ECON-121

Scope of Economics

'Scope' means the sphere of study. We have to consider what economics studies and what lies beyond it. The scope of economics will be brought out by discussing the following.
a) Subject – matter of economics.
b) Economics is a social science
c) Whether Economics is a science or an art?
d) If Economics is science, whether it is positive science or a normative science?

a) Subject – matter of economics: Economics studies man's life and work, not the whele of it, but only one aspect of it. It does not study how a person is born, how he grows up and dies, how human body is made up and functions, all these are concerned with biological sciences, Similarly Economics is also not concerned with how a person thinks and the human organizations being these are a matter of psychology and political science. Economics only tells us how a man utilizes his limited resources for the satisfaction of his unlimited wants, a man has limited amount of money and time, but his wants are unlimited. He must so spend the money and time he has that he derives maximum satisfaction. This is the subject matter of Economics.

Economic Activity: It we look around, we see the farmer tilling his field, a worker is working in factory, a Doctor attending the patients, a teacher teaching his students and so on. They are all engaged in what is called "Economic Activity". They earn money and purchase goods. Neither money nor goods is an end in itself. They are needed for the satisfaction of human wants and to promote human welfare.
To fulfill the wants a man is taking efforts. Efforts lead to satisfaction. Thus wants- Efforts- Satisfaction sums up the subject matter of economics.

b) Economics is a social Science: In primitive society, the connection between wants efforts and satisfaction is close and direct. But in a modern Society things are not so simple and straight. Here man produces what he does not consume and consumes what he does not produce. When he produces more, he has to sell the excess quantity. Similarly he has to buy a product which is not produced by him. Thus the process of buying and selling which is called as Exchange comes in between wants efforts and satisfaction.
Nowadays, most of the things we need are made in factories. To make them the worker gives his labour, the land lord his land, the capitalist his capital, while the businessman organizes the work of all these. They all get reward in money. The labourer earns wages, the landlord gets rent the capitalist earns interest, while the entrepreneur's (Businessman) reward is profit. Economics studies how these income—wages, rent interest and profits- are determined. This process in called "Distribution: This also comes in between efforts and satisfaction.
Thus we can say that the subject-matter of Economics is

1. Consumption- the satisfaction of wants.
2. Production- i.e. producing things, making an effort to satisfy our wants
3. Exchange- its mechanism, money, credit, banking etc.

4. Distribution – sharing of all that is produced in the country. In addition, Economics also studies “Public Finance”

Macro Economics – When we study how income and employment is generated and how the level of country’s income and employment is determined, at aggregated level, it is a matter of macro-economics. Thus national income, output, employment, general price level economic growth etc. are the subject matter of macro Economics.
Micro-Economic – When economics is studied at individual level i.e. consumer’s behavior, producer’s behavior, and price theory etc it is a matter of micro-economics.

c) Economics, a Science or an Art? Broadly different subjects can be classified as science subjects and Arts subjects, Science subjects groups includes physics, Chemistry, Biology etc while Arts group includes History, civics, sociology Languages etc. Whether Economics is a science or an art? Let us first understand what is terms ‘science’ and ‘arts’ really means.
A science is a systematized body of knowledge. A branch of knowledge becomes systematized when relevant facts hove been collected and analyzed in a manner that we can trace the effects back to their and project cases forward to their effects. In other words laws have been discovered explaining facts, it becomes a science, In Economics also many laws and principles have been discovered and hence it is treated as a science. An art lays down formulae to guide people who want to achieve a certain aim. In this angle also Economics guides the people to achieve aims, e.g. aim like removal poverty, more production etc. Thus Economics is an art also. In short Economics is both science as well as art also.

d) Economics whether positive or normative science: A positive science explains ''why" and "wherefore" of things. i.e. causes and effects and normative science on the other hand rightness or wrongness of the things. In view of this, Economics is both a positive and. normative science. It not only tells us why certain things happen, it also says whether it is right or wrong the thing to happen. For example, in the world few people are very rich while the masses are very poor. Economics should and can explain not only the causes of this unequal distribution of wealth, but it should also say whether this is good or bad. It might well say that wealth ought to be fairly distributed. Further it should suggest the methods of doing it.

Importance of Economics

The importance of economics is vital in every field because

1. Economics is informative - It teaches us many interesting and instructive factors about man's behavior when he is engaged in economic activity.

2. Economics brains the minds, Economic reasoning trains our mind.

3. It helps in understanding the economic system which is in functioning today.

4. It is very useful in any professions. It is helpful in banking, marketing, agriculture, and in industry. In other words who knows economics, he can achieve success in his field, economics he can achieve success in his field.

5. It is useful in solving the problems of poverty.

6. It is helpful to house holders and labour leaders.

7. It is also useful for good citizenship.

Basic Economic Terms and Concepts

Many terms are used in ordinary speech are also used in economics but they are used in a different sense. Therefore it is essential to explain those terms not only for clear thinking but also for correct understanding of the language used in books on Economics. Following some terms which are frequently use in economics have been explained in what sense they are used in Economics.

Goods: Any thing that can satisfy a human want is called a ''good" in economics. Goods may be commodity or services; they satisfy human wants which are the starting point of all economic activity.

Kinds of Goods: The classification of goods cans be done in different ways as discussed below.

1) Economic goods and Free Goods:

Free goods are those goods that exist in such plenty that can be used as much as we like. They are gift of nature and used without payment e.g. Air, sunshine etc. with out payment e.g. Air, sunshine etc

The economic goods, on the other hand, are scarce and can be had only on payment. They are limited and generally man made and hence those can be available only on payment. In Economics, we are concerned with economic goods. Economic goods mean wealth. Thus there would have been no science of economics if all goods had been free goods. The distinction between free goods and economic roods, of course is not permanent, for instance air is free goods but when we receive it under fan it is economic goods.

2) Consumption Goods and Capital Goods:

Consumption goods are those which yield, satisfaction directly. They are used by consumer directly to satisfy the wants e.g. food, clothing, etc. (First order goods).

Capital goods are these goods which help us to produce other goods e.g. machinery, tools etc. They are also termed as second order goods. Similarly some goods especially raw

materials are called as intermediate goods. For instance machinery fixed in factory is capital gods but the cotton used as raw material is intermediate goods. Thus, the consumption goods are also referred as consumer's good while capital goods and intermediate goods are termed as producers goods.

3) Material Goods and Non - material Goods:

Material good are concrete in nature e.g. building, furniture, books etc.

While different services a human being is using called non material services. E.g. services of teachers, Doctor, advocate etc.

4) Transferable and Non Transferable Goods:

Most of the material goods can be transferable. Here transferable means change in ownership e.g. land, vehicle etc.

On the contrary non-transferable goods referred to personal qualities like skill, intelligence etc. which never be transferred.

5) Personal and Impersonal Goods:

Personal goods refer to personal qualities of a person and they are non material and exist inside him e.g. skill, intelligence etc. They are also called as internal goods.

The impersonal goods are generally material goods and not personal goods. For example land furniture, vehicle etc. They are external and lie outside and hence they are also called external goods.

In short, personal goods indicate "what he is" and impersonal goods" What he has"

6) Private Goods and Public Goods:

Private goods refer to individual property e.g. Building land, vehicle etc. which are possessed by an individual.

The public goods like railway, roads, dams etc. are owned by society. They are common to all and owned by society collectively.

7) Necessaries, Comforts and Luxuries:

Goods can be classified as

Necessaries – like food, cloth, shelter, etc.

Comfort- table, electricity and

Luxuries – Air Condition, vehicle, T.V., Gold & Silver, Jewellery etc.

What is Wealth?

In ordinary language, "Wealth" conveys an idea of prosperity and abundance. A man of wealth understood as a rich person. But in Economics Wealth is synonymous with economic goods.

In short, Wealth means anything which has value.

Therefore, three attributes of wealth as in the case of value are utility, scarcity and marketability. Good which is able to satisfy human want, which is scale and must be transferable, is wealth.

It should be noted that

1. Money is form of wealth. All money is wealth but all wealth is not money.
2. Income is different than wealth. Wealth yields income.
3. Wealth and welfare are closely inter-related. Wealth is the means and welfare and end.

Classification of Wealth: Wealth can be classified as

1. **Individual Wealth:** Material possession like land, building cash etc.
2. **Personal Wealth:** refers to personal qualities like intelligence, skill etc.
3. **Social Wealth:** They are things owned by society e.g. building dams, road etc.
4. **National Wealth:** They are the natural resources like rivers, climate, oceans etc.
5. **Cosmopolitan Wealth:** It is wealth of the whole word. It is a sum total wealth of all nationals.
6. **Negative Wealth:** It refers debts owned by individual of Govt.

What is Utility?

The goods satisfy human wants. This want satisfying quality in a good is called Utility. Utility is that quality in a commodity by virtue of which it is capable of satisfying a human want. Air, water (free goods) and food, cloth etc. (economic goods) satisfies people's wants and hence they possess utility.

In day to day life we use this term in different way but in Economics utility is having a specific meaning. Hence
a) Utility and usefulness are different. For example a poison when we consume it is definitely injurious and hence it never is useful but it satisfies the human want, i.e. the want of person who decides to suicide and hence it possesses utility.

b) Utility is not synonymous with pleasure. A good which possess utility may not give pleasure when. Consumed e.g. a medicine when a patient consumes does not give pleasure

since mostly it is bitter. But it possesses utility because it is required to cure from sickness. Thus pleasure is different and utility is different.

c) Utility is subjective means no commodity possesses utility in itself independently of the consumer. It is a consumer's mind which gives it utility. A literate person may find utility in books, new paper etc. as he is able to read those, but on the contrary an illiterate person never find any utility. Thus utility depends on mans mind rather than on the things itself.

d) Utility varies in different situations. Moreover the same things may possess different utilities for different purposes. For example water has different utilities when it is used for drinking, bathing and washing purposes.

Types of Utility:

1. From Utility: Due to change in form there is change in utility, e.g. Wood when transformed into furniture, utility will increase.
2. Place utility: When goods transported from one place to another place utility can increase. For example apple will fetch more prices in other part of country than in Kashmir and Himachal Pradesh.
3. Time utility: By storing a commodity and selling it at a time of scarcity, utility can be realized more.

Agriculture Economics and Importance of Agriculture in National Economy

Agriculture Economics:

Application of principles of general economic to agriculture is called as agricultural economics.

Importance of agriculture in the National Economy:

Indian is an agricultural country, where 70 per cent population is dependent on agriculture. This forms the main source of income. The contribution of agriculture in the national income in India is more, hence, it is said that agriculture in India is a backbone of Indian Economy.
The importance of agriculture in the National Economy is explained by the following points.

1) Share of Agriculture in the national income:

Year	Contribution of agriculture in National Income
1950-51	57%

1970-71	43%
1930-31	40%
1938-39	33%

It is seen that agriculture contributes a major share in the national income of India. Secondly, the share of agriculture in national income has been decreasing. At present the contribution is about 28%. This steady and gradual decline is due to the rapid Industrialization in the difference part of the country.
The contribution of agriculture in national income in case of some development countries are as follows. USA – 3% Canada 4% Australia 5%
This indicates that the role of agriculture in the national income in the developed countries is negligible. More developed a country, smaller is the contribution of agriculture in the national income and vice-versa.

2) Agriculture as a source of livelihood:

In India about 65 to 70 per cent population dependent on agriculture, the population remains almost constant for number of years. On the other hand in the developed countries less than 10 per population dependent on agriculture

3) Indian agriculture and pattern of employment:

Year	Percentage of working population in agriculture
1961	69.5%
1981	59.4%
While in U.K.	23%
France	7%

4) Importance of agriculture in Industrial development:

Many industries dependent on agriculture, raw material from agriculture is supplied to many industries e.g. sugar industries, Cotton Industries, Paper Industries, tobacco industries, Chilies, turmeric etc. Many industries supply the inputs to the agricultural industry e.g. fertilizers, insecticides, pesticides, implements and machineries like tractors etc.

5) Role of agriculture in the field of international trade:

Many agricultural products like tea, sugar, oilseeds, tobacco, spices contribute the major share in export. In addition to this, we are exporting fruits some vegetables and flowers to the other countries. Now days we are exporting basmati rice to foreign countries. The proportion of agri. goods is to the tune of 50%. In addition to this goods manufactured from agriculture products contribute 20 percent. Thus, agriculture contributes 70% in export.
In addition to the above the role played by agriculture in Indian is as under.

- Many agriculture produce like food grains, fruits are transported by roadways and railways. Thus, it helps in employment of many people in this field.
- If the agricultural production is good, cultivators will earn more income. They will be in position to purchase manufactured products and other inputs required in agriculture. In short, we can say that the prosperity of the country will depend upon the prosperity of agriculture.

Utility Analysis

Two techniques are used in the analysis of consumer's behavior.

1. Utility analysis: Marshallian or cardinal approach.
2. Indifference curve technique: Modern of ordinal approach.

Here the utility analysis (Marshallian approach) has been discussed. In view of this two laws. Law a Diminishing Marginal Utility (DMU) and law of Equimarginal Utility (EMU) have been explained in next topics.

Utility Analysis: Law of Diminishing marginal Utility (DMU)

Dr. Marshall states this, law as follow: The additional benefit which a person derives from a given increase of his stock of anything diminishes with the growth of the stock that he has another words the law of DMU simply states that other things being equal, the marginal utility derived from successive units of a given commodity goes on decreasing. Hence the more we have of a thing; the less we want of it, because every successive unit gives less and less satisfaction.

The law is explained with the help of following example

Units of commodity No. Of mangoes	Total Utility (TU)	Marginal Utility (MU)
1	3	8
2	14	6
3	16	2
4	16	0
5	14	(-) 2

It will be better to know some terms for understanding the law and they are.

1. **Initial Utility:** It is the utility of the initial or the first unit. In the table initial utility is 8
2. **Total Utility:** In column 3 of the table, it gives the total utility at each step. For example it you consume on mango are total utility is 3, if you consume two mangoes, the total utility is 14.
3. **Zero Utility:** When the consumption of a unit of a commodity makes no addition to the total utility, then it is the point of zero utility. In our table, the TU after the 3rd unit is consumed is 16 and ar the 4th also it is 16. Thus, the 4th mango results in no increase. Thus is the point of zero utility. It is seen that the total utility is maximum when the MU is zero.

4. **Marginal Utility:** The addition to the total utility by the consumption of the last unit considered just worthwhile. The can be worked out by using following formula.
5. **Negative Utility:** It the consumption of a unit of a commodity is carried to excess, then instead of giving any satisfaction, it may cause dissatisfaction. The utility in such cases is negative. In the table given above the marginal utility of the 5th unit is negative.

Assumptions: The assumptions of the law of DMU are:

1. All the units of the given commodity are homogenous i.e. identical in size shape, quality, quantity etc.
2. The units of consumption are of reasonable size. The consumption is normal.
3. The consumption is continuous. There is no unduly long time interval between the consumption of the successive units.
4. The law assumes that only one type of commodity is used for consumption at a time.
5. Though it is psychological concept, the law assumes that the utility can be measured cardinally i.e. it can be expressed numerically.
6. The consumer is rational human being and he aims at maximum of satisfaction.

Exceptions: The exceptions to the law of DMU are as follows:

1. **Hobbies:** In case of certain hobbies like stamp collection or old coins, every addition unit gives more pleasure. MU goes on increasing with the acquisition of every unit.
2. **Drunkards:** It is belives that every does of liquor Increases the utility of a drunkard.
3. **Miser:** In the case of miser, greed increases with the acquisition of every additional unit of money.
4. **Reading:** reading of more books gives more knowledge and in turn greater satisfactions.

Importance of the law of DMU:

1. **Basic of economic law and concepts:** This law of DMU forms the basis of law of demand, law of Equimarginal utility, elasticity of demand etc.
2. **Public finance:** The Govt. can impose and justify progressive income tax on the ground of this law, as the income increases, the MU of income diminishes.
3. **Businessmen:** A businessman or producer can increase the sale of his product by fixing a lower price. Since consumers tend to buy more to equate MU with price, a producer can expect a rise in sale.

Utility Analysis - Law of Equi-marginal Utility (EMU)

This law of Equimarginal Utility is another fundamental principle of Economics. It is also known as law of substitution or law of Maximum satisfaction. We have already seen that human wants are unlimited whereas the means to satisfy these wants are strictly limited. It

therefore becomes necessary to pick up the most urgent wants that can be satisfied with the money that a consumer has.

In order to get maximum satisfaction out of the funds (money) we have, we carefully weigh the satisfaction obtained from each rupee that we spend. If we find that a rupee spend in one direction has greater utility than in another, we shall go non spending money, on the former (first) commodity, till the satisfaction derived from the last rupee spent in the two cases is equal. In other words, we substitute some units of commodity of greater utility for some units of the commodity of less utility. The results of this substitution will be the MU of the former will fall and that of the latter will rise, till the two marginal utilities are equalized. That is why this law is called the laws of substitution or equimarginal utility.

This law has been illustrated with the help of table given below.

Units	Marginal Utility of oranges	Marginal Utility of apples.
1	10	8
2	8	6
3	6	4
4	4	2
5	2	0
6	0	2
7	2	4
8	4	6

Suppose apples and oranges are the commodities to be purchased suppose we have go seven rupees to spend. Let us spend three rupees on oranges and four rupees on apples. The utility of 3rd unit of oranges is 6 and that of the 4th unit of apples is 2. As the MU of oranges is higher, we should buy more of oranges and less of apples. Let us substitute one orange for one apple so that we buy four oranges and three apples. Now the MU of both oranges and apples is the same i.e. 4. This arrangement yields maximum satisfaction. Thus total utility of 4 oranges would be 10+8+6+4=23 and of three apples 8+6+4=18 which gives a total utility of 46. The satisfaction given by 4 oranges and 3 apples of on one rupee each is grater than could be obtained by any other the total utility fiends less than 46. Thus, it can be concluded that we obtain maximum satisfaction when we equalize marginal utilities by substituting some unit of the more useful for the less useful commodity.

Limitation of the Law of Equi- Marginal Utility:

1. **Ignorance:** If a consumer is ignorant and blindly follows custom, he will may not make wrong use of money.
2. **Inefficient organizer:** The inefficient business organizer will final to achieve the best result from the land, labour and capital. That he employs.
3. **Unlimited resources:** When the resources are sample this law will be meaning less.

4. **Hold of custom and fashion:** It the purchase is strongly influence by customer and fashion he will not obtain maximum satisfaction.
5. Frequent changes in prices of different goods and services are occurred the observance of this law is difficult.

Practical Importance of Law of EMU:

1. **Consumption:** A wise consumer acts on this law while arranging his expenditure and obtains maximum satisfaction.
2. **Production:** To obtain maximum net profit, he must substitute one factor of producing to another so as to have most economical combination.
3. **Exchange:** Exchange implies substitution of one thing to another and hence this law is important.
4. Distribution: It is on the principle of the marginal productivity that the share of each factor of production is determined.
5. **Public finance:** The Govt. is also guided by this law in public expenditure. The Govt. can expend its revenue (money) in such a way that it will secure maximum welfare of the people.

Consumer's Surplus

Consumer's surplus is one of the most important concepts in Economics. It was expounded by Alfred Marshall. We often find that the price we pay for a commodity is usually less than the satisfaction we derived from its consumption for example, when we purchase a packet of salt, match-box, news paper etc. and consume, the satisfaction derived from those is greater as compared to the price paid for them. This what consumer surplus mean. The concepts can be defined as under.

1. Consumer's surplus is the excess of what we are prepared to pay over what we actually pay for a commodity.
2. It is difference between what we are prepared to pay and what we actually pay.
3. **Consumer's surplus:** Total Utility - Total Amount spend

Explanation: We can illustrate the concept of consumer's surplus with the help of the table given below.

Unit (Orange)	Marginal Utility	Price (Rs.)	Consumer's Surplus
1	10	2	8
2	8	2	6
3	6	2	4
4	4	2	2
5	2	2	0
Total	**30**	**10**	**20**

Hence consumer's surplus = Total Utility – total amount spent
= 30 - 10 i.e. 20.s

It is assumed in the above table the price of oranges in the market is Rs. 2.00 per orange. A consume will purchase as may oranges as make his, marginal utility equal to the price. Thus he will purchase 5 orange and pay for each Rs. 2.00. In this way he will spend Rs. 10.00 But the total utility of the 5 oranges is equal to Rs. 30.00. He thus gets a consumer's surplus equal to (30-10) Rs. 20.00

The consumer's surplus can also be found from fourth column of the table. The utility of the first unit of oranges to the consumer is equal to Rs. 10.00, therefore be would be prepared to pay Rs. 10.00 for it's rather than go with out is. But be pays for the first orange only Rs. 2.00, because the price of an orange in the market is Rs. 2.00. Therefore, from the first unit, the consumer is surplus equal to (10-2) = Rs. 8.00, which is written in the fourth column. Similarly the utility of second orange is equal to 8 while the consumer pays Rs. 2.00 for its and therefore obtains (8-2) = Rs. 6.00 as consumer's surplus. From 5th orange the consumer derives satisfaction equal to Rs. 2.00 and as such the consumer's surplus from fifth unit is equal to (2-2) = 0. Thus if we calculate the total utility obtained (i.e. 30) and total amount paid (Rs. 10.00), the consumer's surplus as given in column no four is equal to. Rs. 20.00

Practically however the measurement of consumer's surplus is not simple. There are numerous difficulties to measure consumer's surplus exactly in the market but it is possible to have rough estimate which is of very great practical value.

Criticism: The concept of consumer's surplus has been critised on several grounds.

1. It is said that this concept is imaginary idea. It is very difficult to say how much one is prepared to pay and if it is said it will unreal.
2. It is very difficult to measure exactly. Because different people are prepared to pay different amount (price) and hence it is very difficult to measure total consumer's surplus in the market.
3. This concept does not apply to necessaries. For example, if we ask how much a man be prepared to pay for a glass of water when he is dying of thirst, it is very difficult to say an exact amount. Thus, consumer's surplus in such cases is immeasurable.

Importance of consumer's surplus: This concept is useful in a number of ways.

In public finance: It is very useful to Finance Minister in imposing taxes and fixing the rates. He will impose more taxes on commodities in which consumer's surplus is more.

- To the businessman and monopolistic as they can increase the price of the commodities in which there is large consumer's surplus.
- Comparing advantages of different places.
- Measuring Benefits from international trade.

Production, Factors affecting the production and Factors of Production

Production, in Economics is one of the important activities whatever human being is received goods as a natural gift can not be consumed as such. It requires some processing and then and then only it is consumed. Through processing we transform some goods and services in to another one for example sugarcane into sugar, Cotton into cloth etc. In economics, sugarcane or cotton are termed as inputs factor or raw material while sugar or cloth are termed as output or finished product. Thus the term can be defined as under.

1. Production means transformation of inputs (goods and sieves) into output.
2. Production of wealth or value.
3. Production means creation (addition) of wealth or value.

It may consist not only goods but also services.

Factors affecting the production: Following factors affect production.

1. **Natural factors:** like climatic conditions, soil type affect production. Production can be diminished due to natural calamities like flood, drought etc.
2. **Technical progress:** Can positively influence production. Use of improved variety, fertilizers, insecticides etc. can give us more production.
3. **Political factors:** also affect production positively or negatively. Decisions pertaining to taxation, investment or fiscal. Policies of Govt. influence production.
4. **Infrastructure facilities:** Like transport, credit, storage etc. are also equally important to have more production.
5. **Character of people:** determines productivity. The hard workers and sincere workers always produce more and hence it is very important factor which influences production.

Factors of Production:

For undertaking production following important factors are required

1. Land

2. Labour

3. Capital and

4. Organization or Enterprise

Details of factors of production are explained in next topics

What is Distribution?

By distribution we mean "Accounts for the sharing of the wealth produced by a community among the agents, or owners of the agents, which have been active in its productions.

Here distribution is functional not personal. It is distribution not among individuals but among agents of production. A person may represent in his person all the four agents, eg. A peasant (cultivar) may be landlord, organizer, laborer and capital owner. Here we do riot discuss how much he earns as an individual hut the reward that he gets separately for supplying each factor of production. Thus, we study distribution in the form of rent, wages, interest and profits.

What is rent?

Rent: It means reward paid for the use of land; it is received by the land-lord (landowner) and paid by the user of land (tenant). Rent may be-

1) Contract Rent 2) Economic Rent

1) Contract Rent: It refers to the total amount of money paid for the use of land.

2) Economic Rent: It is the part of total payment which is made for the use of land; it can be estimated as follow.

a) Economic Rent: Contract Rent - Interest on the capital invested suppose a tenant paying Rs.20,000.00 per year as contract rent but the interest on capital invested is Rs.3000.00 per year, the remaining Rs.17000.00 (Rs.20,000-3000) is being for the use of land, economic rent.

b) Economic Rent: Present actual earning - Transfer earnings. Here transfer earnings represent the amount which a factor can earn in its next best alternative use. Suppose a piece of land yields in its present use Rs.5000.00 in a year and suppose further that if it is transfer to its next best use, it will yield Rs.4000.00 In its present use Rs.1000.00 (Rs.5000-4000) more than in its next best use. This sum of Rs.1000.00 is surplus is economic rent. Hence Economic rent means surplus or excess over transfer earnings.

Recardian Theory of Rent: The theory of rent was put forth by the Economist, Divid Recardo. According to the Recardian theory of Rent, rent is differential surplus and arises from the fact that land possesses certain popularities as a factor of production. It is limited area and its fertility varies, besides, its situation is fixed, thus rent results because

a) Fertility is more or less fixed in nature
b) The stock of land is fixed and can not be increased.

Thus, Recardo defines rent as that portion of the produce of the earth which is paid to the landlord for the original and indestructible powers of the soil. “This has been illustrated as under”.

1) Rent in Extensive Cultivation: Let us suppose that there are different qualities of land say ‘A’, ‘B’, ‘C’ and ‘D’ grade depending upon fertility. ‘A’ is most fertile land and yields 35 quintals of wheat while the ‘B’ is inferior than ‘A’ yielding 30 Qts. of wheat. Further, ‘C’ is still inferior who yields 25 Qts while ‘D’ is least fertile yielding 20 Qts of wheat which Record describes as marginal land.

Ricardo begins with a group of new settlers in a new country, the group of people will settle down in ‘A’ part of the country which is most fertile land. They will start to cultivate land. At this stage no rent is paid because ample land of first quality is available, But as the population increases and the produce from the “A” grade land is insufficient for increasing population, Naturally ‘B’ grade land will have also to be taken for cultivation. Since, this land is inferior it yields less than the land i.e. 30 quintals of wheat per plot as compared with 35 Qts of ‘A’ with the same expenditure of labour and capital. Naturally ‘A’ grade land acquires a greater value as compared with ‘B’ now a tenant will be prepared to pay up to 5 quintal of wheat in order to get a plot in the ‘A’ zone or take ‘B’ grade land free of charge. Thus, the rent arises for ‘A’ grade land which is equal to the difference between yields of ‘A’ and ‘B’ grade lands. That is 35 Qtls-30 Qts 5 Qts of wheat. Thus Ricardo considered ‘Rent’ as a surplus accruing to superior land over inferior land called “marginal land” Thus such shifting of population is occurred further on ‘C’ and ‘D’ grade lands the economic rent will still increased as indicated in the following table.

Grade of Land	Production (Qts)	Value of Produce @ Rs 1000/ Qts	Cost of production	Surplus over 'D' (Qts)	Economic Rent (Rs.)
A	35	35000	20000	15	15000
B	30	30000	20000	40	10000
C	25	25000	20000	5	5000
D	20	20000	20000	Nil	No Rent

2) Rent in intensive cultivation: Suppose, the settlers resided in ‘A’ grade land realize that there is another way too of increasing the produce by applying more labour and capital to superior lands (i.e. intensive cultivation). This is done but it is seen that the law of diminishing returns sets in now consider that ‘A’ ‘B’, ‘C’ and ‘D’ are the different doses of labour and capital (not grades) applied to the same grade of land The first dose ‘A’ yields 35 Qts of wheat, the second dose of labour and capital — ‘B’ applied on the some plot will almost definitely give us less than the first, suppose 30 Qts of wheat. So we have the choice of either taking new plots or cultivating the same lands more intensively. If we adopt the latter course, the first unit of labour and capital (does A) will be yielding a surplus over the second unit. (dose- ‘B’) which produces, just enough to cover the expenses. This Surplus again is rent. Here 5 Qts surplus and it is economic rent. As more and more units of labour

and capital are applied, the return per unit will go on falling.

The rent arises from extensive cultivation and intensive cultivation together has been depicted diagrammatically as under. The shaded area represents rent and the 'D' land/dose yields which just cover its expenses and no more. It is described as "marginal" or 'No—Rent land".

3) Rent Due to Differential advantages: Suppose, further after some years market in 'A' zone and Railway in 'B' zones have been started. As a result, when produce is to be disposed off the market cost in 'A' zone and transport charges in 'B' zone will be least or negligible compared to that of in 'C' and 'D' zone. Thus the plots located in 'A' & 'B' zone will be advantageous. The better situated plots, which have to bear less market transport charges, will enjoy a surplus over the distant ones (i.e. 'C' & 'D' zones. This surplus will be another cause of rent.

Hence, economic rent is a surplus which arises on account of natural differential advantages, whether of fertility or situation possessed by the land in question over marginal land.

4) Scarcity Rent: Suppose, all types of lands cultivated extensively and intensively too. But the price rises still further under the pressure of demand. Population is increased and no more land is available. Prices of agril produce go up and therefore, incomes from land go up. Hence, all land, including no-rent 'D' quality land begins to get surplus above expenses. This surplus above costs in the 'D' quality land, (our previous no rent land) is "scarcity rent".

Summing up, the fertility, situation and limited total stock these qualities of land which are original and permanents give rise to rent.
The Recardian theory of Bent has been criticized on following points.

1. Fertility of land is not original. The present productive capacity of land is the result of human efforts, like use of manures and improved technology.
2. The idea of indestructibility is objected. Area of land is everlasting but not fertility. Fertility can be destructed due to continuous cultivation.
3. The concept of marginal land Said to he imaginary.

Cost-type and Concepts

The term 'cost' generally refers to the outlay of funds & or productive purposes. In other words, cost refers to the expenses incurred on productive services and physical input factors.

Cost analysis is an important tool to describe the relationship of costs to income. Commonly, there are two types of costs used in farming viz fixed costs and variable costs. However, marginal or added cost is also en important tool to guide the farmer to decide, how far he can push the production and how much of various resources he can USC.

The total sums of fixed and variable costs in the production of a particular commodity are called as total cost. There are other costs which have boon derived from those main groups.

1) Fixed Costs: These costs are related to fixed resources and are overhead costs. They remain constant irrespective of the yields obtained.
These are the same at all levels of production. Rent, interest on fixed capital, depreciation of building, taxes and wages of the permanent labourers constitute fixed costs Fixed costs have little relation to making decision on the level of production of farming practices.

2) Variable Costs: These costs are related to the variable resources and change with the output. The variable costs are nil, if there is no production on the farm. They change with the quantity of production. In the beginning, as the production creases variable costs rise quite rapidly, but with further rise in production variable costs do not increase proportionately with the production due to economics brought about by mass production later on as diminishing returns set in, variable costs start rising more rapidly than the production.
If farming is to be carried, the variable cost must be less than selling price, e.g. current supplies such as seeds, fertilizers, irrigation, insecticides, hired labour charges, interest on working capital.

3) Total Costs: The fixed and variable costs make total cost of production of each unit of crop or livestock product. The total cost stands even when production is zero. The increase in variable costs determines whether farming would be profitable, but once the total costs are covered, the farmer remains indifferent to the average cost of per unit cost of production.
Profit = Gross income - Total Cost (Fixed Variable)

4) Average total Cost: It refers to the average of all costs (fixed + Variable) per Unit of output. It is the resultant of total cost divided by the output. In the beginning the average costs are very high because the high fixed costs are distributed on a few units of production. But as more units are produced the fixed cots are spread over on more and more units. When the fixed costs have spread over on many units, there is not much effect of the fixed costs on the average costs. Variable costs assume importance s average cost begin to rise,

$$\text{Average total cost} = \frac{\text{Fixed Cost} + \text{Variable cost}}{\text{Total output. Total output}} = \frac{\text{Total Cost}}{\text{Total output}}$$

5) Average Fixed Cost: Average fixed cost is a fixed cost per unit of output. The total fixed cost is the same at all the levels of production. The average fixed cost falls continuously at a decreasing rate as more output is produced. It is because the fixed cost is divided by increasingly large number as output increases. It can be expressed as

$$AFC = \frac{TFC}{Y}$$

Where, AFC = Average Fixed Cost
TFC = Total Fixed Cost
Y = Output.

6) Average Variable Cost: The average variable cost (AVC) refers to total variable cost per unit of output. The AVC has an inverse relationship with average product (AP). When AP increases AVC decreases, when AP decreases AVC increases, further more, when AP is at maximum the AVC must be at its minimum. The AVC is expressed as

$$AVC = VC/Y$$

Where, VC= Variable cost
Y= Output

7) Marginal Cost: Marginal cost MC is the change in cost associated with an increase of one unit of output. The marginal cost has also certain relationship with Marginal Product (MP) just as the average variable cost has with average product.

There is an inverse relationship between Marginal Product (MP) and Marginal Cost (MC) that is when MP is increasing, MC is decreasing, when MP is decreasing MC is increasing and when MP is at maximum MC is at lowest point.
As marginal costs are related to the cost of producing additional units of output, they are affected only by the variable costs Fixed cost, as a rule, do not influence the marginal cost, because they neither increase nor decrease with the additional production. Marginal costs arc very important in determining as to how far production should be pushed and how much of the various resources should be used. A farmer should acid to the production as long as added return is greater or at least equal to the added cost.

Introduction to National Income

For understanding the concept of national income, it is necessary to know how an economy works. In any economy, its people are engaged in on productive activity or the other, whereby they earn income and spend their income on goods and services to satisfy their wants. The health and progress of an economy are to be judged from how much they are able to produce arid spend i.e. Country's total output, income and expenditure. Those aggregates of the economy are but different aspects of its national, income.

Circular Flow: The Wheel of the Wealth

In every economy there are households on the one hand and productive enterprises or firms on the other. The function of house holds is to consume holds and services for the satisfaction of their wants. Thus the household is the basic consuming unit in the economy. The function of productive enterprises (forms) is to produce goods and services for the satisfaction of the wants of households and thus the firm or productive enterprise is the basic producing unit in the economy. The household here may be family unit while producing unit (firm) may be grocery shop, factory etc. Besides, Government is another sector which occupies an important Position. It like households, purchases goods and services arid since it runs many public enterprises it act as, producing unit. Thus households, firms and government are the main components of the entire economic organization of a country which is know as an economy. Economy is the sum total of the operations of the households, firms and government.

In every economy there is always a circular flow (movement) of resource services (i.e. services of land, labour capital and enterprise) from the household to firms and the reverse movement of goods and services from the firms to the households. This is depicted in the diagram given below.
The inner circuit shows the real flows would take place only in barter economy where goods and services are exchanged for goods and services. But in the modern economy where use of money as medium of exchange is widely adopted

Households supply the resource services or factors to firms and receive in return payments in terms of money for goods and services they want. The firms sell goods and services for money and use the money so received to pay the households for their supply of resource services. Thus labour gets Wages; capita1 gets interest land gets rent and enterprise gets profits all in terms of money, this circular flow of money also known as **Wheel of Wealth.** This flow of money is not continuously at steady level. It may contract or expand when depression and prosperity occur, respectively in an economy. The diagram explains circular flow of closed economy where savings and role of Govt. is totally absent.

Definition of National Income

1) National Income is that part of objective income of the community, including income derived from abroad, which can be measured in money" - Pigou.

2) National income may be defined as the money value of the flow of commodities and services (exc1udinc imports) reckoned at current prices minus the sum of following/items, at current prices.

1. Money value of diminution in stocks
2. Money value of goods and services used up in the course of production
3. Money value of goods and services used to maintain intact existing capital equipments.
4. Receipts from indirect taxation.
5. Favorable balance of trade
6. Net increase in the country's foreign indebtedness.

In short, National Income is the aggregate factor income (i.e. earning of labour and property) which arises from the current production goods and services by the nation's economy. Here nation's economy refers to the factors of production Labour and property, supplied by the normal residents of the/ national territory. The national income has three interpretations

1) It represents a receipts total.
2) It represents expenditure total.
3) It represents a total value of production.

These three - fold interpretation arises out of fact that, every expenditure is at the same time a receipt and f goods and services purchased (bought) are valued at their sales prices. Thus

Value Received = Value paid = Value of goods & services

Concepts of National Income

There are various concepts of national income, they are as under.

1) Gross National Product (GNP): GNP is defined as the total market value of all final goods and services produced in a year. GNP is a monetary measure and avoids double counting. This implies it measures the market value of the annual output and the outputs here are final products

The GNP can be obtained by adding up:

1) Personal consumption expenditure.
2) What private business spends on replacements renewal & new investment called gross domestic private investment.
3) Net foreign investment (export surplus)
4) Government purchases.

2) National Product: This can be obtained when-charge for depreciation is deducted from the

GNP, in other words it means the market value of all final goods and services after providing for depreciation.

Therefore

Net National Product (NNP)
OR = GNP - Depreciation
National income at Market price

3) National Income at Factor Cost: It means the sum of all incomes earned by resource suppliers for their contribution of land, labour, capital and entrepreneurial ability which goes into the year's net production. Thus difference between national income (at factor cost) and net not national product (i.e. national income at market prices) arises from the fact that Indirect taxes and subsidies. Hence National Income is

National Income at Factor cost = NNP - Indirect taxes + subsidies.

Measurement of National Income

Since factor incomes arise from production of goods arid services, and since incomes are expended on goods and services produced, three alternative methods of measuring national income are possible.

a) Output Method: This method is also called as production Method. It consists of following three stages.

1) Estimation of the gross value of domestic output in the various sectors of production.
2) Determination of cost of materials used, services rendered to these sectors by other sectors of production and also annual depreciation value, of the plants and equipments used in these Sectors.
3) Deduction of costs and depreciation values from the gross value production which gives (derives) net value of domestic output.

b) Income Method: Under output method, the net output estimates are obtained. This estimate is regarded as the equivalent of the value of sales of the output. This is the income to producer while receipts of the factor suppliers. This income comprises-

i) Wages earned by the workers, salaries of staff, social Security, bonus etc.
ii) Earning of self employed persons, dividends of shareholders
iii) Rent of land, factories and business premises.
iv) Interest on capital and earnings of public enterprises the sum of all above gives us National Income.

c) Expenditure Method: Under this method, estimation of the disposal of income on the purchase of final goods end services has been done. It includes following.

a) Personal consumption expenditure of households.
b) Gross private domestic investment, i.e. business spending on capital goods.
c) The net foreign investment, i.e. net Spending by foreign nationals.
d) Govt. purchases of goods and services.

Method used in India: The National Income Committee used a combination of Income method and the Product (output) method for estimating nationa1 income. In the agriculture and industry sectors the output method (product method) is used. Here net value of product arc computed and incorporated in national income. But in the fields of commerce, transport, banking the income method is used. The National income involves the value of products and income earned by the people engaged in service sector.

Difficulties In measurement: In, under-developed countries like India many difficulties are to be faced in estimating national income. They are:

1. Prevalence of non monetized transactions in agriculture still lot of product does not come into the market, It consumed at farm level.
2. Illiteracy - Due to illiteracy it is not possible to keep regular account.
3. Occupational specialization is incomplete.
4. Lack of adequate statistical data.
5. Estimation of value of inventories i.e. raw material is very difficult.
6. Estimation of depreciation on capital goods and avoiding double counting is too much difficult.

Use of National Income data: It is very useful to measure economic welfare, determine standard of living of a community, similarly to assess economic development and for comparison purpose the national income is must.

Sources of public finance – Taxes (Direct & Indirect)

As discussed above functions of modern Governments are very important and extensive which require heavy expenditure. Govt. has to undertake important functions like defense (internal and external), Social welfare, education, health, industry, agriculture. For all of these a huge amount of funds is required. There are four main sources from which this fund or income is obtained, they are.

1. Taxes, direct & indirect.
2. Process, earnings of state's commercial and industrial undertaking.
3. Fees and assessments.
4. Loans

Similarly Govt. can raise funds through fines, penalties, gifts etc.

a) Taxes: It has been defined as a compulsory contribution of the wealth of a person or a

body of persons for the services of the public powers.
Thus it implies:

i) Tax is compulsory payment.
ii) A particular tax is not a price for any particular service performed by the State (Govt.) One can not refuse to pay the tax on the ground that he does not use a service. Govt. does not promise to provide a specific in return for the payment of a particular tax.
Tax may be – i) Direct ii) Indirect.

1) Direct tax: It is generally imposed on income. E.g. Income tax It is really paid by a person on whom it is legally imposed.
2) Indirect tax: The taxes on goods are indirect taxes. Indirect tax is imposed on one person but it is paid partly or wholly by another.

Suppose a tax is imposed on house owners. Being it is compulsory they have to pay it or in other words the impact of the tax on them. Here impact means burden. But owners will not pay it quietly, they will raise house rent charges and tenants have to bear it. But tenants will try to obtain this burden from their offices where they are working. If they get it the employer will increase the price of his product to recoup the burden. Thus, finally the weight of the tax or "incidence" falls on people.

Thus impact means burden which is shifted to another and who is bearing it finally is known a incidence Therefore Shifting starts with impacts and ends in incidence.

The direct tax is one whose impact and incidence are on the same person i.e. tax payer is also tax bearer.

In case of indirect tax, the impact and incidence are on different persons, i.e. there is shifting of tax.

Advantages of Direct taxes:

1) Equitable: Equality of sacrifice can be attained through progression.
2) Economical: Cost of collection is low as it is generally collected at source.
3) Certain: Both tax payer and authorities know how much tax is there. Hence the amount of revenue is certain.
4) Elastic: Suddenly tax can be increased and in emergency period funds can be increased eg. Death duties

Disadvantages to Direct tax:

1) Inconvenient: It pinches the tax payer as a lum-sum amount is taken out of his pocket and hence it is inconvenient.
2) Evadable: The tax payer (assessee) can submit a false return of income and thus avoid the tax.
3) Arbitrary: If taxes are progressive, the rate of progression is arbitrary and if it is

proportional. The poor person has to bear more tax. Thus, both are bad.
4) Disincentive: If taxes are too heavy, it will result in discourage saving and investment.

Advantages of Indirect taxes :

1) The poor can contribute: They are the only means of reaching the poor.
2) Convenient: It is convenient both, for tax payer and state. Tax payers do not feel much burden, as these taxes are paid in small amount and secondly when purchases are there tax payment will be there.
3) Broad based: These taxes are spread over wide range. Large number of population can be covered.
4) Easy collection: Automatically taxes collected easily.
5) Non-evadable: Means non avoidable.
6) Elastic: If imposed on necessaries it will yield huge amount.
7) Equitable: Irrespective of income group, tax is collected from all.
8) Check harmful consumption: The harmful commodities like tobacco drugs are heavily taxed to check the consumption.

Disadvantages of indirect tax:

1) Regressive: Rich & poor both have to pay a equal price and hence poor are more suffered than rich.
2) Uncertain: These taxes are collected in the form of prices of the commodity. If that commodity is not purchased tax amount will be reduced. Hence it is uncertain.
3) Uneconomical: For collecting the tax, large administrative staff is required.
4) Harmful to industry: If more taxation is there, the rise in prices will occur which result in less purchase and thus it is harmful to the industry involved in production.