

## Unit-1: Introduction to Microeconomics

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### Meaning of Microeconomics

The word 'Micro' is derived from the Greek word 'mikros' meaning small. Microeconomics deals with small segments of society. Microeconomics is defined as the study of the behaviour of individual decision-making units, such as consumers, resource owners, and firms.

It is also known as Price Theory since its major subject matter deals with the determination of the price of commodities and factors. Microeconomics has both theoretical and practical importance. It solves the three central problems of an economy, i.e., what, how and for whom to produce.

For example, if we study the price of a particular commodity instead of studying the general price level in the economy, we are studying microeconomics. Precisely, microeconomics studies the behaviour of individual units of an economy such as consumers, firms, and industry, etc. Therefore, it is the study of a particular unit rather than all units combined.

### Features of Microeconomics

Microeconomics is an individualistic economics

- It studies the economic behaviour of small and individual economic units like households, companies, markets, etc.
- It assumes the existence of full employment in the total economy
- Microeconomics analysis economic relationships under the assumption of ceteris paribus thus it is the partial equilibrium analysis
- It is best applied in the free market economic system
- It is also known as price theory or value theory
- Microeconomics divides the entire economy into different parts and then it investigates the economic behaviour of the separate parts-slicing method
- Its main goal is to allocate scarce resources into their alternative uses and attain efficiency
- The main microeconomic variables are relative price, individual demand, individual supply, production of a firm, etc.

## **Subject Matter of Microeconomics**

Microeconomics seeks to analyze the market mechanisms that establish relative prices amongst goods and services and/or allocates society's resources amongst their many alternative uses. In microeconomics, we study the following issues.

1. Theory of product pricing, which includes-
  - (a) Theory of consumer behaviour.
  - (b) Theory of production and costs.
2. Theory of factor pricing, which constitutes-
  - (a) Theory of wages.
  - (b) Theory of rent.
  - (c) Theory of interest.
  - (d) Theory of profits.
3. Theory of economic welfare

### ***Allocation of Resources***

Microeconomics assumes the total quantity of resources is given and it seeks to explain how they are allocated to the production of various goods. Therefore, microeconomics studies the allocation of resources and determines what to produce, how to produce, and for whom to produce.

### ***Theory of Product Pricing***

Microeconomics studies the determination of prices of goods and services therefore it is known as price theory. Microeconomics studies product pricing in different market situations like perfect competition, monopoly, monopolistic competition, oligopoly, etc. The theory of product pricing is also called the theory of the firm. Under this, the theory of demand and the theory of production, costs, and revenue are also included. With help of these microeconomic theories, appropriate prices of the products are determined to fulfill the objective of business firms.

### ***Theory of Demand/Consumption***

The theory of consumption considers the study of demand and consumer behaviour. Under the theory of consumption, microeconomics studies demand analysis, utility analysis, demand forecasting, etc. Theory of consumption shows how the limited income is distributed among the various goods that yield

maximum satisfaction to the consumers. In short, we can say the theory of consumption studies how a consumer allocates his/her resources optimally.

### ***Theory of Production and Cost***

Theory of production studies the behaviour of producers with their relation to the optimum allocation of resources. It consists of studying factors of production, production functions, cost analysis, the law of production. It also includes linear programming, a mathematical technique of cost minimization or output maximization.

### ***Theory of Factor Pricing***

The goods are produced with the joint efforts of all inputs like land, labor, capital, and entrepreneur. The rewards of these factors are called rent, wages, interest, and profit, respectively. Thus, microeconomics under the theory of factor pricing studies the process and basis of factor pricing in different market structures. It means microeconomics is the study of the theory of distribution.

### ***Theory of Economic Welfare***

The theory of economics welfare studies economic efficiency which refers to the allocations of resources to maximize people's satisfaction.

Its subject matter includes the potential measures of maintaining economic prosperity of people like consumers and producers who want to improve that prosperity or welfare. The important function of welfare economics is to define and analyze the law of economic efficiency which is the main subject matter of microeconomics.

### **Uses/Importance of Microeconomics**

Microeconomics has both theoretical and practical importance. It is clear from the following points:

- Microeconomics helps in formulating economic policies which enhance production efficiency and results in greater social welfare.
- Microeconomics explains the working of a capitalist economy where individual units (i.e., producers and consumers) are free to make their own decision.
- Microeconomics describes how, in a free enterprise economy, individual units attain an equilibrium position.
- It helps the government in formulating correct price policies.
- It helps in the efficient employment of resources by entrepreneurs.

- It helps business economists to make conditional predictions and business forecasts.
- It is used to explain gains from trade, disequilibrium in the balance of payment position, and determination of international exchange rate.

### Types of Microeconomics

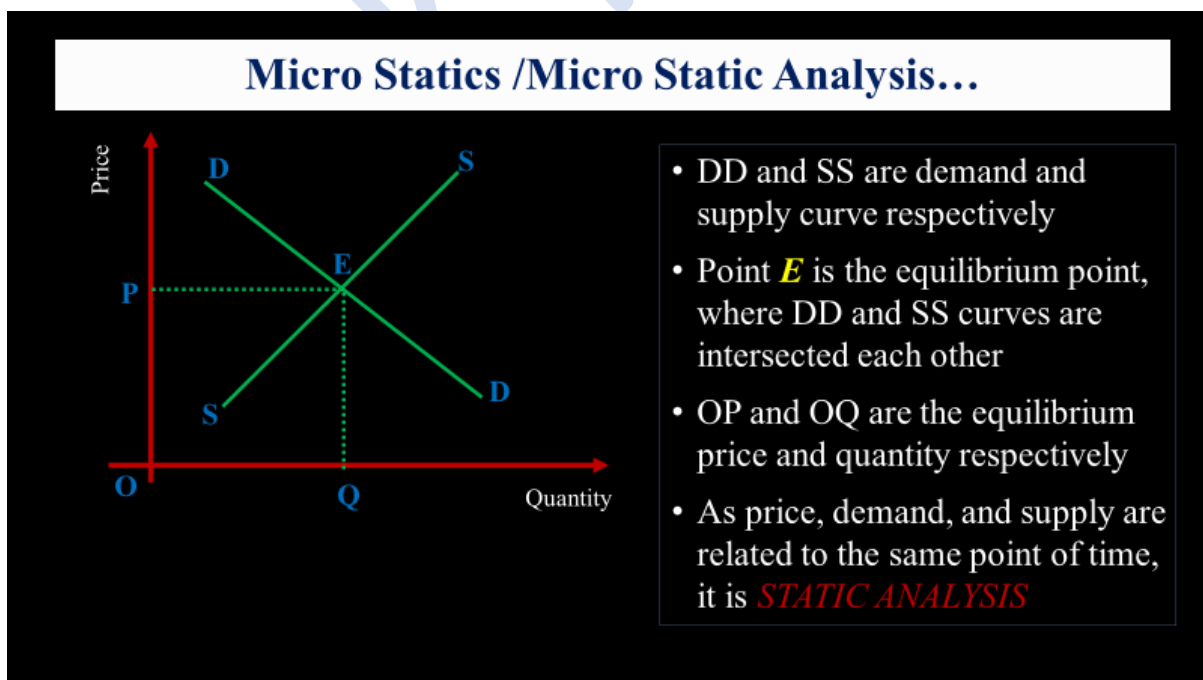
Based on consideration of time, microeconomic analysis can be divided into three types.

1. *Micro Statics/Micro Static Analysis*
2. *Comparative Micro Statics/ Comparative Micro Static Analysis*
3. *Micro Dynamics/ Micro Dynamic Analysis*

#### *Micro Static*

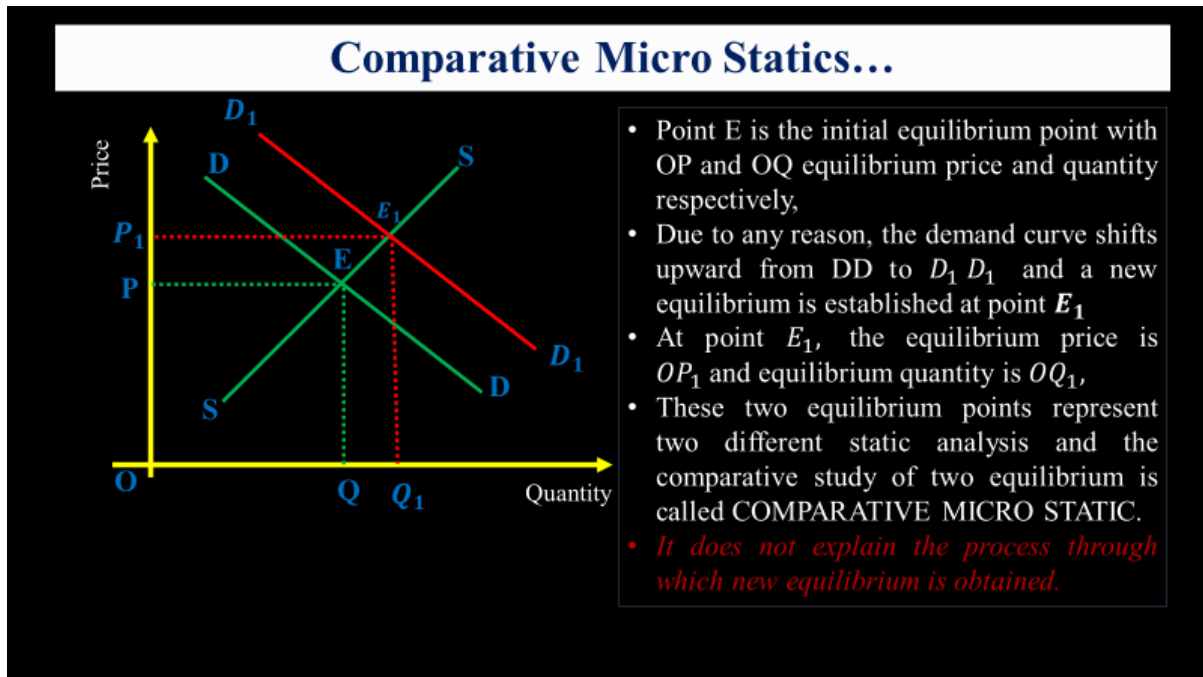
Micro statics is the study of static equilibrium relationships between microeconomic variables relating to a particular point of time. It has nothing to do with time and assumes that there will be no change in the relationship between microeconomic variables. For example, micro static analyses the condition of the equilibrium price of a commodity at a point in time.

However, it does not deal with the process by which the microeconomic forces have reached the equilibrium position.



## Comparative Micro Static

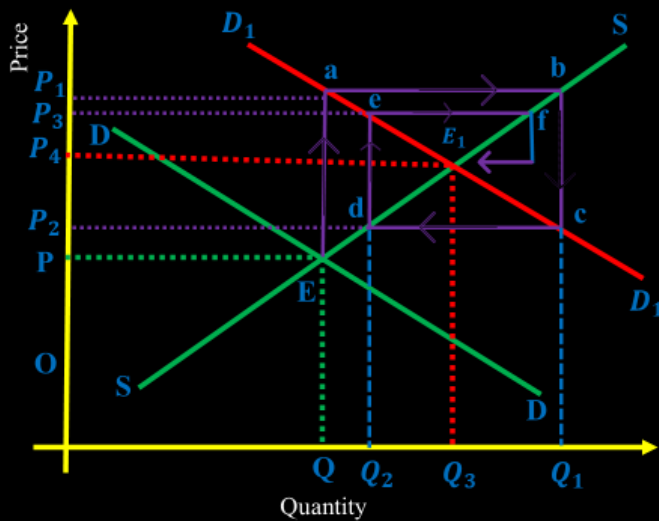
It is the comparative study of different points of equilibrium between microeconomic variables at different points in time. It compares one equilibrium position with another when there is the formation of a new equilibrium point due to a change in the microeconomic variable. It does not enlighten the happenings/undertakings in between the two points of equilibrium, causes for breaking the initial equilibrium, and the time was taken by the system in the establishment of a new equilibrium after it was disturbed.



## Micro Dynamics

It is the study of the causes, process, happenings, time, and overall association through which the initial equilibrium position was disturbed and a new one is formed. It describes all types of changes and disequilibria that occurred between two points of equilibrium positions. So, it is the analysis of the cause for breaking initial equilibrium, cause for establishing new equilibrium, and all sorts of changes occur in between two equilibrium. Micro dynamic is thus the study of dynamic picture of economic relationships that existed in real life.

## Micro Dynamics...



- At the beginning when demand curve shifts from  $DD$  to  $D_1D_1$ :  $D > S$  and price increase to  $P_1$  from  $P$ .
- At price  $P_1$  (higher price),  $S > D$  by 'ab' or 'Q Q<sub>1</sub>' and this results fall in price to  $P_2$ .
- At price  $P_2$  (lower price),  $D > S$  by 'dc' or 'Q<sub>1</sub>Q<sub>2</sub>' and this results rise in price to  $P_3$ .
- At price  $P_3$  (higher price),  $S > D$  by 'ef' and this results fall in price...
- This process continues in different steps a, b, c, d, e, f, ..... Until new equilibrium  $E_1$  is formed where the new equilibrium price  $P_4$  and new equilibrium quantity  $Q_3$  are determined.
- Thus, micro dynamics shows the process of adjustment from one equilibrium point to another breaking initial equilibrium and establishing a new equilibrium.

## Limitations of Microeconomics

Even though it has so many benefits, it also suffers from certain defects or limitations. These are:

- It is not capable of explaining the functioning of an economy.
- It assumes full employment, which is rare in real life.
- It cannot be used for solving the problem relating to public finance, monetary and fiscal policy, etc.

## Business Economics: Meaning

Business economics is a separate and special branch of economics that deals with the application of economic principles and methods for business and managerial decision formulation for the business firm. So, managerial economics or business economics deals with the integration of economic theory with business practices to facilitate decision-making and planning by business firms.

## Characteristics of Business Economics

- Business economics is microeconomic as it studies the problems of individual business firms rather than the economic problems of an economy.
- It is normative. As it is concerned with the development of methods of goal attainment of the business firm as well as it also suggests for future planning.

- It uses the theory of the firm as its scope is confined up to a particular business firm
- The main aim of business economics is to help the management in decision-making related to resource allocation problems and issues.
- It is conceptual and metrical as it provides different theoretical concepts and their measurement based on empirical data and information while solving resource allocation issues in a business.

### **Scope of Business Economics**

The scope of managerial economics is the subject matter that is covered by its study. It considers almost all the problem areas of managers and firms. So, the scope of business economics is very wide, and it is increasing day by day. It covers Demand analysis and Forecasting, Production analysis, Cost analysis, Inventory management, Advertising, Pricing system, Resource allocation, etc. The following points explain the subject matter of business economics.

#### ***Demand Analysis***

For a firm or an industry consisting of several firms, the extent of demand determines the size of the market. The analysis and forecasting of demand for a given product are very important for the successful operation of a business firm. A clear understanding of consumer behaviour and a clear knowledge of the market demand conditions are essential for a firm's profit planning. Thus, estimating present demand and forecasting future demand is the first step towards the objective of profit maximization. The stability and growth of the business are linked to the size and structure of demand. It helps in identifying various factors influencing demand. The study of demand analysis and demand forecasting is one of the major areas of study of business economics.

#### ***Production and Cost Analysis***

Business economics also studies the cost and production-related issues of the business firms. Production decisions have many facets/areas. It makes available both consumer and capital goods. With limited resources, the firm must produce different alternative products at the possible least cost. Achieving a certain level of profit requires the production of a certain level of output and to obtain such production While producing different goods and services, different forms of costs also must be incurred. So, business economics is responsible for determining the optimum level of production with a minimum average cost of production. Under this cost combination, production function, determinants of cost, the relation between production and cost in the short and long run, the optimum size of the firm, and determination of the size of production are studied.

### ***Pricing Analysis***

Price is the expression of the value of an item in terms of a monetary unit. Pricing is a very important area of business economics as it is the basis of the revenue of a firm. Also, the success of a business firm largely depends on the correctness of price decisions taken by it. At any price, if demand exceeds supply, their excess demand pushes up the prevailing price. At any price, if supply exceeds demand, this excess supply pulls down the price, thus price is determined at a point where demand is equal to the supply. The important topics of this area are ~ pricing methods, price determination, differential pricing, product line pricing, and price forecasting.

### ***Profit Analysis***

Profit is the tool for generating internal funds. The primary focus of any business firm is profit maximization. A firm that wants to grow in near future and would not like to depend on external funds, may like to generate its internal resources through reserves and surpluses created by way of accumulated retained earnings, i.e., profit. Profit analysis would be very easy if the knowledge of the future were perfect. But in a world of uncertainty, there occurs a great difference between the expectations and happenings. This constitutes the difficult area of business economics. Profit maximization is assumed as a strategy and in that context pricing, product variation, costing, quality control, etc., are all treated as tactical and practical operations towards achieving it. Profit decisions include profit policies, nature, and measurement of profit, techniques of profit planning. Profit is the reward for uncertainty bearing and risk-taking.

The firm aims at maximizing profit either by maximizing revenue, which it earns by sales of its product in the commodity market or by minimizing costs of productions by cutting down the expenditure on the factors which it purchases in the sector market or by both.

### ***Capital Decision***

Capital is the foundation of a business. The amount of capital utilized, and its relative importance determines the financial structure of a company. Effective financial management would ensure that the capital structure of the company is tailor-made. Therefore, while deciding about the capital structure of the company, the management should bear the following factors in mind

- The use to be made of the capital,
- The cost of capital, and
- Most efficient allocation of capital.



In short, capital management implies planning and control of capital expenditure. The capital decision includes the cost of capital, rate of return, and selection of projects. Capital management is a very critical and top-level decision.

### ***Inventory Management***

The term inventory refers to stock. Stock refers to the stock of raw materials, finished goods, or semi-finished goods that a firm needs to keep or store. It should be an ideal quantity because both the high and low quantities are not good for the business. Business economics uses some methods like ABC analysis in its management.

### ***Environmental Analysis/Problems***

Environmental issues are related to the general business environment in which a business operates. They are related to the overall economic, social, and political atmosphere of the country. The factors which constitute the economic environment of a country include the following factors.

- The type of economic system of the country,
- General trends in production, employment, income, prices, saving and investment, etc.,
- Structure of and trends in the working of financial institutions, e.g., banks, financial corporations, insurance companies, etc.,
- The magnitude of and trends in foreign trade,
- Trends in labor and capital markets,
- Government's economic policies, e.g., industrial policy, monetary policy, fiscal policy, price policy, etc.,
- Social factors like the value system of the society, property rights, customs, and habits,
- Social organizations like trade unions, consumers' cooperatives, and producers' unions,
- The political environment is constituted of such factors as a political system— democratic, authoritarian, socialist, or otherwise; state's attitude towards private business, size and working of the public sector and political stability, and
- The degree of openness of the economy and the influence of MNCs on the domestic markets.

### **Production Possibility Curve**

Production possibility curve or frontier (PPF) shows the various alternative combinations of goods and services that an economy can produce when the

resources are all fully and efficiently employed. PPC shows the obtainable options.

There is a maximum limit to the number of goods and services which an economy can produce with the given resources and the state of technology. The resources can be used to produce various alternative goods which are called production possibilities and the curve showing the different production possibilities is called the production possibility curve.

### *Assumptions*

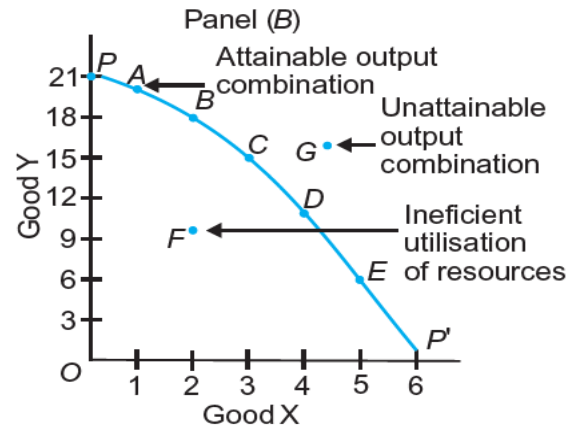
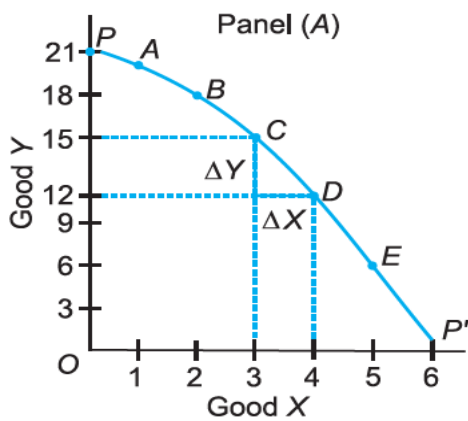
Assumptions underlying the production possibility curve are:

- The economy produces only two goods, X and Y. (Examples of goods X and Y can be 'gun and butter', wheat and sugar cane, cricket bats and tennis rackets, or anything else.)
- The number of resources available in an economy is given and fixed.
- Resources are not specific, i.e., they can be shifted from the production of one good to the other good.
- Resources are fully employed, i.e., there is no wastage of resources. Resources are not lying idle.
- The state of technology in an economy is given and remains unchanged.
- Resources are efficiently employed

Production possibility schedule refers to the tabular presentation of different possible combinations of two goods that an economy can produce with given resources and available technology.

The following table gives a production possibility schedule. It shows that, with given resources, an economy can produce either zero unit of X and 21 units of Y or 1 of X and 20 of Y or 2 units of X and 18 units of Y or 3 units of X and 15 units of Y or 4 of X and 11 of Y or 5 of X and 6 of Y or 6 units of X and zero units of Y.

Production Possibility	Good X	Good Y
P	0	21
A	1	20
B	2	18
C	3	15
D	4	11
E	5	6
P'	6	0



The above figure illustrates a production possibility curve. Good X is shown on the x-axis and good Y is shown on the y-axis. PP' is the required production possibility curve.

It shows, the maximum amount of good X produced, given the amount of the other good. In panel (A), each alternative possibility, i.e., (0, 21), (1, 20), (2, 18), (3, 15), etc., are plotted, and points P, A, B, C, D, E and P' are joined by line segments.

In panel (B), a smooth PPC is drawn which assumes that infinite production possibilities exist. The economy can either produce OP of good Y or OP' of good X or any other combination shown by points A, B, C, D, or E.

All points on the curve are attainable. The problem is that of choice, i.e., to choose among the attainable points on the curve. It depends upon the tastes and preferences of an individual. This is the basic problem of an economy. Any point inside the curve, such as point F, indicates unemployment of resources or inefficient use of resources. Any point outside the curve, such as point G, is unattainable given the scarcity of resources. An economy always produces on a PPC.

### ***Features of Production Possibility Curve***

#### ***PPC slopes downward***

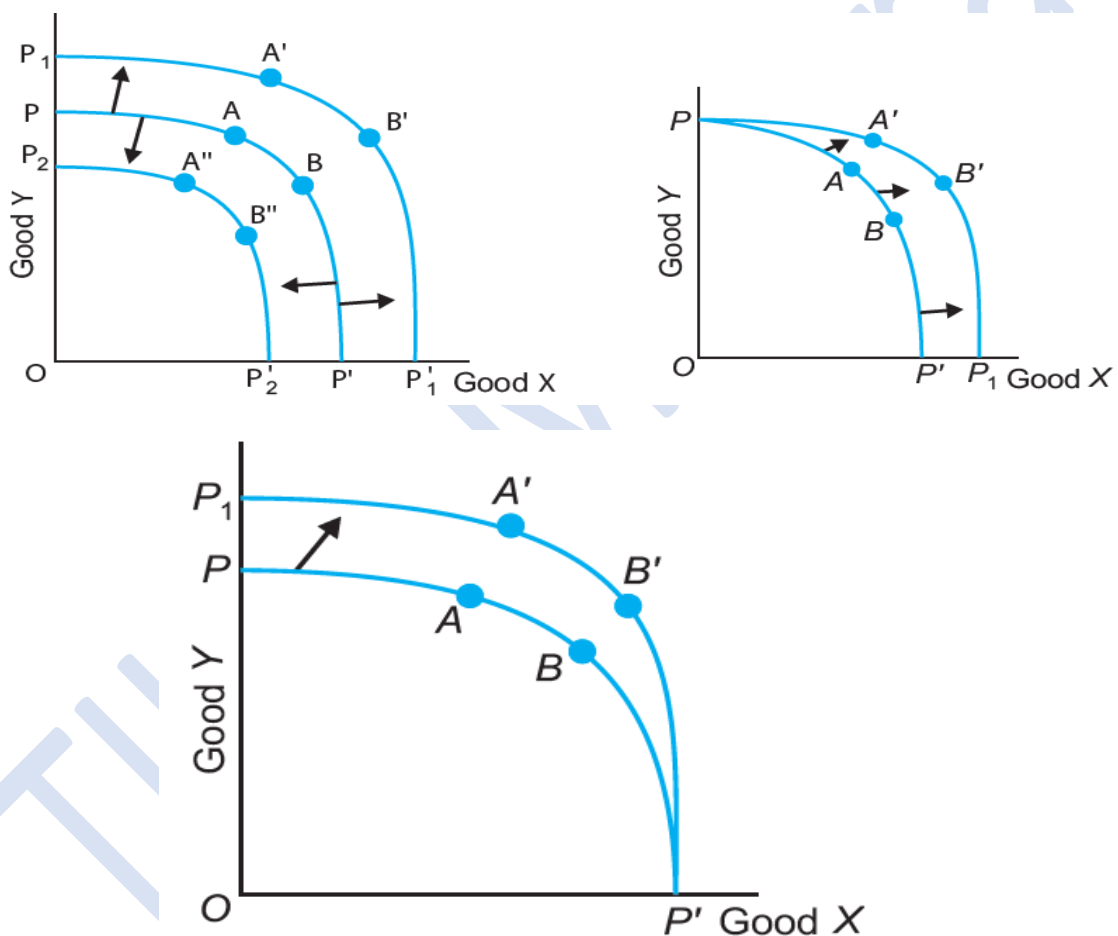
A production possibility curve slopes downward from left to right because, under the condition of full employment of resources, the production of one good can be increased only after sacrificing the production of some quantity of the other good. It is so because resources are scarce. Due to this, the production of both goods cannot be increased at the same time. That is why PPC slopes downward.

#### ***PPC is concave to the origin***

A production possibility curve is concave to the point of origin because of the increasing marginal rate of transformation (MRT) or increasing marginal opportunity cost (MOC). The slope of PPC is defined as the quantity of good Y given up in exchange for an additional unit of good X.

### *The Shift in Production Possibility Curve*

With the discovery of new stock of resources or an advancement in technology, the productive capacity of an economy increases. The economy can produce more good X or more good Y or more of both goods. The effect of economic growth on the production possibility curve to a country is illustrated in the following figures.



*PPC will shift to the right when*

- New stock of resources is discovered.
- There is an advancement in technology. For example, when training institutes come up, they provide training that raises the efficiency of workers. PPC shifts outside.

*PPC will shift to the left when*

- Resources are destroyed because of natural calamities like earthquakes, fire, war, etc.
- There is the use of outdated technology.

## **Ten Principles of Economics**

Economics is all about making rational economic decisions in a state of scarcity. Economics study how scarce economic resources are allocated. And economics also analyses the forces and trends that affect the economy as a whole, including the growth rate of output, the rate of the population that cannot find work, the rate at which price is increasing, and so on.

So, Economics is the study of how people, societies, and nations make economic decisions, how they interact with each other, and how the collective system i.e., the economy as a whole works. The ten principles of economics are explained below.

### **How People Make Decisions?**

1. People face trade-offs
2. The cost of something is what you give up to get it
3. Rational people think at the margin
4. People respond to incentive

### **How People Interact?**

5. Trade can make everyone better off
6. Markets are usually a good way to organize economic activity
7. Government can sometimes improve market outcomes

### **How Economy as a Whole Work?**

8. A country's standard of living depends on its ability to produce goods and services
9. Price rise when the government prints too much money
10. Society faces a short-run trade-off between inflation and unemployment