FUNDAMENTALS OF ECONOMICS

Lecture no.1 Economics – Meaning, Definitions, Subject matter of Economics – Traditional approach – consumption, production, exchange and distribution

Economics is popularly known as the “Queen of Social Sciences”.

It studies economic activities of a man living in a society. Economic activities are those activities, which are concerned with the efficient use of scarce means that can satisfy the wants of man. After the basic needs viz., food, shelter and clothing have been satisfied, the priorities shift towards other wants. Human wants are unlimited, in the sense, that as soon as one want is satisfied another crops up. The knowledge of economics guides us in making effective decisions. The subject matter of economics is concerned with wants, efforts and satisfaction.

Subject matter of economics

A man wants food, clothing and shelter. To get these things he must have money. For getting money he must make an effort. Effort leads to satisfaction. Thus, \text{wants - efforts - satisfaction} sums up the subject matter of economics initially in a primitive society where the connection between wants efforts and satisfaction is direct.

FIG: Subject matter of economics
Divisions of Economics

The subject matter of economics can be explained under two approaches viz., Traditional approach and Modern approach.

Traditional Approach: It considered economics as a science of wealth and divided it into four divisions viz., consumption, production, exchange and distribution

1. Consumption: It means the use of wealth to satisfy human wants. It also means the destruction of utility or use of commodities and services to satisfy human wants.

2. Production: It is defined as the creation of utility. It involves the processes and methods employed in transformation of tangible inputs (raw materials, semi-finished goods, or subassemblies) and intangible inputs (ideas, information, know-how) into goods or services.

3. Exchange: It implies the transfer of goods from one person to the other. It may occur among individuals or countries.

4. Distribution: Distribution refers to sharing of wealth that is produced among the different factors of production. It refers to personal distribution and functional distribution of income.

Lecture No.2 Modern Approach – Microeconomics and macroeconomics - Methods of economic investigation – Deduction &, Induction

Modern Approach: This approach divides subject matter of economics into two divisions i.e., microeconomics and macroeconomics. The terms "micro-" and "macro-" economics were first coined and used by Ragnar Frisch in 1933.

1. Micro-Economics or Price Theory: The term "micro-economics" is derived from the Greek word "micro", which means small or a millionth part. It is also known as "price theory". It is an analysis of the behaviour of small decision-making unit, such as a firm, or an industry, or a consumer, etc

Importance of Micro-Economics: Micro-economics occupies a very important place in the study of economic theory.

- Functioning of free enterprise economy,
- Distribution of goods and services,
- Determination of prices,
- Efficiency in consumption and production

Limitations of Micro-Economics: Micro-economic analysis suffers from certain limitations:

- It does not give an idea of the functioning of the economy as a whole.
It fails to analyses the aggregate employment level of the economy, aggregate demand, inflation, gross domestic product, etc.

It assumes the existence of "full employment" in the whole economy, which is practically impossible.

2. **Macro-Economic or Theory of Income and Employment:** The term "macro-economics" is derived from the Greek word "macro", which means "large". Macroeconomics is an analysis of aggregates and averages pertain to the entire economy, such as national income, gross domestic product, total employment, total output, total consumption, aggregate demand, aggregate supply, etc.

**Importance of Macro-Economics:**

- It is helpful in understanding the functioning of a complicated economic system.
- It also studies the functioning of global economy.
- With growth of globalization and WTO regime, the study of macro-economic has become more important.
- It is very important in the formulation of useful economic policies for the nation to remove the problems of unemployment, inflation, rising prices and poverty.
- Through macro-economics, the national income can be estimated and regulated.
- The per capita income and the people's living standard are also estimated through macroeconomic study.

**Limitations of Macro-Economics:**

- Individual is ignored altogether. For example, in macro-economics national saving is increased through increasing tax on consumption, which directly affects the consumer welfare.
- The macro-economic analysis overlooks individual differences. For instance, the general price level may be stable, but the prices of food grains may have gone up which ruin the poor.
- A steep rise in manufactured articles may conceal a calamitous fall in agricultural prices, while the average prices were steady. The agriculturists may be ruined.

**DEFINITIONS OF ECONOMICS** The word economics has been derived from the Greek Word “OIKONOMICAS” with “OIKOS” meaning a household and “NOMOS” meaning management. Kautilya, the great Indian statesman, named his book on state crafts as „Arthashastra”.

**WEALTH DEFINITION OF ECONOMICS** : Adam smith defined Economics as “An enquiry into the nature and causes of wealth of nations” in his book, entitled „Wealth of Nations”. He is regarded as the “Father of Economics”.

**WELFARE DEFINITION OF ECONOMICS** : Alfred Marshall in his book “Principles of Economics” defined “Political Economy or Economics as a study of mankind in the ordinary business of life, it
examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well-being.

**SCARCITY DEFINITION OF ECONOMICS:** In his publication „Nature and Significance of Economic Science Lionel Robbins formulated his conception of Economics based on the scarcity concept. “Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses.

**GROWTH DEFINITION OF ECONOMICS:** John Maynard Keynes is known as the Father of Modern Economics. He defined economics as “the study of the administration of scarce resources and of the determinants of employment and income”.

In the words of Nobel prize winner Prof. Samuelson, “Economics is the study of how people and society end up choosing with or without the use of money, to employ scarce productive resources that could have alternative uses, it produces various commodities over time and distributes them for consumption, now or in the future, among various persons and groups in society. It analyses costs and benefits of improving patterns of resources allocation.”

**Importance:** Economics analyses the economic problems of the society. It plays a major role in the economic development of the country by proposing the optimum allocation of resources. Knowledge of economics is useful in understanding various national and international events and trends. Amartya Sen, Bharat Ratna recipient was awarded Nobel Prize for Economics.

**Methods of Economics Investigation:** There are two methods of economic investigation that are used in economic theory i.e., 1) Deductive method and 2) Inductive Method

**Deductive Method:** This method involves reasoning or inference from the general to the particular or from the universal to the individuals. It is also known as the abstract, analytical, hypothetical or apriori method.

Deduction involves four steps: (1) Selecting the problems (2) Formulating the assumptions (3) Formulating the hypothesis through the process of logical reasoning whereby inferences are drawn and (4) Verifying the hypothesis.
**Inductive Method:** This method is also known as Concrete method, historical method or realistic method. It involves reasoning from particulars to the general or from the individual to the universal. This method derives economic generalisations on the basis of experiments and observations. In this method detailed data are collected on certain economic phenomenon and effort is then made to arrive at certain generalizations which follow from the observations collected.

**Is Economics a Science or an Art**

Science is a systematized body of knowledge in which the facts are so arranged that they speak for themselves. Judged by this standard, economics is certainly a science. Economics is also an art because it lays down precepts or formulas to guide people to reach their goals. Economics therefore is a science as well as an art.

**Economics – A Social Science**

Economics deal with the activities of people living in an organized community or society, in such activities which relate to the earning and use of wealth or with the problems of scarcity, choice and exchange. Hence it called a social science.

**Positive Economics and Normative Economics:**

1. Positive economics is concerned with „what is” whereas Normative economics is concerned with „what ought to be”.

2. Positive economics describe economic behaviours without any value judgment while normative economics evaluate them with moral judgment.

3. Positive economics is objective while normative economics is subjective.

4. The statement, “Price rise as demand increase” is related to positive economics, whereas the statement, “Rising prices is a social evil” is related to normative economics.

**Lecture No.3 Agricultural Economics – Definitions, Meaning, Importance of Agricultural Economics – Branches of agricultural economics**

**AGRICULTURAL ECONOMICS**

**Introduction**

Agricultural economics began in the 19th century as a way to apply economic principles and research methods to crop production and livestock management. The word, agriculture comes from the Latin word ager, referring to the soil and cultura, to its cultivation. Agriculture, in its widest sense can be defined as the cultivation and /or production of crop plants or livestock products. It is synonymous with farming: the field or field –dependent production of food, fodder and industrial organic materials.
Definition

Agricultural economics is an applied field of economics in which the principles of choice are applied in the use of scarce resources such as land, labour, capital and management in farming and allied activities. It deals with the principles that help the farmer in the efficient use of land, labour and capital. Its role is evident in offering practicable solutions in using scarce resources of the farmers for maximization of income.

**Prof. Gray** has defined agricultural economics as “The science in which the principles and methods of economics are applied to the special conditions of agricultural industry”

According to **Prof. Hibbard**, “Agricultural economics is the study of relationships arising from the wealth-getting and wealth-using activity of man in agriculture”

**Importance of agricultural economics**

1. Agricultural economics finds to seek relevance between cause and effect using the most advanced methods viz, production functions and programming models.
2. It uses theoretical concepts of economics to provide answers to the problems of agriculture and agribusiness.
3. Initially earnest efforts were made by the economists to use the economic theory to agricultural problems.
4. Subject matters of agricultural economics is enriched in many directions and fields taking the relevant tools of sciences particularly mathematics and statistics.
5. Agricultural depression which occurred in last quarter of 19th century and middle of 20th century brought about increased attention and concern to find out plausible cause and solutions for world agricultural depression.
6. Agriculture is the integral part of the world food system, having the foundation links between crops and animal production system.
7. Agricultural economists here have to play a major role in understanding the intricacies involved in the foundation systems.
8. Knowledge regarding problems in production, finance, marketing and government policies and their impact on production and distribution is very essential to find out suitable solutions for the farm problems.
9. Students of agricultural economics are taught the subject disciplines viz., 9 microeconomics, macroeconomics, agricultural production economics, farm management, agricultural marketing etc., to fulfill the requirements.

**Lecture No.4. Agricultural production economics- Meaning- Definitions- Subject matter – Objectives - Farm Management – Meaning – scope – Definitions- Objectives**

Agricultural production economics Agricultural production economics is a field of specialization within the subject of Agricultural Economics. It is concern with the selection of production pattern
and resource use efficiency in order to optimize the objective function of farming community or the nation within a frame work of limited resources. The goals of agricultural production economics are:

1. To provide guidance to individual farmers in using their resources most efficiently and
2. To facilitate the most efficient use of resources from the standpoint of economy.

**Definition**

Agricultural production economics is an applied field of science wherein the principles of choice are applied to the use of capital, labour, land and management resources in the farming industry.

**Subject matter**

Agricultural production economics is concerned with the productivity of inputs. As a study of resource productivity, it deals with resource use efficiency, resource combination, resource allocation, resource management and resource administration. The subject matter of production economics involves topics like factor-product relationship, factor-factor relationship and product-product relationship, size of farm, returns to scale, credit and risk and uncertainty, etc.

**Objectives:**

1. To determine and outline the conditions which give the optimum use of capital, labour, land and management resources in the production of crops and livestock.
2. To determine the extent to which the existing use of resources deviates from the optimum use.
3. To analyse the forces which condition existing production pattern and resource use.
4. To explain means and methods in getting from the existing use to optimum use of resources.

**Farm management**

The role of farm management, therefore, is to supply the information from the farmers for sound planning. All farm management tools are helpful to the farmers in solving their managerial problems for successful operation of the farm business.

**Scope**

Farm management is considered to fall in the field of microeconomics. It treats every farm as a separate unit because of differences in the ability of resources, problems and potentiality. The main concern of farm management is the farm as a unit. Farm management deals with the allocation of inputs at the level of individual farms. The objective of farm management is to maximize returns from the farm as a whole. It is interested in the profitability along with practicability. What crops, livestock enterprises and their combination to grow, what amount of resources to be applied, how the various farm activity to be performed, etc., all these fall within the scope of farm management.

**Definitions**

Farm management is defined as the science that deals with organization and operation of the farm in the context of efficiency and continuous profits (*J. N. Efferson*)

Farm management is defined as the art of managing a farm successfully as measured by the test of profitableness (*Gray*)
Objectives
1. To examine production pattern and resource use on the farm.
2. To identify the factors responsible for the present production pattern and resource use on the farm.
3. To determine the conditions of optimality in the resource use and the production pattern on the farm.
4. To analyse the extent of sub optimality in the resource use on the farm, and
5. To suggest ways and means in getting the present use of resources to optimality on the farm.

Lecture No.5 Agricultural finance – Meaning – Definitions – micro vs macro finance – need for agricultural finance-Agricultural marketing – meaning, definition, importance of agricultural marketing

Agricultural finance
Agricultural finance generally means studying, examining and analyzing the financial aspects pertaining to farm business, which is the core sector of the country. The financial aspects include money matters relating to production of agricultural products and their disposal.

According to Tandon and Dhandyal (1962), “as a branch of agricultural economics, which deals with the provision, and management of bank services and financial resources related to individual farm units”

Micro Vs Macro finance Agricultural finance is viewed both at macro level and micro level. Macro finance deals with the different sources of raising funds for agriculture as a whole in the economy and it is also concern with the lending procedures, rules, regulations, monitoring and controlling procedures of different agricultural institutions. Thus, macro finance pertains to financial agriculture at the aggregate.
Micro finance deals with financing the individual farm business units and it is concern with the study as to how the individual farmer considers various sources of credit to be borrowed from each source and how he allocates the same among the alternative uses within the farm.

Need for agricultural finance
Given the requirement of finance in agricultural sector, very few farmers will have capital of their own to invest in agriculture. Therefore, a need arises to provide credit to all those farmers who require it. Even if we look into the expenditure pattern of the farm families, they have hardly any savings to fall back on. Therefore, credit enables the farmers to advantageously use seeds, fertilizers, irrigation, machinery, etc. Farmer has to invariably search for a source which supplies adequate farm credit. Above all, small and marginal farmers constitute majority of the farming community.

Agricultural Marketing
The term, agricultural marketing implies selling of goods and services by the farmers and ranchers. It includes various functions viz., assembling, transportation, storing, buying, selling, standardization, grading, processing, sales promotion, etc.
According to Thomsen, “agricultural marketing comprises all the operations, and the agencies conducting them involved in the movement of farm produced foods, raw materials and their derivatives, such as textiles, from the farms to the final consumer and effects of such operations on farmers, middlemen and consumers.”

**Importance of agricultural marketing**

Marketing gives signals to increase production and thereby ensures the availability of goods, and services. If the marketing activity is developed, demand for goods increases as a result, production of goods also increases. Due to increased production, the demand for inputs increases i.e., demand for input is derived from the increase in demand for the output. To distribute the required input to the farm sector, the input marketing has to be strengthened.


**BASIC TERMS AND CONCEPTS IN ECONOMICS**

**GOODS and SERVICES**

**Goods:** It is defined as anything that satisfies human wants or needs.

**Characteristic features of goods:** They are tangible in nature and They are the material outcome of production Example: Foodgrains, Machinery, Seeds, Fertilizers etc.,

**Services:** Services would be the performance of any duties or work for another or professional activity.

**Characteristic Features of Services:** They are intangible, Non-Materialistic, Inseparable, Variable and Perishable Example: Services rendered by agricultural labourers, doctors, teachers etc.,

**Classification of Goods** The goods are classified based on supply, durability, consumption and transferability.

1) **Based on Supply:** The goods are categorized as economic goods and free goods based on the supply criteria free goods are those goods that exist in lenty that can be used as much as we like. They are gifts of nature and used without payment Example: 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 only. 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 goods, of course is not permanent, for instance air is a free good but when we receive it under fan it is an economic good.

2) **Based on Consumption:** The Goods are categorized as Consumer goods and Producer Goods. Consumer goods are those which yield, satisfaction directly. They are used by consumer directly to satisfy the wants Example: food, clothing, etc. These goods are known as the Goods of First order. Producer goods are these goods which help us to produce other goods. They give satisfaction indirectly by producing other goods which will yield final satisfaction. Example: machinery, tools etc. They are also termed goods of the second order.
3) Based on Durability: This classification emphasized on the nature of the goods and their usage. Mono Period Goods are those goods which can be used only once in the production and consumption process. Example: Seeds, Fertilizers, food etc., Poly Period Goods are those which can be used repeatedly during the production and consumption process over several periods. Example: refrigerator machinery, implements etc.,

4) Based on Transferability: External Material Transferable good. Example: Land, Buildings etc., External material non-Transferable good. Example: Degree Certificate, PAN Card etc., External non material transferable good. Example: Goodwill of a business External non material Non-transferable good. Example: Friendship, light internal non material Non-transferable good. Example: Intelligence Quotient, Ability, cruelty etc.,

UTILITY
The basis of consumer behaviour is that people tend to choose those goods and services they value high. Based on this premise economists developed the notion of utility to describe the consumption patterns adopted by the consumers.

Definition: Utility means the power to satisfy a human want. Any commodity or service which can satisfy a human want is said to have utility

Characteristics of Utility:
1. Utility is subjective
2. Utility varies with purpose
3. Utility varies with time
4. Utility varies with ownership
5. Utility need not be synonymous with pleasure
6. Utility does not mean satisfaction

KINDS OR TYPES OF UTILITY: The kinds or types of utilities are 1) Form utility 2) Place utility 3) Time utility and 4) Possession utility.

1. Form Utility: The Change in the form offers greater utility to the good than in its original form. For example: Processing of paddy into rice. Rice, fetches superior price than paddy because of processing.

2. Place Utility: The utility obtained by spatial movement of the goods is termed as place utility. Transportation aids in place utility i.e., through the transfer of goods from surplus production area to deficit or slack areas. Example: Shimla apples are transported to all parts of the country thereby increasing the utility of apples.

3. Time utility: Storing the commodity at the times of surplus production and make them available during scarcity creates time utility. Storage aids in creation of time utility by the supply of seasonal products during off season as per the consumers requirements.

4. Possession Utility: The Utility obtained due to possession or transfer of ownership of the commodity is called possession utility. Buying and selling creates possession utility. For Eg:- Agriculture land sold to real estate for plots would increase the utility for the same piece of land.

Cardinal and Ordinal Utility
**Cardinal utility**: This is based on the premise that utility could be measured and can be aggregated across individuals. It quantitatively measures the preference of an individual towards a certain commodity.

**Ordinal utility**: this is the ordinal measurement of utility. According to this utility cannot be quantified. For example: If the utility is 100 units towards a cup of coffee and 50 units for a cup of tea, the conclusion drawn is that Coffee is preferred over tea.

**Lecture No.7 Value – Definition – Characteristics; Price – Meaning, Wealth – Meaning Attributes of wealth, Types of wealth, Distinction between wealth and welfare.**

**Value and wealth**

Value The word “Value” in economics conveys value-in-exchange. It does not include free goods which have only value-in-use. In other words, value of a commodity refers to those goods that can be obtained in exchange for itself or purchasing power of a commodity in terms of other commodities and services. Value can be referred to as the capacity of a good to command other things in exchange.

**Characteristics of Value**: It must possess utility, it must be scarce and It must be transferable and marketable

**Price**

In prehistoric times, people did not know money and they had a barter system in which goods are exchanged with goods. Therefore, in those days value and price were used synonymously. But now days, goods are exchanged for money. Therefore, Value expressed in monetary terms is Price

**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.

**Definition**: It consists of all potentially exchangeable means of satisfying human wants (J.M.Keynes)

**Characteristics of wealth**: It should possess utility, it must be scarce, it must be transferable and it must be external to person

**Relation between Money and Wealth**: Money is a form of wealth. All money is wealth but all wealth is not money

**Relation between Income and Wealth**: Income is different from wealth. Wealth yields income.

**Types of Wealth**: 
1. Individual Wealth: It consists of all tangible and intangible possessions of the individuals besides loans due to them. Example: Land, bonds, deposits are tangible possessions while, intangible possessions are copyrights, patents etc.,

2. Social Wealth: It is the wealth, which is collectively used by all the people in a nation. Example: Railways, Public Parks, Government colleges etc.,

3. Representative Wealth: It is that form of wealth in the form of title deeds

4. National Wealth: It is an aggregate of all individuals wealth and social wealth of the country inclusive of loans due to people and to the nation debts have to be deducted. Example: Rivers, mountains.

5. Cosmopolitan Wealth: It is wealth of the whole word. It is a sum total wealth of all nationals.

6. Negative Wealth: It refers to the exclusive debts owed by the individuals and the nation.


LAW OF DIMINISHING MARGINAL UTILITY (LDMU)

The law of diminishing marginal utility is a generalization drawn from the characteristics of human wants, H.H Gossen was the first to formulate this law in 1854. Marshall has stated the law of diminishing marginal utility as follows “The additional benefit which a person derives from a given increase of his stock of a thing diminishes with every increase in the stock that he already has”. In other words, the law 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.

Marginal Utility: The addition to the total utility by the consumption of the last unit considered just worthwhile.

Total utility: The sum total of utilities obtained by the consumer from consumption of different units of a commodity

ASSUMPTIONS: There should be a single commodity with homogeneous units wanted by an individual consumer, there should not be any change in the taste, habit, custom, fashion and income of the consumer, there should be continuity in the consumption of the commodity, Units of the commodity should be of a suitable size, Pries of the different units of the commodity and of the substitutes of the commodity should remain the same, the commodity should be divisible; the consumer should be an economic man who acts rationally and goods should be normal goods.
Schedule showing marginal utility and total utility

<table>
<thead>
<tr>
<th>Units of apples consumed</th>
<th>Total utility in utils</th>
<th>Marginal utility in utils</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>13</td>
<td>-1</td>
</tr>
</tbody>
</table>

The above table shows that when a person consumes no apples, he gets no satisfaction. His total utility is zero. In case he consumes one apple, he gains seven units of satisfaction. His total utility is 7 and his marginal utility is also 7. In case he consumes second apple, he gains extra 4 utils (MU). Thus given him a total utility of 11 utils from two apples. His marginal utility has gone down from 7 utils to 4 utils because he has a less craving for the second apple. Same is the case with the consumption of third apple. The marginal utility has now fallen to 2 utils while the total utility of three apples has increased to 13 utils (7 + 4 + 2). In case the consumer takes fifth apple, his marginal utility falls to zero utils and if he consumes sixth apple also, the total utility starts declining and marginal utility becomes negative. Total utility and marginal utility from the successive utils of the commodity are plotted in the figure below: The total utility curves starts at the origin as zero consumption of apples yield zero utility. ii. The TU curve reaches at its maximum or a peak at M when MU is zero. 22 iii. The MU curve falls throughout the graph. A special point occurs when the consumer consumes fifth apple. He gains no marginal utility from it. After this point, marginal utility becomes negative.

\[ MU_a = TU_a - TU(a-1) \]

**Importance of the Law:**

1. The law of diminishing marginal utility is the basic law of consumption. The law of demand, the law of equimarginal utility and the concept of consumers surplus are based on it.

2. The law helps in bringing variety in consumption and production.

3. The law helps to explain the phenomenon in the value theory that the price of a commodity falls when its supply increases. It is because with the increase in the stock of a commodity its marginal utility diminishes.

4. The famous diamond –water paradox of Smith can be explained with the help of this law. Diamonds are scarce and hence possess high marginal utility and hence higher price. On the other hand, water is relatively abundant because of which it possess low marginal utility and low price even though its total utility is high

5. The principle of progressive taxation is based on this law. As a person’s income increases, the rate of tax rises because the marginal utility of money to him falls with the rise in his income. The law underlines the socialist plea for an equitable distribution of wealth.
Exceptions to LDMU are as follows:

1. Hobbies: In case of certain hobbies like stamp collection or old coins, every additional unit gives more pleasure. MU goes on increasing with the acquisition of every unit.

2. Drunkards: It is believed that every dose 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: The habit of reading of more books gives more knowledge and in turn greater satisfactions.


LAW OF EQUI MARGINAL UTILITY

The principle of equal marginal utility occupies an important place in the cardinal utility analysis. According to this, a consumer is in equilibrium when he distributes his given money income among various goods in such a way that marginal utility derived from the last rupee spent on each good is the same. The Marshallian approach to consumer’s equilibrium is based on the following assumptions.

**Assumptions**

The main assumptions of the law of equi-marginal utility are as under: (1) Independent utilities. The marginal utilities of different commodities are independent of each other and diminishes with more and more purchases. (2) Constant marginal utility of money. The marginal utility of money remains constant to the consumer as he spends more and more of it on the purchases of goods. (3) Utility is cardinally measurable. (4) Every consumer is rational in the purchase of goods. (5) Limited money income. A consumer has limited amount of money income to spend.

**Definition and explanation of the law:** The law of equi-marginal utility is simply an extension of the law of diminishing marginal utility to two or more than two commodities. The law of equi-marginal, is known, by various names. It is named as the Law of Substitution, the Law of Maximum Satisfaction, the Law of Indifference, the Proportionate Rule and the Gossen’s Second Law. In cardinal utility analysis, this law is stated by Lipsey in the following words. “The household maximizing the utility will so allocate the expenditure between commodities that the utility of the last penny spent on each item is equal”. As we know, every consumer has unlimited wants. However, the income at his disposal at any time is limited. The consumer is therefore, faced with a choice among many commodities that he can and would like to pay. He therefore, consciously or unconsciously compares the satisfaction which he obtains from the purchase of the commodity and the price which he pays for it. If he thinks the utility of the commodity is greater than the utility of money, he buys that commodity.
This law is known as the Law of Maximum Satisfaction because a consumer tries to get the maximum satisfaction from his limited resources by so planning his expenditure that the marginal utility of a rupee spent in one use is the same as the marginal utility of a rupee spent on another use. It is known as the Law of Substitution because consumer continues substituting one good for another till he gets the maximum satisfaction. It is called the Law of Indifference because the maximum satisfaction has been achieved by equating the marginal utility in all the uses. The consumer then becomes indifferent to read just his expenditure unless some change takes place in his income or the prices of the commodities, etc.

**Limitations of the Law**

(i) Effect of fashions and customs. The law of equi-marginal utility may become inoperative if people forced by fashions and customs spend money on the purchase of those commodities which they clearly know yield less utility but they cannot transfer the unit of money from the less advantageous uses to the more advantageous uses because they are forced by the customs of the country. (ii) Ignorance or Carelessness. Sometimes people due to their ignorance of price or carelessness to weigh the utility of the purchased commodity do not obtain the maximum advantage by equating the marginal utility in all the uses. (iii) Indivisible Units. If the unit of expenditure is not divisible, then again the law may become inoperative. (iv) Freedom to Choose. If there is no perfect freedom between various alternatives, the operation of law may be impeded.

**Practical Importance of Law of LEMU:**

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 Government is also guided by this law in public expenditure by allocation of revenue (money) in such a way that it will secure maximum welfare of the people.

**Lecture No.10 Consumer’s Surplus- Meaning, Assumptions, Explanation, Difficulties in measuring Consumer’s Surplus, Importance. CONSUMER’S SURPLUS**

**Importance:** The concept of consumers surplus is based on the theory of demand. It was introduced by marsh in 1895 in his publication “principles of economics.

According to marsh consumer’s surplus is “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”. In brief, consumers surplus is the difference between what the consumer is willing to pay and what he actually pays.

**Assumptions:** 1. Marginal utility of money for the consumer is assumed to be the same through out the process of exchange. 2. Commodity does not have substitutes. 3. In the market at the given point of time, there are no differences of income, tastes, preferences and fashions among the consumers and 4. Each commodity is considered independent of others.
Difficulties in measuring Consumer’s Surplus:

1. The cardinal measurement of utility is difficult because it is close to impossible for a consumer to say that the first unit of commodity gave him 10 units of satisfaction and the second unit of commodity gave him 5 units of satisfaction.

2. Marginal utility for the same commodity id different to different consumers. Marginal utility for a particular commodity varies from person to person depending upon their income, tastes and preferences.

3. Existences of substitutes: In the real world a number of substitutes for a commodity exist, thus making the work of measuring consumer’s surplus a complicated task.

4. Marginal utility of money is not constant: Marshall based his concept of consumer’s surplus on the simplifying assumption that the marginal utility of money is constant. As the consumer buys more and more units of a commodity x, the amount of money with him diminished, in this case, the marginal utility of money is bound to increases rather than remain constant.

5. Lack of awareness of different price: It is not possible for a consumer to be aware of the entire demand schedule.

Importance of Consumers Surplus

1. Conjunctural Importance : When the people enjoy larger consumer’s surplus, it does not indicate that they are better off. Thus it serves as an index of economic betterment.

2. Useful to the Monopolist : The monopolist can freely raise the process of the goods if they bring in higher consumer’s surplus, without any fear of foregoing the sales.

3. Helps in Public Finance and Taxation : More taxes can be impose by the government to get more revenue, on those goods for which consumer’s surplus is high

4. Helps to measure benefits from International Trade: International trade implies transaction of commodities across the frontiers. Generally, those commodities which happen to be cheaper in the foreign markets are imported thereby resulting in higher consumer’s surplus of satisfaction for the commodity