed from the above that value of lessor's and lessee's interest in the same property varies considerably on account of terms and conditions of the lease.

Illustration no. II

Let us consider the case with following data:

Date as on which valuation is made 01-12-2010

- (i) Area of land: 15,000 sq. m.
- (ii) Date of commencement of lease: 01-01-1914
- (iii) Period of lease: 999 years
- (iv) Premium paid by lessee at the time of entering into lease: ` 20,000/-
- (v) Ground rent payable per annum : ` 1,000/-
- (vi) Covenants of lease:
 - (i) Lessee has a right to develop the land any time during pendency of lease.
 - (ii) In the event of sale or transfer 50% unearned increase is payable by lessee to the lessor.
 - (iii) Lessor cannot increase the ground rent.
 - (iv) Lessee is in possession of land and it is lying vacant.

From terms of lease, one can conclude that lessor has surrendered almost all the rights of development in lieu of premium charged at the time of granting lease except benefit of unearned increase.

Period of lease is 999 years from 01-01-1914.

Unexpired period of lease = 999 – 98
= 901 years i.e. perpetuity

Value of lessor's interest

- (i) Capitalized value of ground rent in perpetuity.
- (ii) Value of right of reversion, which in this case will be negligible as property shall revert to lessor after 901 years.

Capitalized value of ground rent in perpetuity at 5%.

$$= 1,000 \times \frac{100}{5}$$

$$= 20,000/- \quad (i)$$

Value of right of reversion is negligible as mentioned above.

Value of unearned increase at 50%:

Current land rates is say, ` 10,000/- per sq. m.

Area of land	=	15,000 sq. m.
Premium paid	=	20,000
Unearned increase	=	(15,000 x 10,000) – 20,000
	=	14,99,80,000/-
50% unearned increase	=	7,49,90,000/- (ii)
Value of lessor's interest.	=	(i) + (ii)
	=	20,000 + 7,49,90,000
	=	7,50,10,000/-

Value of lessee's interest

This is an open plot of land.

Lessee has right to develop as well as sell and in the event of sale or transfer 50% unearned increase is payable.

Current land rates is say, ` 10,000/- per sq. m.

Area of land	=	15,000 sq. m.
Value of lessee's interest	=	15,00,00,000/-
(15,000x 10,000) minus 50% unearned increase minus capitalized value of ground rent	=	$15,00,00,000 - 7,49,90,000 - \left(1,000 \times \frac{100}{6} \right)$
	=	7,49,93,333/-
Value of lessor's interest	=	7,50,10,000/-
Value of lessee's interest	=	7,49,93,333/-

Note: In above case if no earned increase would not have been payable by the lessee, then almost 100% value would be to lessee.

It is observed from above two illustrations that following points ought to be considered in order to estimate value of lessor's and lessee's interest in a property:

- (i) What is the lease rent for land?
- (ii) What is total lease period and unexpired period of lease?
- (iii) Whether lease is renewable or not?
- (iv) In case of renewal of lease, will lease rent remain same, as old or new rent will be fixed?
- (v) What amount will be payable to lessor as premium or capital investment in case of sale/assignment of property or extension of lease?
- (vi) On maturity of lease, if land reverts to the lessor then what will happen to building constructed by the lessee on the leased land? Will building vest free of cost with the lessor or the lessor has to buy from the lessee?

Generally, covenant provides that lessee will have to demolish the building before surrender of land to lessor and / or possession of land and building either free of cost or on certain payment.

All these alternatives need to be properly examined.

In short, following points are required to be considered in estimating lessor's/lessee's interest-

- Amount receivable by lessor and lessee as per their interests or legal rights arising out of lease agreement.
- When and how long amount would be payable? i.e. during the lease period and after the expiry of lease period.

Unless and until all these factors are considered for valuation, rights of both the parties in the property cannot be ascertained precisely. Any shares decided without considering all these relevant aspects is bound to be arbitrary.

Now let us examine the Case Laws on apportionment of compensation between lessor and lessee

Inder Parshad Vs. Union Of India, 1994 (5) SCC 239

“The civil court decided by its award that apportionment of compensation fixed in the award of the Land Acquisition Collector between the lessee-claimant and the Government- landlord shall be in order of 67 per cent and 33 per cent. The

High Court by its judgment and decree under the present appeal has modified the apportionment of compensation payable for land as 75 per cent for the lessee and 25 per cent for the lessor. Under these circumstances it cannot be said that the Land Acquisition Collector had determined the compensation only towards the leasehold interest held by the appellant and that, therefore, the appellant is entitled to the entire compensation determined by the Collector. Therefore, the judgement and decree under appeal does not call for interference and the appeal is accordingly dismissed. But in the circumstances, the parties are directed to bear their own costs.”

The following data about the lease of property for which lessor’s and lessee’s interest are to be valued from above case law are available:

Lessor	:	Government of India
Lessee	:	Shri Inder Parshad.
Particulars of land	:	
Area	-	3.1 Acres situated at Block No. 160 in Delhi
Type of land	-	Nazul
Period of lease	-	Perpetual from 14.06.1934
Premium paid	-	` 10,850.00 (in the year 1934)
Ground rent	-	` 542.50 per annum

This works out to less than ` 150/- per acre per annum on Gazette Notification dated 5th March, 1967 under Section 4 of the Act.

The lessor has right to enhance the rent and the right to re-entry upon the demised land on breach of the covenants.

The lessee with permission of the lessor constructed a building on the demised land and was in its quiet enjoyment, complying with the lease covenants.

In absence of lease agreement it is not possible to come to firm conclusion.

Area of land = 3.1 acres = 15,004 sq. yd.

Premium paid in 1934 = `10,850/- i.e. 72 paise per s. yd. The ground rent is 542.05 per annum which is meager.

The courts have held as under:

	<u>Share of Lessor's Interest</u>	<u>Share of Lessee's Interest</u>
District Court	33%	67%
High Court	25%	75%

The decision of High Court was upheld by the Supreme Court.

In fact, the value of lessor's and lessees interest will be as under:

I. Value of lessor's interest

- (a) Capitalized value of ground rent for unexpired period of lease.
- (b) Value of right of reversion.

This is a perpetual lease from 14-06-1934.

Ground rent agreed at the time of entering into lease is ` 542.50 p. per annum

- (a) Capitalized value of ground in perpetuity at 5% will be as under:

$$\begin{aligned} \text{Ground Rent per annum} \times \frac{100}{5} &= 542.5 \times 20 \\ &= 10,850 \\ &\text{Say, 11,000/-} \end{aligned}$$

- (b) Value of right of reversion

= Present value of property reverting the entire property after the expiry of lease period (which in this case is perpetual)

= Negligible.

∴ Value of lessor's interest. = 11,000/-

II. Value of lessee's interest

Lessee is in the occupation of property as per terms of lease. He has right to transfer the land with the permission of lessor. In the judgement it is not

mentioned what will be unearned increase to be charged by the lessor in the event of transfer by lessee.

Therefore, let us assume that no unearned increase is payable by the lessee.

Under the circumstances, the lessee is almost the owner of the property subject to payment of ground rent ` 542.50 per annum as on the date of notification.

Supreme Court of India in case of Mangatram vs. State of Haryana 1996 AIR SC 3347 has held as under :

“As regards apportionment of the compensation, the High Court has directed to pay $\frac{1}{4}$ to the tenant and $\frac{3}{4}$ to the Wakf Board. In view of the judgement in Col. Sir Harinder Singh Brar Bans Bahadar vs. Bihari Lal and Inder Parshad vs. Union of India, the tenants are entitled to $\frac{3}{4}$ of the compensation while the landlord is entitled to $\frac{1}{4}$ of the compensation. In view of the above law, the order of the High Court in appeals arising from reference under Section 30 is modified to the extent that appellants / tenants Mangat Ram and Others are entitled to $\frac{3}{4}$ th while the Wakf Board is entitled to $\frac{1}{4}$ th of the compensation amount.”

As explained earlier value of lessor's / lessee's interest depend on terms and conditions of lease whereas in this case the interests are not worked out as per the principles of valuation.

With due respect to the Court it is submitted that above judgements are arbitrary.

The Supreme Court has not considered several relevant factors and provisions, which decides the value of rights of lessor and lessee in cases referred above.

The fault of such arbitrary awards by the Court does not lie on the Judiciary but it fully lies on advisors representing the rival parties. It was the duty of the advisors to point out to the Court, various relevant points and deciding factors required to be considered by the Court, while fixing value of the lessor's right and the value of the lessee's right in the leasehold property