LESSON 1

INTRODUCTION OF ECONOMICS

Introduction- From the beginning of human civilization man has depended on various types of livelihood. Early man's life was based on hunting. Now a days animal husbandry and agriculture are the main means of livelihood for most of the people. With the passage of time, after industrial revolution, forms of livelihood changed in many countries. Today industries, trade and other commercial activity have developed. Commercial activities have become source of income and employment for most of the people. In this way there have been development and change in the types of economic activities. Similarly the literature of economic thoughts, theories and laws related to economic activities have enriched and have became popular by name of 'Economics'. We find mention of word 'Economics' in Indian ancient books. **''कृषिपालन,पालयः वाणिज्यम च वार्ताः''** In the above Sanskrit verse the word "varta" is used for economic activities. Ancient thinkers like, Brihaspati, Shukra and Kautilya have used the word Varta for economic activities like agriculture ,animal husbandary, milk production and other commercial activities. Swami Dayanand Saraswati, Dadabhai Naoroji, Mahadev Govind Ranade, Gopal Krishna Gokhale, Ramesh Chander Dutt, M.N.Roy are the prominent early Indian economic thinkers. Later on Mahatma Gandhi, Jawharlal Nehru, Ram Manohar Lohia, Prof. J.K. Mehta, Pandit Deen Dayal Upadhaya and Amaratya Sen also became prominent.

Definition of Economics:

Adam smith is known as the 'Father of Economics'. In 1776 Adam Smith's book- "An enquiry into the nature and causes of wealth of nations" was published. Various economists defined 'Economics' differently. Among the various definitions the important ones are-

1. Wealth based
2. Welfare based
3. Scarcity based
4. Development based
5. Wantlessness based

Adam Smith stated 'Economics' as study of 'wealth'. Alfred Marshall has defined Economics as study of 'Economic welfare'. Criticizing the above definitions Lord Lionel Robbins defined. "Economics as a science that studies human behavior as a relationship between limited resources and unlimited wants involving choice making process". Relating economics to 'development' Paul A. Samuelson has laid emphasis on the dynamic analysis of economic activities . Prof J. K. Mehta defined economics as a science which studies human behavior as a means to obtain wantlessness situation. His thoughts were influenced by Mahatma Gandhi.

According to Koutsoyianis- 'Economic theory aims at the construction of the models which describe the economic behavior of the individual units (consumers, firms, government, agencies) and their instructions which create economic system of a region, a country, or the world as a whole'.

Economics is a social science. In economics we study the economic behavior of the individual units (consumer, producer, firm) their groups and that of nations. They all have to make a choice amongst the limited and alternative uses of resources to fulfill their unlimited and competitive needs.

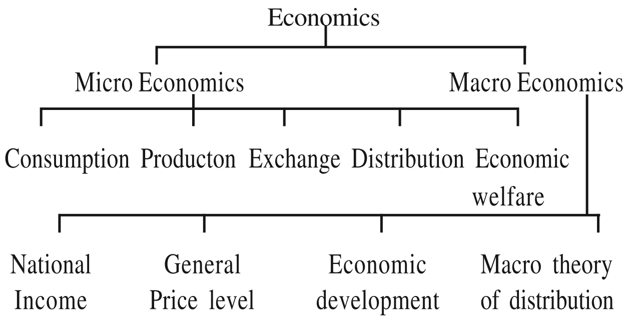
In simple words, economics is the science which studies the problem of choice arising due to scaree resources, it is also an art of solving these problems.

To conclude economics is –

1. A branch of social science
2. It studies the economic behavior of individuals and nations
3. It is related to finding solution to make choice between unlimited wants and scarce means having alternative uses.

Nature and scope of Economics:-

The nature and scope of economics is a vexed question and economists differ widely in their views. John Nevelle Keyens has described in detail the nature and scope of economics. He has included nature of economics, its relation to other subjects and limitations of economic laws. The study of individual units (a consumer, a producer, or a firm) are the subject matter of Micro Economics whereas 'Macro Economics is the study of economic behavior of groups of individual unit (a nation).



The word 'micro' and 'macro' was first used by Ragner Frisch in 1933. Micro and Macro have originated from greek word- 'Mikros' and 'Makros' respectively. Micro means 'small' and Macro means 'large'.

In the words of N. Gregory Mankiw- **"Micro economics is the study of how households and firms make decisions and how they interact in specific markets. Macro economics is the study of economy in wide phenomena".**

Micro Economics- It is also called 'Price theory'. In micro economics we study the behavior of individual units like a consumer, a producer or a firm. This study is done with the consideration of price. As a consumer maximizes the satisfaction with specific price and income, similarly a producer maximizes his production with specific price of a goods and service. A firm or group of firms also maximizes its profit and production at a given price are some of the examples.

All individual units are studied with reference to price. The theory of distribution is also studied considering the price of labour- wages, price of capital-interest, price of land used-rent, price of entrepreneur-profit etc.The returns to the factors are considered during the study of factor price. Micro economics consists the study of Micro partial and Micro total analysis. When price of a good is taken as a variable and other factors are assumed to be constant then study is called micro partial, whereas when all factors are taken as variables then its called micro total analysis.

When price and other factors are taken as constant then this study is known as Micro-Static. Similarly when we compare two static equilibrium we call it as micro-comparative analysis. When all factors as variable it is referred to as micro dynamic analysis.

Macro Economics :

In Macro economics study is done with reference to wide (broad) or aggregate levels .Macro economics includes the study of level of national income, employment, national savings, national investment, general price level, fluctuations in economic growth and development etc. Macro economics is also known as the general theory of income and employment. In 1936 "The general theory of employment, interest and money." Written by Keynes was published.The theories of macro economics developed more scientifically from then onwards.

According to Gardner Ackley- "Macro economics deals with economic affairs in the large, it concerns the overall dimensions of economic life .It looks at the total size and shape and functioning of the "Elephant" of economic experience, rather then working of articulation or dimensions of the individual parts. It studies the character of the forest, independently of the trees which compose it".

In Macro economics also the study when based on one factor is known as Macro-Partial. While assuming all factors variable in Macro-total study. The level of national income, level of employment, level of saving investment, general price etc are studied under macro-total. The macro economic study under constant situation is called macro-static. When two static are compared it is called macro-comparative and this way the study of continuous changing condition is called macro-dynamic.

Difference between Micro and Macro Economics

The difference between micro economics & macro economics can be made on various count. Micro-economics study is based on the individual economic experiences. Whereas macro economics studies the wide and aggregates levels.

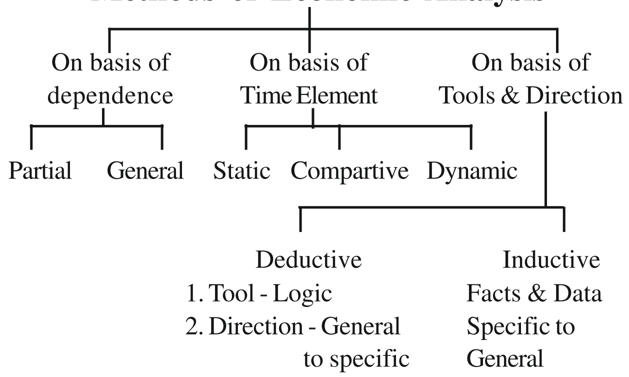
The difference between micro and macro economics can be seen on various basis in the table 1.1 given below. Large group are formed with the help of small innumerable units. The summation of innumerable consumption, production, labour and other factors helps to measure macro consumption production & total resources.

In this way micro & macro economics are complementary to each other.

Methods of Economic Analysis-

There are various methods of economic analysis which are used according to the objective and nature of analysis. The brief description is given below -

Methods of Economic Analysis



A. On basis of dependency -

When the analysis is done keeping one factor in consideration, then it is called Partial Analysis; for instance the study of demand of a commodity with respect to its price. But when the demand of commodity is studied on basis of other factors beside its price for example price of substitute, income of consumer etc. such analysis is called general analysis.

B. On the basis of time element -

When economic analysis is related to a specific point of time it is called static analysis. When it is related to two point of time it is known as comparative analysis but when we study the process of changes between equilibriums it is called as dynamic analysis. Regnar Frisch was the first to use the terms economic-static and economic dynamic in 1928.

C. On basis of tools and direction-

Though inductive and deductive method are complementary to each other yet there are some difference between them. Deductive methods means reasoning from general to particular. The deductive methods drives new conclusions from fundamental. It is based on facts and assumptions from truths established

Table 1.1

S.No.	Basis of difference	Micro Economics	Macro Economics
1	Unit of study	Individual units	Whole economy of a nation
2	Assumptions	Perfect competition, full employment, no interference of government and independent price mechanism	The distribution of factors of production is pre-determined
3	Objective of study	For theories related to optimum distribution of resources	For theories relating to expansion of production and achievement of full employment.
4	Tools of analysis	Price mechanism	Determination of national income
5	Situation of study	Study of individual units when they are in position of equilibrium	Study of dis-equilibrium of an economy as a whole
6	Type of equilibrium	Partial equilibrium	General equilibrium
7	Changes	The micro changes can occur even in macro stability situation	The change in micro structure does not effect the macro stability
8	Contradiction (Paradox)	Saving is beneficial in micro	Saving is not beneficial in macro

by other methods. When generalization is done on basis of logic, it is called deductive method. It is also called as hypothetical and logical method. It is a study from general to specific and from hypothesis to facts.

Inductive is a process of reasoning moving from specific to generalization of theories. In inductive method we analyze data by using appropriate statistical methods. We derive conclusion on basis of collection, classification and analysis of data based on events in reality. Malthusian theory of population has been derived from inductive reasoning. Inductive method is also called as experience based method or historical method.

Economics is Science or Art-

Nature of economics refers to what type of study is economics. Economic analysis is of two types–

1. Economics as a science
2. Economics as an art

Scientific analysis are sequential, factual and logical. We can propound economic laws and theories scientifically through observation of human behavior in society. The various laws in economics are law of demand and supply, law of production, theory of rent, interest etc. The analysis method of economics is both factual and logical. In deductive method economic study is conducted on the basis of logic and conclusions are drawn on basis of facts (data). Thus the nature of economics is that of science. When economics is considered as a science it is studied in two perspectives i.e. positive and normative. In positive analysis conclusions are drawn on basis of cause and effect it seeks to explain what actually happens . It is described as "what is?", for example the fall in price of commodity causes an increase in quantity demanded. Similarly normative analysis is value based. In this type of analysis conclusions are drawn on basis of "what ought to be?" Normative economics involves value judgments about economic fairness or good-bad or right- wrong. For instance it is a common opinion that rich should be taxed more and poor less.

Art refers to physical and mental capacity by which a work is conducted in the best manner. Art is the practical application of knowledge for the desired goal. Particular goals can be achieved on basis of positive economics. In economics we achieve 'what should be' on the basis of 'what is? Science gives principle of any discipline however, art turns these principles into reality.

Economics is Art when the best method is adopted for removing poverty. The best choice we make in daily life, these problems can be best solved by using laws and methods of economics. The specific examples which show economics as art are the laws of maximum satisfaction, maximization of production, profit maximization unemployment reduction and economic growth and development.

Thus it clearifies and proves that by use of laws and method and steps taken for poverty eradication economics is an Art.

Limitations of Economic Laws –

The laws, theories of natural sciences like those of physics and chemistry are completely accurate. They can be tested in laboratories. Economics being a social science its laws cannot be tested in any laboratories. Hence its data cannot be examined objectively so the laws formulated are not accurate as of natural science. Because of lack of accuracy the economic laws and theories are less reliable. Still the development of history at present is in 'description stage'. Political science, Public administration and Sociology are one step ahead in 'analytic stage'.Whereas Economics is far ahead of all of them and is in 'prediction stage'. This makes Economics an important subject in present times.

Economics laws and theories are based on some assumptions

Assumptions – Assumptions are some fundamental and necessary conditions which are essential to be fulfilled for a law or theory to be proved veracious

Every law is based on some conditions which are assumed as given and they are called as assumptions

Assumptions of Economics- Economics theories are based on certain assumptions which are as follows-

1. Other things remain constant (ceterius paribus).
2. Economic units are rational.
3. Economic man.
4. Initial condition of equilibrium.

5. Relation between social, political and economic institutions.
6. Relationship with biology and geography . Besides assumptions it is necessary to know some economics terminology like variables, constant, parameters, hypothesis, axioms, laws and prediction to have a better understanding of economic- behaviour, problem and analysis.

Human wants are unlimited, if like wants the means to satisfy them were also unlimited, there would have been no economic problem but resource or means are scarce in all economies. The causes of economic problem are

1. Unlimited wants having different preferences
2. Scarce and alternative use of resources
3. Co-ordination between wants and means.

The economic problems arise because the needs and wants of people are unlimited and the resource available to satisfy them are limited. Amongst various competitive wants which one should be satisfied using the limited resources is the case economic problem. Choice have to made between competing alternatives. All economic decisions involve making choices. Generally preferences are based on the intensity of wants, those which have high intensity become priority, whereas those wants which are less intense and can be postponed for future, secondary or non-priority wants generally are left unfulfilled.

The Central Problems of Economy

The main problem of economics is related to choice so it is known as 'problem of choice'. The first problem and choice faced by an individual is the allocation of time. This allocation is between leisure and work. After the allocation of time in economics we deal with the allocation of resources(labour, land, capital etc) .

To understand the basic economic problem it is essential to know the concept of production possibility curve, opportunity cost and marginal opportunity cost concept.

Concept of Production Possibility Curve.

Dominick Salvatore- "The curve which shows that a country with its best available technique and using all its resources produce alternative combinations of various quantities of a commodity. Such a curve is called production possibility curve or transformation curve". Production Possibility Curve (PCC) shows different combination of a two goods which can be produced with the given resource and technique of production. It represents graphically the alternative production possibility of an economy, it is concave to the origin. It is formed by joining all the alternative combinations of two goods. The movement from one point to another on PCC, the combination of two goods change i.e. the quantity of one good increases and the other decreases. One good is transformed into another that is why it is also known as transformation curve Fig 1.1 Shows PPC or goods-transformation curve which is concave to the origin

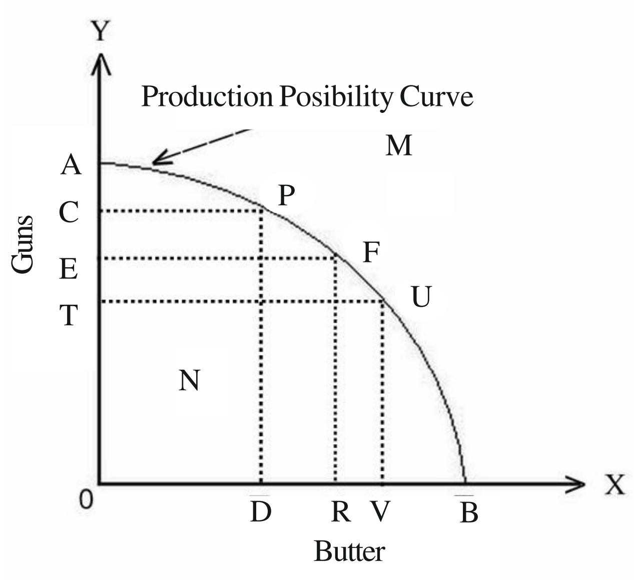


Figure 1.1

According to above fig1.1 it is assumed that by utilizing all the resources land labor and capital OA quantity of guns can be produced, hence OB production of butter is scarified. On point P. The production of guns is OC and that of butter is OD shifting from point P to F on PPC, the production of guns decreases from C to E while that of butter increases from D to R, the opportunity cost of increase in production of butter by D-R is C-E the decrease in amount of guns

Concept of Opportunity Cost

The opportunity cost of good produced is the cost of other good that is forgone for production of the good in concern. In case of production of two goods for example butter and guns, if resources (land, labour and capital) are employed in production of butter, then the production of guns sacrificed is opportunity cost of butter.

Concept of Marginal Opportunity Cost:

The resources are shifted from production of one commodity to the production of other commodity. To increase the production of one commodity. The production of other commodity has to be decreased. The quantity sacrificed of second commodity is the marginal opportunity cost, of first commodity. Thus marginal opportunity cost is defined as the amount of commodity that needs to be given up in order to increase the production of the other commodity by one unit. For instance if some resources are shifted from the production of cloth to the production of wheat. Assume that by shifting resources to the production of wheat the production of cloth decreases by 200 metre thus the opportunity cost of additional unit of wheat is 200 units of cloth.

Central problems of an economy

Every economy whether it is capitalist, socialist or mixed faces three central problems which are as follows–

1. What to produce – The first central problem of an economy is to decide what goods are to be produced? Resources are scarce in relation to human wants. All the goods cannot be produced. Allocation of resources and the consequent problem of choice requires what is to be produced. The solution to this problem depends on the nature of the economy. The (PPC) production posibility curve is used to solve this problem. According to section (A) of fig 1.2 it is assumed that two commodities guns and butter have to be produced. With all resources allocated in the production of any one commodity either OA of guns or OB quantity of butter can be produced. Similarly, on curve A-B any point such as C or D can be used to solve the problem of 'what to produce'.

2. How to produce- How to produce means how to organise the factors of production. It is concerned with the choice of technique of production. According to the part B of fig 1.2 two types of techniques labour intensive and capital intensive can be used. An economy must decide as to which technique is to be used in a given industry so as to obtain maximum production. Selection of labour intensive or capital intensive techniques depends on type of economy. According to the fig 1.2(B) production can be done either using labour intensive from O to C or quantity of capital from O to D. Any point on curve C-D can be used to determine how to produce.

3. For whom to produce or the problem of distribution-The third problem is related to the distribution of production. For instance there are two groups in an economy, the rich and the poor between whom the goods are to be distributed. We can understand this by part C of following fig 1.2. According to the figure the entire production O-S can be distributed

Central problems of an economy

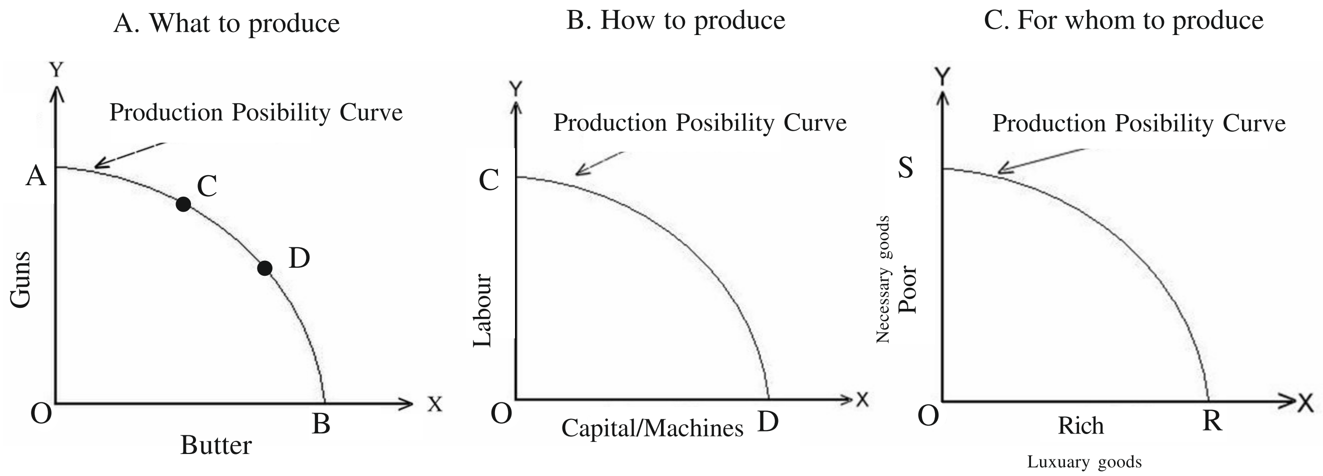


Fig1.2 Solution of Central Economic Problems with the help of Production Posibility Curve

among poor or entire O-R to rich. Similarly any point on PPC S-R can be taken to distribute goods between the two classes. This depends on the type of economy.

Other problems-

4. Problem of distribution of factors of production and their various alternative uses.
5. Whether the factors of production are fully utilized or are under utilised.
6. The problem of how to increase the production capacity.

Economics and economy have different meaning. Paul Krugman & Robbins Wells have explained both as follows- Economy is a mechanism or system to co-ordinate the production activities of a society, where economics is a social science which studies about the production distribution and consumption of goods and services.

Economy

An economy refers to social political, and economic organization & structure of a country. In an economic system where people earn their livehood by performing legal economic activities. Economic system can be classified into three sectors. Primary sector (agriculture and animal husbandry), secondary sector (industry and manufacturing) & tertiary sector (services).

Type of economic system or economy

There are basically three types of economies

1. Capitalistic
2. Socialistic
3. Mixed

The solution of economic problems depends on the type of economy as follows-

Table 1.2 depicts that the different solutions to central economic problem the solution differ according to the economic system. For instance in a capitalistic economy those goods are produced whose price is highest as-high price yields maximum profit where as in socialistic economy those goods are produced to obtain maximum economic–welfare. Economics is a branch of social science which analyses the economic activity.

It is a science as it deals with the study of economic activities and fundamental problems. Similiarly, it is an art because it helps in finding solutions to these problems.

Table 1.2

Fundamental Problem of an economy	Types of Economy: Capitalist	Socialist	Mixed
What to produce ?	Price - mechanism (Which shows the taste & prefrence of the consumer)	Central Planning Authority	In Private Sector price mechanism & in public sector planning authority decide what to produce
How to Produce ?	Price mechanism shows the relative price of factors of production consumer)	Central planning authority keeping in view the factor endowment of the country	Profit motive decide in private sector in public sector decision is made on basis of welfare motive
For whom to produce (distribution)	According to share of factors of production the higher the income recieve larger share of production.	On basis of principle of productivity of factor of production	Distribution of goods are distributed price mechanism and some are distributed by government with help of PDS.

Important points

- The enriched literature related to economic thoughts, theories and laws became popular by the name of 'economics'.
- ''कृषिपालन, पालयः वाणिज्यम च वार्ता'' The word ***varta*** in above statement is used for economic activities.
- The various definitions of economics are mainly wealth-based, welfare based, scarcity based, development based, situation of want lessness based.
- Economics is a science which studies the problem of 'Choice' due to scarcity of resources and it is an art to solve these problems.
- Ragnar Frisch was the first to use the terms 'micro- and macro economics' in 1933.
- Micro economics is a study of individual units (a consumer, a producer, or a firm) with reference to price.
- Macro economics is a comprehensive study of aggregates in reference to level of national income, level of employment general price level and fluctuations of economic growth and development
- In deductive method the analysis is done from general to specific and from hypothetical to factual. On the contrary in inductive method, it is vice versa. Deductive method is logical based where as inductive method is factual based.
- The study of nature of economics is in two forms- economics as a science, economics as an art.
- The subject matter of natural science can be observed in laboratory and its laws and theory can be tested. Economics being a social science its laws and theories cannot be observed in any laboratory. The entire economy is its laboratory.
- While analyzing economic laws many assumptions are undertaken. It is essential to fulfill these assumptions to prove various economic laws and theories.
- The first problem is the allocation of time between 'work' and leisure. After this every individual allocates, the available resources like labour, land capital etc. and tries to solve basic economic problems.
- PPC is a curve which is concave to its origin and is formed by joining various alternative combinations of two commodities that can be produced with given set of inputs assumed to be used efficiently. Movement on the PPC depicts the change, the combination of the two goods.
- The opportunity cost of a commodity is the quantity sacrificed of the alternative commodity that could be produced.
- The solution of basic economic central problem depends on the type of economies (capitalistic, socialistic or mixed).
- Paul Krugman and Robin Wells have classified the difference between economy and economic system as follows:- economy is a system which co ordinates the production activities of a society where as economics is s social science that studies the production, distribution and consumption of goods and services.

Exercise Questions

Objective Type Questions:-

1. Wealth based definition of economics was given by-

   (A) Adam Smith

   (B) Alfred Marshall

   (C) Paul A Samuelson

   (D) Koutsoyiannis

2. The term 'varta' has been used for-

   (A) Agriculture

   (B) Animal husbandry

   (C) Commerce

   (D) All of the above

3. Micro economics is related to-

   (A) Price factor of production

   (B) Price of services

   (C) Price of commodities

   (D) All the above

4. Macro economics is related to-
   (A) National income, economic growth and development
   (B) General price level and employment.
   (C) Total saving and total investment level
   (D) All of the above
5. Which of the follwowing is not a central economic problem :-
   (A) What to produce?
   (B) How to produce?
   (C) Whom to produce?
   (D) How to become poor?

Very Short Answer Type Questions:-

1. What is Economics ?
2. What is micro-economics?
3. Define macro-economics.
4. How economy is classified into various sectors? Name them.
5. On what basis are decisions taken in Capitalistic economy?
6. On what basis are decisions taken in Socialist economy?

Short Answer Type Questions:-

1. Write the scope of Micro Economics.
2. What are the main fields of study of Macro Economics?
3. Mention in brief the types of Micro Economics
4. Define production possibility curve.
5. What is opportunity cost ?
6. Describe the deductive and inductive method of economic analysis.

Essay Type Questions:-

1. Explain in detail the relationship between 'scarcity and choice.
2. Mention the central problems of an economy and explain then causes in detail.
3. Explain in detail central problems of an economy with the help of PPC and describe the concept of opportunity cost.
4. Describe in detail the main assumptions of economic analysis.
5. Describe in detail the difference between micro and macro economics.
6. Explain in detail whether economics is a science or an art or both.

Answer Table

1	2	3	4	5
A	D	D	D	D