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college of commerce & management

**B.Com (Hons.) I Year**

**Subject: Managerial Economics**

## **SYLLABUS**

**Class: - B.com ( Hons) I Year**

**Subject: - Managerial Economics**

<b>UNIT I</b>	Concepts and Techniques- Nature and Scope of Managerial Economies, Application of Economics in Managerial Decision Making Marginal Analysis: Meaning and definition of demand Functions of demand, Types of demand, Demand Forecasting.
<b>UNIT II</b>	Production function: Types of production function- one variable two variables, Law of return and return to scales, law of variable proportion, isoquant curves and economies of scales.
<b>UNIT III</b>	Market Structure- Price and Output decision under different Market Structures, Price Discrimination, Non- price Competition, Price Determination under Perfect and Monopolistic Market
<b>UNIT IV</b>	Factor Pricing Meaning Definition & types of Rent, Wages, marginal Productivity Theory.
<b>UNIT V</b>	New Economic Policy 1991 Liberalization, Privatization, Globalization, Impact on Business, Business Cycle.



## UNIT -I

### MANAGERIAL ECONOMICS

#### Introduction to Economics

-The standard definition for economics is the study of the production, distribution, and consumption of goods and services floating in the economy. This definition indicates that economics includes any business, nonprofit organization, or administrative unit. This subject presents economic concepts and principles from the perspective of "managerial economics," which is a subfield of economics. To the great dismay of economists - is merely a branch of psychology. It deals with individual behaviour and with mass behaviour. Many of its practitioners sought to disguise its nature as a social science by applying complex mathematics where common sense and direct experimentation would have yielded far better results.

This is not a realistic model - merely a useful approximation. According to this latter day - rational - version of the dismal science, people refrain from repeating their mistakes systematically. They seek to optimize their preferences. Altruism can be such a preference, as well. Still, many people are non-rational or only nearly rational in certain situations. And the definition of "self-interest" as the pursuit of the fulfillment of preferences is a tautology

In simple words, Economics means utilization of optimum resources. The word Economics derived from the Greek words "OIKOU" & "NOMUS", which means Rules or Law of the household. Economics is the Social Science that studies the Production, distribution & consumption of goods & services.

Basically, Economics deals with proper utilization of available scarce resources like manpower, money, raw materials & other resources which satisfy the wants of Social Animals.

#### Nature of Economics

- ❖ Is Economics a science or an art?
- ❖ Is Economics a positive or normative science?
- ❖ Is Economics a macro or micro Economics?

#### Economics as a science:-

For this first know what is science, "Science is a systematic & comprehensive study of knowledge which explains in cause & effective relation." is Economics is a science. For this two basic features are-

1. Argument in favour of Economics as a science.

**Arguments in favour of Economics as a science:** - Robbins considered Economics as a science.



The following arguments are given in favour of Economics as a science.

- 1) **Systematic study-** Collection, classification, & analysis of Economics facts are systematized in Economics. The subject matter of Economics is systematically divided into consumption, production, exchange, distribution, & public finance.
- 2) **Scientific Law-** Law of Economics is similar to the Law of other sciences. In Laws we establish cause & effective relationship of Economic activities. For E.g. the Law of demand shows the relationship between a change in demand & change in price.
- 3) **Experiments-** Economics carries several experiments with the laws of Economics. Different Economic laws have been experimented & tried to get out of Economics evils. For e.g. the devaluation of Indian rupee in 1955-66 was an economic experiment.
- 4) **Measuring rod of money-** Economists possess the measuring rod of money to measure the economic facts. Marshall said that the measuring rod of money has made Economics a more certain science than offer social sciences. Money is good measuring rod to measure individual as well as commercial motives.
- 5) **Universal-** Much of the Economic laws is universally true. They are applicable to all types of Economics. Whether it is a capitalist, socialist, or mixed Economy, the law of Economy is equally applicable.
- 6) On the basis of arguments given above, we can say that Economics is a science. It explores the facts, analysis them & classifies them.

### **Economics as an art:-**

For this first know about what is art, Art is the practical application of knowledge of achieving definite ends.

According to "Lord J.N. Keynes"

"An art is a system of rules for the attainment of a given end." "A science teaches us to know, an art teaches us to do."

Economics as an art due to following reasons:-

1. Solution of problems- it can be helpful to human beings only, if it is able to solve their problems. Economics helps to utilize the scarce resources in the best possible ways. Prof. Pigou remarked in this context, "Economics is not only light-giving but also fruit-bearing."
2. Modern trends- Modern Economists are much concerned with solving the Economic problems. Prof. Stiglar said, "At least 90% of modern Economists spend over half of their time on applied or empirical subject." for this we can regard Economics as an art.



3. Verification of Economics law- Verification of Economics laws is possible only if Economics is an art because art is the practical application of knowledge. When we actually apply the Economics laws, only then we come to know that whether their results are true or false. From the arguments given below, we say that Economics is an art. Now days, Economic problem has become very popular & to formulate Economic plans is an art. Therefore we can conclude that Economics is a science as well as art.

***Science & Art both are complementary to each other.***

***Macro-Economic Conditions & Micro-Economic analysis***

1. Macro-Economic Condition- The decision of the firm are made almost always within the broad framework of environment within which the firm operates, known as macro-economic conditions. with regard these conditions, we may stress three points:
- a. The Economy in which the business is predominantly, a free enterprise economy using prices & market.
  - b. The present day economy is the one undergoing rapid technological & economic changes.
  - c. The intervention of government in economic affairs has increased in recent times & there is no likelihood that this intervention will stop in future. It can ignore neither the working of the market nor the place of economic change, nor the activities of government in the economic sphere. The management which keeps itself well & continuously informed of changes in the economic system is called progressive management.
2. Micro-Economic Analysis- The Micro-Economic analysis deals with the problem of an individual firm, industry, consumer, etc. in the case of Managerial Economics Micro-Economics helps in studying what is going on with in the firm, how best to use the available resources between various activities of the firm. It is also known as price theory.
- The concept of Micro-Economics are the elasticity of demand, marginal costs, the long-run economics, & diseconomies of scale, opportunity costs, present value, & market structures.



Micro environment	Macro environment
1. Micro Environment or Internal Environment refers to the forces operating in the market that are close or within the enterprise or firm and affect its ability to serve its customers directly.	1. Macro environment refers to all forces that are part of the larger society and are the "uncontrollable" to which companies mould itself through setting the "controllable" factors.
2. It comprises of producer/seller customer, competitors, suppliers marketing intermediaries.	2. Macro environment comprises demographic forces, economic forces, technological forces, political forces, natural forces, cultural forces.
3. These are uncontrollable for a firm.	3. These are controllable for a firm.
4. It includes concepts such as demography, economy, natural forces, technology, politics, and culture.	4. This includes all departments, such as management, finance, research and development, purchasing, operations and accounting.

### *Positive V/s Normative approach*

Positive approach concern with **WHAT IS, WAS OR WILL BE**, while Normative approach concern with **WHAT OUGHT TO BE**.

The statement 'a government deficit will reduce unemployment & cause an increase in prices' is hypothesis in positive economics, while the statement 'in setting policy, unemployment ought to matter more than inflation' is a normative hypothesis.

Positive Economics is of two types:

- Description.
- Theory.

The Positive Economics theory, on the other hand attempt to developed hypothesis which explain why it happened.

The Normative Micro-Economics, one is concerned with problems like what the objectives & policies of business ought to be & how to go about them. Managerial Economics is concern with analysis which is prescriptive or normative in nature.

Positive and Normative Statements



In this brief note we introduce you to the idea of positive and normative statements and the idea of value judgments contained in statements and articles.

### **Detecting Bias in Arguments**

Whenever you are reading articles on current affairs it is important to be able to distinguish where possible between objective and subjective statements. Very often the person writing an article has a particular argument to make and will include in their piece subjective statements about what ought to be or what should be happening. Their articles are said to carry value judgments, they are trying to persuade you of the particular merits or demerits of a particular policy decision or issues. These articles may be lacking in objectivity.

### **Positive Statements**

Positive statements are objective statements that can be tested or rejected by referring to the available evidence. Positive economics deals with objective explanation and the testing and rejection of theories. For example:

1. A rise in consumer incomes will lead to a rise in the demand for new cars.
2. A fall in the exchange rate will lead to an increase in exports overseas.
3. More competition in markets can lead to lower prices for consumers.
4. If the government raises the tax on beer, this will lead to a fall in profits of the brewers.
5. A reduction in income tax will improve the incentives of the unemployed to search for work.
6. A rise in average temperatures will increase the demand for chicken.
7. Poverty in the UK has increased because of the fast growth of executive pay.

### **Normative Statements**

Normative statements express an opinion about what ought to be. They are subjective statements rather than objective statements – i.e. they carry value judgments. For example:

1. The level of duty on petrol is too unfair and unfairly penalizes motorists.
2. The London congestion charge for drivers of petrol-guzzling cars should increase to £25 - three times the current charge.
3. The government should increase the national minimum wage to £6 per hour in order to reduce relative poverty.
4. The government is right to introduce a ban on smoking in public places.
5. The retirement age should be raised to 75 to combat the effects of our ageing population.
6. The government ought to provide financial subsidies to companies manufacturing and developing wind farm technology.



## Managerial economics

Sometimes referred to as **business economics**, is a branch of **economics** that applies **microeconomic** analysis to decision methods of businesses or other management units. The purpose of managerial economics is to provide economic terminology and reasoning for the improvement of managerial decisions. Most of us are familiar with two different conceptual approaches to the study of economics: microeconomics and macroeconomics. Microeconomics studies phenomena related to goods and services from the perspective of individual decision-making entities—that is, households and businesses. Macroeconomics approaches the same phenomena at an aggregate level, for example, the total consumption and production of a region. Microeconomics and macroeconomics each have their merits. The microeconomic approach is essential for understanding the behavior of atomic entities in an economy. However, understanding the systematic interaction of the many households and businesses would be too complex to derive from descriptions of the individual units. The macroeconomic approach provides measures and theories to understand the overall systematic behavior of an economy. Since the purpose of managerial economics is to apply economics for the improvement of managerial decisions in an organization, most of the subject material in managerial economics has a microeconomic focus. However, since managers must consider the state of their environment in making decisions and the environment includes the overall economy, an understanding of how to interpret and forecast macroeconomic measures is useful in making managerial decisions.

Economics is the combination of three different activities:-

1. MONEY;
2. WEALTH (ASSETS);
3. GOODWILL;

“Economics is an enquiry into nature & cause of wealth in nation.”

“Adam Smith”

“Economics is the study of mankind in the ordinary business of life. It examines that part of individual or social action which is closely connected with the attainment & use of material requisite of well being.”

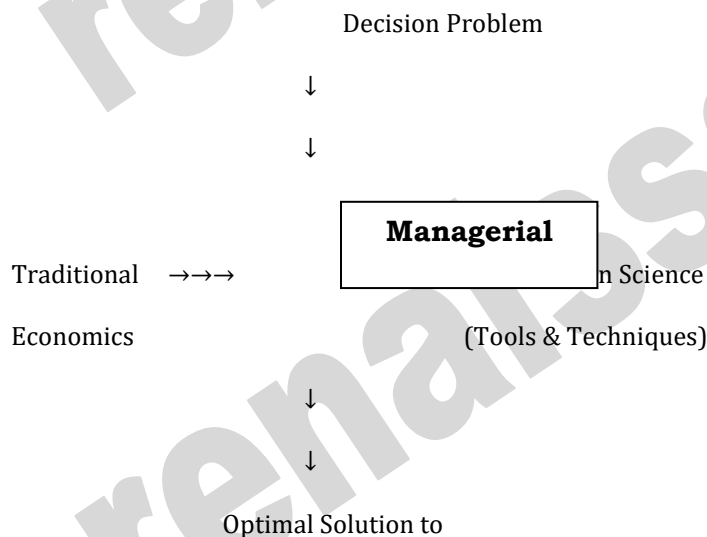
“Marshall”

**Managerial Economics = Management + Economics**



Management deals with principles which helps in decision making under uncertainty and improves effectiveness of the organization. On the other hand economics provide a set of preposition for optimum allocation of scarce resources to achieve a desired result. Managerial Economics deals with the integration of economic theory with business practices for the purpose of facilitating decision making and forward planning by management. Almost any business decision can be analyzed with managerial economics techniques, but it is most commonly applied to:

- **Risk analysis** - various models are used to quantify **risk** and asymmetric **information** and to employ them in **decision rules** to manage risk.
- **Production analysis** - microeconomic techniques are used to analyze **production efficiency**, **optimum factor allocation**, **costs**, **economies of scale** and to estimate the firm's cost function.
- **Pricing analysis** - microeconomic techniques are used to analyze various **pricing decisions** including **transfer pricing**, **joint product pricing**, **price discrimination**, price elasticity estimations, and choosing the optimum pricing method.
- **Capital budgeting** - Investment theory is used to examine a firm's **capital purchasing decisions**.



At universities, the subject is taught primarily to advanced undergrads. It is approached as an integration subject. That is, it integrates many concepts from a wide variety of prerequisite courses. In many countries it is possible to read for a degree in Business Economics which often covers managerial economics, **financial economics**, **game theory**, business **forecasting** and industrial economics.

Managerial Economics is a tool which is help to solve the Business problems. It is totally practical approach over pure Economics.





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Managerial Economics is an Economic applied to problems of choice of alternatives of Economic nature & allocation of scarce resources by the firm. In other words, Managerial Economics involves analysis of allocation of the resources available to a firm.

Managerial Economics is the Economics applied in the decision making. It is that branch of Economics which serves as a link between abstract theory & managerial practice.

1. "Managerial Economics is the use of Economic modes of thoughts to analyze business problem."  
"McNair & Meriam"
2. "Managerial Economics as, "price theory in the service of business executives."  
"Watson"
3. "The application of Economic theory & methodology to business practice."  
"Brigham & Pappas"
4. "Managerial Economics as, "a fundamental academic subject which seek to understand & to analyze problem of business decision making".  
"Hague"

### **Scope of Managerial Economics**

Managerial Economics has a closed connection with economic theory, operation research, statistics, mathematics, & the theory of decision-making. Managerial Economics also draws together & relates ideas from various functional areas of management like production, marketing, finance & accounting, project management etc.

In so far as Managerial Economics is concern, the following aspects constitutes its subject matter

1. Objective of a Business firm
2. Demand analysis & demand forecasting
3. Production & cost
4. Competition
5. Pricing & output



6. Profit
7. Investment & capital budgeting cost
8. Product policy, sales promotion & market strategy

Well scope is something which tells us how far a particular subject will go. As far as Managerial Economic is concerned it is very wide in scope. It takes into account almost all the problems and areas of manager and the firm.

ME deals with Demand analysis, Forecasting, Production function, Cost analysis, Inventory Management, Advertising, Pricing System, Resource allocation etc.

Following aspects are to be taken into account while knowing the scope of ME:

1. **Objective of the Business Firm:** As we know that Economics is playing very essential role for the business. It is first used for the Setting up of the objectives of a organization or business. The objective may be Business Expansion, Increase Sales, New technology adoption etc. or some time as per the change in government policy it help us to set the business objective as per the availability of the resources.
2. **Demand Analysis and Forecasting:** Unless and until knowing the demand for a product how can we think of producing that product. Therefore demand analysis is something which is necessary for the production function to happen. Demand analysis helps in analyzing the various types of demand which enables the manager to arrive at reasonable estimates of demand for product of his company. Managers not only assess the current demand but he has to take into account the future demand also.
3. **Production and Cost function:** Conversion of inputs into outputs is known as production function. With limited resources we have to make the alternative uses of this limited resource. Factor of production called as inputs is combined in a particular way to get the maximum output. When the price of input rises the firm is forced to work out a combination of inputs to ensure the least cost combination. Cost analysis is helpful in understanding the cost of a particular product. It takes into account all the costs incurred while producing a particular product. Under cost analysis we will take into account determinants of costs, method of estimating costs, the relationship between cost and output, the forecast of the cost, profit, these terms are very vital to any firm or business.
4. **Competition:** As per the Market situation a business has to face many tough competition from the market in terms of Perfect Competition, Monopolistic Competition, Duopoly or Oligopoly etc. as a Businessman you must know what kind of competition you are facing with the world and what are the different solution for the same. Because this is the world of competition and it has to be faced with all the possible options.
5. **Pricing and Output:** After knowing the competition, and type of it, it is must to set the price of the products or services which has to be offered in the market. It is very necessary to set a price of the commodity and its output, where the cost will be minimum and sufficient output at a required profit margin can be achieved. Economics help to decide the Pricing and output for the organization. Here pricing refers to the pricing of a product. As you all know that pricing system as a concept was developed by economics and it is widely used in managerial economics. Pricing is also one of the central functions of an enterprise. While pricing commodity the cost of production has to be taken into account, but a complete knowledge of the price system is quite essential to determine the price. It is also important to understand how product has to be priced under different kinds of competition, for different markets.
6. **Pricing :** cost plus pricing and the policies of the enterprise Now it is clear that the price system touches the several aspects of managerial economics and helps managers to take valid and profitable decisions.
7. **Profit:** Every organization is working for Profit. To decide the profit margin and the net amount of profit economics helps better. At last every one as a firm need to earn profit but profit is depends on the Competition and pricing of the firm. Economics also helps in this to determine the profit level.



8. **Investment decision and capital budgeting:** Some time firm to invest again for the business expansion and diversification. To take the decision whether to invest or not, Economics help to decision maker to take decision. Capital Budgeting is a technique to determine whether to invest or not.
9. **Product policy, sales promotion & market strategy:** As per the Situation firm take decision regarding Product mix, sales promotion in the market and the best possible market strategy. Again to decide all of these, economics will help to firm to take decision.
10. **After Inventory Management:** What do you mean by the term inventory? Well the actual meaning of the term inventory is stock. It refers to stock of raw materials which a firm keeps. Now here the question arises how much of the inventory is ideal stock. Both the high inventory and low inventory is not good for the firm. Managerial economics will use such methods as ABC Analysis, simple simulation exercises, and some mathematical models, to minimize inventory cost. It also helps in inventory controlling.
11. **Advertising:** Advertising is a promotional activity. In advertising while the copy, illustrations, etc., are the responsibility of those who get it ready for the press, the problem of cost, the methods of determining the total advertisement costs and budget, the measuring of the economic effects of advertising ---- are the problems of the manager.
  - a. There's a vast difference between producing a product and marketing it.
  - b. It is through advertising only that the message about the product should reach the consumer before he thinks to buy it.
  - c. Advertising forms the integral part of decision making and forward planning.
12. **Resource allocation:** Resources are allocated according to the needs only to achieve the level of optimization. As we all know that we have scarce resources, and unlimited needs. We have to make the alternate use of the available resources. For the allocation of the resources various advanced tools such as linear programming are used to arrive at the best course of action.

## Managerial Economics





### **Role of Managerial Economist**

A managerial economist helps the management by using his analytical skills and highly developed techniques in solving complex issues of successful decision-making and future advanced planning.

The role of managerial economist can be summarized as follows:

1. He studies the economic patterns at macro-level and analysis it's significance to the specific firm he is working in.
2. He has to consistently examine the probabilities of transforming an ever-changing economic environment into profitable business avenues.
3. He assists the business planning process of a firm.
4. He also carries cost-benefit analysis.
5. He assists the management in the decisions pertaining to internal functioning of a firm such as changes in price, investment plans, type of goods /services to be produced, inputs to be used, techniques of production to be employed, expansion/ contraction of firm, allocation of capital, location of new plants, quantity of output to be produced, replacement of plant equipment, sales forecasting, inventory forecasting, etc.
6. In addition, a managerial economist has to analyze changes in macro- economic indicators such as national income, population, business cycles, and their possible effect on the firm's functioning.
7. He is also involved in advising the management on public relations, foreign exchange, and trade. He guides the firm on the likely impact of changes in monetary and fiscal policy on the firm's functioning.
8. He also makes an economic analysis of the firms in competition. He has to collect economic data and examine all crucial information about the environment in which the firm operates.
9. The most significant function of a managerial economist is to conduct a detailed research on industrial market.
10. In order to perform all these roles, a managerial economist has to conduct an elaborate statistical analysis.
11. He must be vigilant and must have ability to cope up with the pressures.
12. He also provides management with economic information such as tax rates, competitor's price and product, etc. They give their valuable advice to government authorities as well.

### **Relationships between Managerial Economics & Other Subjects**

1. Managerial Economics & Traditional Economics- The relationships between M.E. & T.E. starts with the basic concepts that both of them are related or concern with solving the problem of allocation of limited resources between competing ends. the two main contributions to M.E. are:
  - a. To help in understanding the market conditions & the general economic environment within which the firm operates.



- b. To provide a philosophy for understanding & analyzing resources- allocation problems. Managerial Economics takes help of Economics analysis for achieving both T.E. & M.E. efficiency in the business operations. The firm maximizes its goal by producing maximum output at minimum cost is Managerial Economics efficiency. The production is carried out to the best of technological specification is Traditional Economics efficiency.
2. Managerial Economics & Operation Research- Both M.E. & O.R. are concern with taking effective decisions. M.E. & O.R. are both concerned with model-building. Models are generalized & scientifically analyzed relationship between various factors relevant in a specified kind of situations. Economic models are more general & confined to broad economic decision-making, whereas O.R. models on the other hand, draw from various disciplines & are more job-oriented, through situational O.R. is both expensive as well as a very slow process compare to M.E. the significant relationship between M.E. & O.R. can be highlighted with reference to certain important problems of M.E. which are solved with the help of O.R. techniques. The problems are equal allocation problems, waiting-line problems & inventory problems.
3. M.E. & Mathematics- Mathematics & M.E. are very closely related to each other. This is because M.E. is both conceptual as well as metrical. It drives its metrical property from the fact that an important function M.E. is to estimate & predict the relevant economic factors for decision-making & forward planning.
4. M.E. & Statistics- Statistics is widely used by Managerial Economists. M.E. aims at quantifying the past economic activity as well as to predict its future course. This is the way where Statistics is used in M.E. Managerial Economics heavily depending upon the theory of probability to take care of various problems in decision-making.
5. M.E. & the Theory of Decision-Making- M.E. is based on the assumption of a single goal of profit maximization & on the assumption of certainty, i.e., perfect knowledge. The theory of decision-making recognizes the multiplicity of goals & the pervasiveness of uncertainty in the business. In complex problem with multiple goals & high degree of uncertainty & where decisions are to be taken quickly, the theory of decision-making guides M.E.

### Features of Managerial Economics

- ✚ Managerial Economics concern with decision making of Economic nature. It deals with identification of Economic choices & allocation of scarce resources.
- ✚ It is goal oriented & prescriptive. It deals with how decisions should be made by managers to achieve the organizational goals.
- ✚ It is pragmatic. It is concern with those analytical tools which are useful in improving decision making.
- ✚ It is both conceptual & metrical.



- ✚ Managerial Economics provide a link between Traditional Economics & the Decision Science, for Managerial decision making, as shown in figure:-

### **Characteristics of ME**

- ✚ Managerial Economics is micro-economic in character as it concentrates only on the study of firm & not on the working of economy.
- ✚ Managerial Economics takes the help of macro-economics to understand & adjust to the environment in which the firm operates.
- ✚ Managerial Economics is Normative rather than Positive character.
- ✚ It is only for the analysis of profits that help is taken of the theory of distribution.

### **Significance of Managerial Economics**

1. In order to enable the manager to become a more competent model builder, Managerial Economics provides the no. of tools & techniques.
2. Managerial Economics provides most of the concepts that are needed for the analysis of business problems, concept of elasticity of demand, fixed & variable costs, short & long-run costs, opportunity costs, net present value, etc. all helps in understanding & solving decision problems.
3. It helps in making decision such as- what is the production technique & the input-mix that is least costly? How to take investment decision? & so on...



**DEMAND ANALYSIS**

**Meaning and Definition of Demand: -**

The demand may arise from an individual, a household as well as a market.

As we have indicated earlier, 'demand' is a technical concept from Economics. Demand for product implies:

- a) Desires to acquire it,
- b) Willingness to pay for it, and
- c) Ability to pay for it.

All three must be checked to identify and establish demand. **For example** : A poor man's desires to **stay in a five-star hotel room** and his willingness to pay rent for that room is not 'demand', because he lacks the necessary purchasing power; so it is merely his wishful thinking. Similarly, a miser's desire for and his ability to pay for a car is not 'demand', because he does not have the necessary willingness to pay for a car. One may also come across a well-established person who processes both the willingness and the ability to pay for higher education. But he has really no desire to have it; he pays the fees for a regular cause, and eventually does not attend his classes. It should also be noted that the demand for a product--a commodity or a service--has no meaning unless it is stated with **specific reference to the time, its price, price of its related goods, consumers' income and tastes etc.**

**Difference between NEED, WANT and DEMAND**

<b>Need</b>	Basic necessity Feel deprived if this is absent	Food
<b>Want</b>	Given choices, this is what you prefer	Chicken, Burger, Steak dinner
<b>Demand</b>	A want that is supported by a decision and capacity to buy	Only burger is within my budget!

**Need:** Human needs are the basic requirements and include food, clothing and shelter. Without these humans cannot survive. An extended part of needs today has become education and healthcare. Generally, the products which fall under the needs category of products do not require a push.



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Instead the customer buys it themselves. But in today's tough and competitive world, so many brands have come up with the same offering satisfying the needs of the customer that even the "needs category product" has to be pushed in the customer's mind. For Example: Agriculture sector, FMCG, Real Estate etc.

**Wants:** Wants are a step ahead of needs and are largely dependent on the needs of humans themselves. For example, you need to take a bath. But I'm sure you take baths with the best soaps. Thus Wants are not mandatory part of life. You DONT need a good smelling soap. But you will definitely use it because it is your want. For example: Hospitality, Consumer Durables, and Electronics etc.

**Demand:** You might want a BMW or a Mercedes for a car. You might want to go for a cruise. But can you actually buy a BMW or go on a cruise? It is not necessary that you have the *ability* to buy a BMW or go on a cruise but you may want that in future. Thus a step ahead of wants is demand.

When an individual wants something which is premium, but he also has the ability to buy it, then these wants are converted to demands. The basic difference between wants and demands is desire. A customer may desire something but he may not be able to fulfill his desire.

Example of demands – Cruises, BMW's, 5 star hotels etc.

The needs wants and demands are a very important component of marketing because they help the marketer decide the products which he needs to offer in the market. Thus the flow is like this.

To say that demand for an Atlas cycle in India is 60,000 is not meaningful unless it is stated in terms of the year, say 1983 when an Atlas cycle's price was around Rs. 800, competing cycle's prices were around the same, a scooter's prices was around Rs. 5,000. In 1984, the demand for an Atlas cycle could be different if any of the above factors happened to be different. For example, instead of domestic (Indian), market, one may be interested in foreign (abroad) market as well. Naturally the demand estimate will be different. Furthermore, it should be noted that a commodity is defined with reference to its particular quality/brand; if its quality/brand changes, it can be deemed as another commodity.

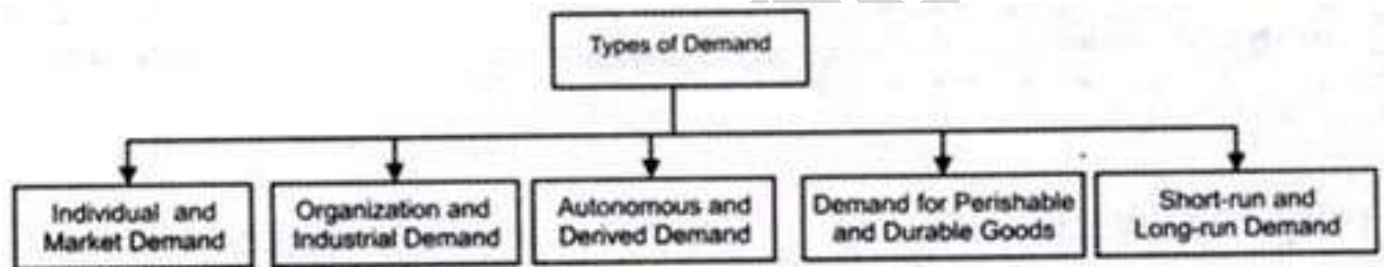
To sum up, we can say that the **Demand for a product is the desire for that product backed by willingness as well as ability to pay for it. It is always defined with reference to a particular time, place, and price and given values of other variables on which it depends.**

Demand for a commodity refers to the quantity of the commodity, which an individual household is willing to purchase per unit of time at a particular price.





1. **Individual Demand** :- It is demand by one or more Individual e.g. Cigarettes, Footwear etc.
2. **House Holds (H.H.)** :- Demand by H.H. e.g.: Refrigerator.
3. **Market Demand** :- When we consider the demand for a commodity by all the Individuals/Households in the market at a price, we call it Market Demand.



**Figure-1: Types of Demand**

### Demand and Quantity Demanded

Demand refers to different possible quantities of a commodity that the consumer is ready to buy at different possible price of that commodity prevailing in the market at a given point of time.

Quantity demanded refers to a specific quantity to be purchased against a specific price of the commodity.

For Example: Demand of commodity X refers to 10 units of X if  $P_x$  is Rs 5/-per unit, 8 units of X if  $P_x$  is Rs 6 per unit of X if  $P_x$  is Rs 7/- per unit. Quantity demanded of commodity X refers to Rs 8/- per unit if  $P_x$  happens to be Rs 6 per unit.

### Factors Affecting Demand or Determinants of Demand

The desire to purchase is revealed by taste and preference of the individuals/households. The capability to purchase depends upon his purchasing power, which in turn depends upon his income and price of the commodity.

- a) **Price of the Commodity**: - Effect of price on commodity even that the other determinants of demand is constant. There are two effects:
  1. The substitutes effect

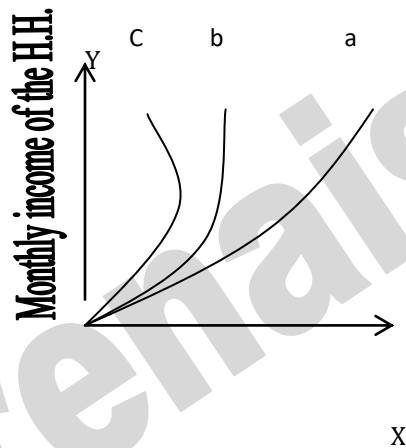


2. The Income effect

- I) **The Substitutes Effects:** - Substitutes effect the decrease in the price of commodity x, leaves the consumer with additional income which he can use in buying more amount of x, rather than its substitute y. This increasing the demand of commodity x. For e.g.: x= tea and y=coffee. If increasing in the price of the commodity x or tea, then the substitute y or coffee demand is increasing and vice-verse.
- II) **Income Effect:** - It is the increase in the real income or the purchasing power of a consumer due to the decrease in the price of commodity x.

b) **Income of Individual or Consumer and Household:** - The amount demanded of a commodity also depends upon the income of a household/individual. Income of individual or consumer can have three effects:

- An increase in the income usually increases the amount of consumption of regular goods and other factors remaining constant. Generally **Luxury Goods** are the Goods which have the same nature. As Income of the consumer increase then they purchase luxury goods more and more.
- Increase in income may need to increase in the consumption and thus the demand of certain commodity remains unchanged. In these category goods like **FMCG and Necessity goods** take place. According to this concept demand increase up to a certain limit then become constant.
- An increase in the income after a point may decrease the consumption and thus the demand of a commodity decrease, such a commodity is known as **Inferior Goods**. Normally it always happens that as income increase demand of some product becomes negative.



Units demanded of good x per day

Engel was the first person to study the relationship between income and quantity demanded for the normal and inferior goods.

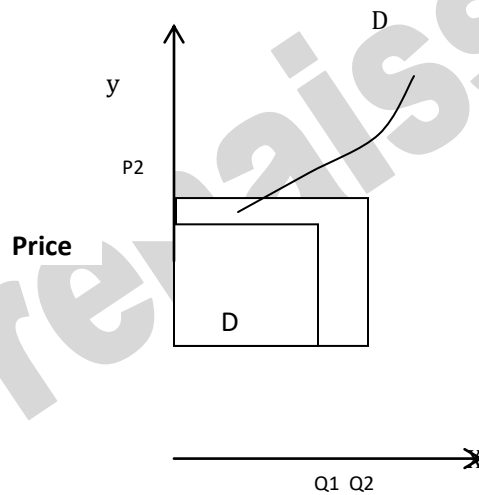
- C] **Price of related goods:** - There are two types of relation between goods.



1<sup>st</sup> Substitute and 2<sup>nd</sup> Complimentary.

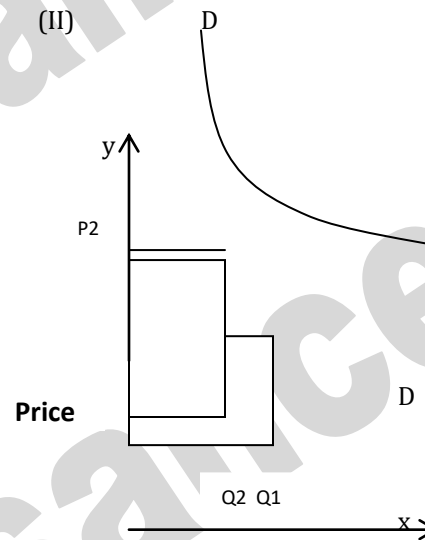
- i. Substitute: - These are the goods which have same effect – as price increase of the first commodity; it results in increase in demand of other commodity. **For ex:** Apple and Pears, Tea and Coffee. Price of Tea increases and demand of Coffee also increase.
- ii. Complimentary: - These are those goods which have adverse effect on the demand of the commodity. The increases in the price of the first commodity decrease the demand of the other quantity or commodity. **For exp:** - Bread and Butter, Pen and Ink, Tea and Sugar.

(I)



Quantity Demanded

(II)



Quantity Demanded

I. Amount demanded of coffee per week [I Substitute goods case]

II. Amount demanded of butter per day [II Complementary goods case]

D] **Taste and Preference:** - Taste and Preference, if changes in the consumer favors, the demand of commodity increase and vice versa. For e.g.: Jeans will have greater demand now, because of the preference of the consumer. Taste also play important role to change in the demand of the commodity because of the new choice of the consumer. No. of examples are considered for the taste and preference of the consumer like Food articles, dressing sense, luxury products etc.

E] **Advertisement:** - More advertisement creates favorable taste and preference for the demand of a commodity. In present scenario higher the advertising, higher the demand for the product. Every



Px ( Price of Goods )	Qx ( Quantity of Goods Demanded )
<b>B.Com (Hons.) I Year</b>	<b>Subject: Managerial Economics</b>
1	4

company has to use this concept or philosophies. In present Insurance and banking firm also has great advertising so they can capture more market shares.

F] **Expectations:** - The consumer makes two kinds of expectation:

- a. Related to their future income.
- b. Related to future price of the good and its related goods.

- a. **Related to their future income:** - If the consumer feels that his future income will be more, he will spent more today. Whereas if he feels that his income will be less in the future, he would spend less today and so the demand will decrease. Income of the consumer x demand today in future. Recently in all over the world recession becomes big problem, in this situation, persons who find that their income will cut down, they stop consuming luxury goods. In recent survey, higher society persons sell their luxury hotels or Ship to survive.
- b. **Related to future price of the goods and its related goods:** - If the consumer feels that the price of goods is going to increase in the future, they will buy more of it today, thus increasing the demand of the commodity. And if they feel that price will decrease tomorrow, then they postponed their demand right now.

G] **Population:**

H] **Government Policy:**

I] **Others**

### **Demand Schedule**

Demand schedule is a table showing relation between different quantities of a commodity to be purchased at different prices of that commodity. **SAMUELSON** state this as "The table relating to price and quantity demanded is called the demand schedule."

This could be of two major types – Individual Demand Schedule and Market Demand Schedule\

### **Individual Demand Schedule**



2	3
3	2
4	1

It refers to the demand schedule of an individual buyer for a commodity at different possible prices at a given point of time. This table reflects the inverse relationship between price of the commodity and the quantity demanded for the same at a given point of time.

### Market Demand Schedule

P <sub>x</sub> ( Price of Good X )	Q <sub>x</sub> ( Consumer A )	Q <sub>x</sub> ( Consumer B )	Q <sub>x</sub> ( Consumer A+ B )
1	4	5	4+5=9
2	3	4	3+4=7
3	2	3	2+3=5
4	1	2	1+2=3

Every market has several consumers of a commodity at a given point of time. This table shows the quantity demanded for Goods X by consumer A and B at different price levels.

### THE LAW OF DEMAND

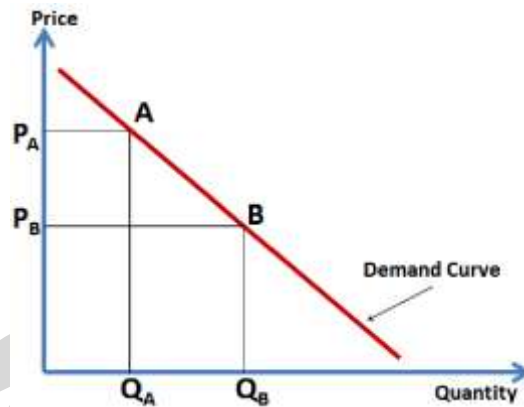
The law of demand states that other things being constant, there is an inverse relationship between quantities demanded and own price of the commodity.

### Explanation

P <sub>x</sub> ( Rs )	Q <sub>x</sub> ( Units )
10	100
9	150



8	200
---	-----



## Nature of Demand

1. Derived demand & autonomous demand.
2. Demand for producer's goods and consumer goods.
3. Demand for durable goods and non durable goods.
4. Industry demand and firm demand.
5. Total demand and market segment demand.
6. Short run and long run demand.

1. Derived demand & autonomous demand: - derived demand means a demand which is created because to produce other commodities or the commodities which are helpful to produce other products. For ex. Machinery, labour, raw material etc. are the example which is demanded as per requirement.

*Autonomous* demand is just reverse of derived demand where demand is already exist due to its direct consumption. For ex. Demand for food is direct demand or autonomous demand because it can consume directly by a person or a group of persons.

*In practical* there is no distinction between derived and autonomous demand because for same product may be derived demand but the same product can be autonomous demand for other. The autonomous demand is more elastic in nature then the derived demand. It is because derived demand not influences the price effect on others.



2. Demand for producer goods & consumer goods: - producer goods are those goods which are used by a producer for further production e.g. raw material, machinery, semi finished goods and other material.

In general sense consumer goods demand is more elastic in nature as compare to the producer goods.

Consumer goods are those goods which are directly consumed by the consumers. E.g. milk, bread and any other product which directly satisfy the needs of consumers.

3. Demand for durable goods and non durable goods :-As we know that durable goods are those goods which can be store for a long time as well as the demand can be postponed, if it is not required immediately or urgently e.g. machinery, household appliances, books etc are the durable goods. The non-durable goods are those which have short life. It is also divided into two parts perishable and non-perishable.

Demand of durable goods is more elastic in nature then the non durable goods because slight change in price will directly affect the overall demand of the product.

4. Industry demand and firm demand: - firm demand denotes the demand for the products of a particular firm for ex. Demand for steel produced by "TISCO" is a firm demand. In contrast to these if all the companies create demand of a particular product that produce similar product is called industry demand. For ex. Demand of steel by all the companies represent s demand of steel industry.

The firm demand is more elastic in nature as compare to Industry demand. It is because every firm faces the competition with their competitors in the industry.

5. Total demand and market segment demand: - as the name suggests market segment demand is demand of a particular market where as total demand represents demand of whole market. For ex. A company has a product which is sold in whole India and the demand of that product is called total demand, but if the same product has different demand in different -different segment then this is called as market segment demand.

Market segment demand is always more elastic then the total demand.

6. Short run & long run demand: - short run demand refers to demand with its immediate to price changes & income fluctuations where as long run demand is that which will ultimately exist as a result of the changes in pricing, promotion or a product improvement other enough time is allowed to let the market adjust itself to the new situations.

Long run demand is more elastic than the short run demand.



**ELASTICITY OF DEMAND**

Elasticity of demand is defined as measurement of percentage change in quantity demanded in response to a given percentage change in own price of the commodity.

$E = \frac{\% \text{age change in quantity demanded of good } x}{\% \text{age change in determinant of demand } z}$

$$E = \frac{\Delta Q}{Q_1} \times \frac{Z_1}{\Delta Z}$$

E = Elasticity of demand

$\Delta$  = To change

Q = to quantity demanded

Z = to a demand determinant

$\Delta Q = Q_2 - Q_1$

$\Delta Z = Z_2 - Z_1$

$$E = \frac{Q_2 - Q_1}{Q_1}$$

**Price Elasticity of Demand**

The more the value of the E.O.D. the more responsive is the quantity demanded to changes in the determinant under consideration. Price E.O.D. is the determinant of relative responsiveness of quantity demanded to price of the commodity.

$E = \frac{\% \text{age change in quantity demanded of good } x}{\% \text{age change in price of commodity } x}$

$\% \text{age change in price of commodity } x$

$$\frac{Q_2 - Q_1}{Q_1}$$





E =

$$E = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$\Delta Q = Q_2 - Q_1$$

$$\Delta P = P_2 - P_1$$

Q1 and P1 are original quantity and price respectively

Q2 and P2 are the new quantity and price respectively.

Higher the elasticity of demand, greater will be the %age change in Quantity demanded for every %age change in price.

Since the elasticity of demand is linked to the law of demand, the coefficient of price elasticity of demand E, will always have a negatively sloping demand curve, in order to avoid confusion in interpretation only the absolute value of E is taken i.e. the sign is ignored

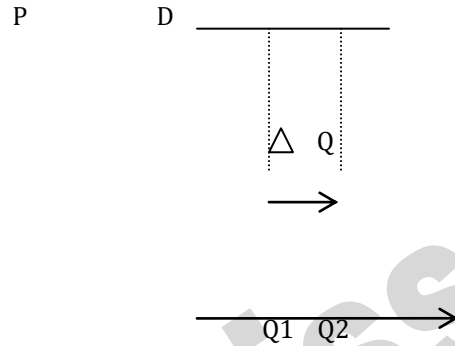
### Type of price elasticity

1. Perfectly elastic demand: - where no reduction in price is needed to cause an increase in quantity demand

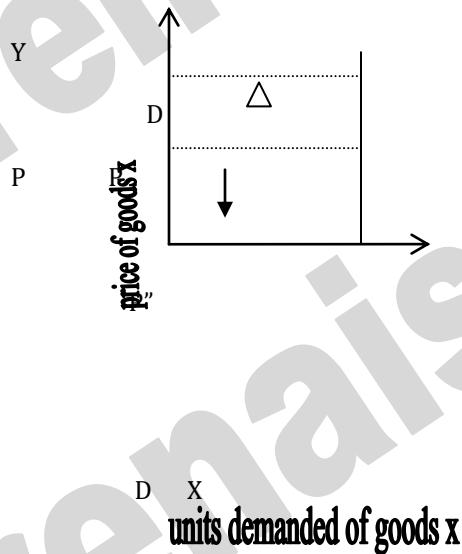


Example: -

1. Petrol
2. Ice cream
3. Cloths



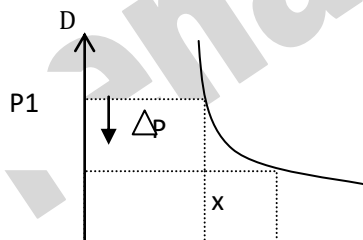
2. Absolutely (Perfectly) inelastic demand: - where a change in price, however large, causes no change in quantity demanded. ( $E=0$ )



Example: -

- 1. Salt
- 2. Match box
- 3. Ink

3. Unit Elasticity of demand: - Where a given proportionate change in price causes an equally proportionate change in quality demanded. ( $E=1$ )



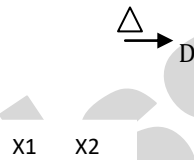
Example:-

- 1. Soap
- 2. Detergent
- 3. Tea
- 4. Milk
- 5. Sugar

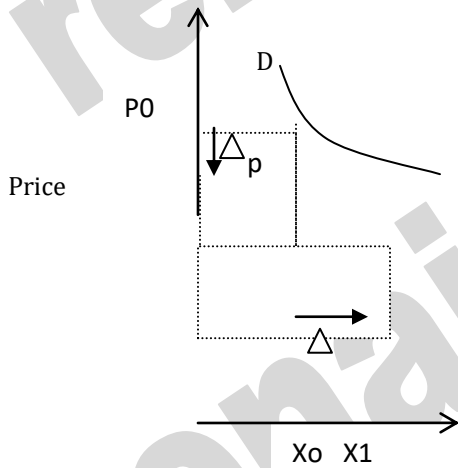


Price

Quantity



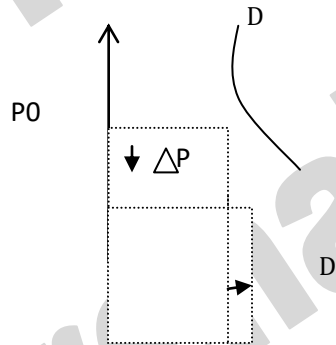
4. Relatively elastic demand quantity: - Where a change in price causes more than proportionate change in quantity demanded. ( $E > 1$ )



Example: -

- 1. Dry Fruits
- 2. Bear
- 3. Whiskey

5. Relatively inelasticity demand: - where a change in price causes a less than proportionate change in quantity demanded. ( $E < 1$ )



Example:-

- 1. Cigarettes
- 2. Mobile
- 3. Vegetables



$$x \quad \Delta$$

—————→

$X_0 \quad X_1$

### Factors affecting Price elasticity of demand

1. *The Number and Closeness of the Substitutes:* - The availabilities of close substitutes of the commodity are the most important determinant of the degree of price elasticity. In case the product has large no. of close substitutes in price range demand for the product is bound to be highly elastic.  
**For e.g.:** Demand for cigarettes will be inelastic because there are no close substitutes.
2. *The share of commodity in buyer's budget:* - if the proportion of consumer income, which is spent on the commodity, is very small, demand will tend to be in elastic. The commodities in the category are salt, match- boxes, ink etc.
3. *The nature of the commodity:* - the demand of necessities is inelastic, while these of luxuries are elastic.
4. *Number of uses a commodity can be put to:* - larger the number of user of a commodity, greater will be the elasticity of that commodity. The various uses of the commodity are put in the order of their importance.
5. *Habit-forming characteristics:* - there are some goods which are habit-forming like the use of tobacco and alcohol. Since the consumer forms a habit with their use the demand for such goods will tend to be inelastic.
6. *Time - Period:* - Time is very important in price elasticity of demand. Demand is more elastic in the long run than in the short run.

### INCOME ELASTICITY OF DEMAND

## Factors Affecting Price Elasticity Of Demand

- Nature of the Commodity
- Availability of Substitutes
- Variety of uses of commodity
- Postponement
- Influence of habits
- Proportion of Income spent on a commodity
- Range of prices



It is for a commodity shows the extent to which a consumer's demand for the commodity changes as a result of the change in his/her income.

Income elasticity of demand may be defined as a ratio of percentage change in the quantity demanded of a good. Say x to the %age change in income of the consumer.

$$E_y = \frac{\% \text{age change in quantity demanded of good x}}{\% \text{age change in Income of Consumer}}$$

$$E_y = \frac{\frac{\Delta Q}{Q_1}}{\frac{\Delta Z}{Z_1}}$$

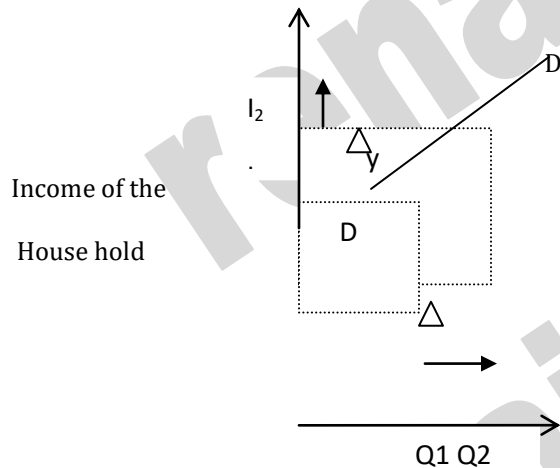
$$\Delta Q = Q_2 - Q_1$$

$$\Delta Z = Z_2 - Z_1$$

The income elasticity of demand is positive for all normal goods because the consumer's demand for a good changes in the direction of the change in his income. In the case of an inferior good the demand for the good varies inversely with income. Therefore the income elasticity of demand is negative.

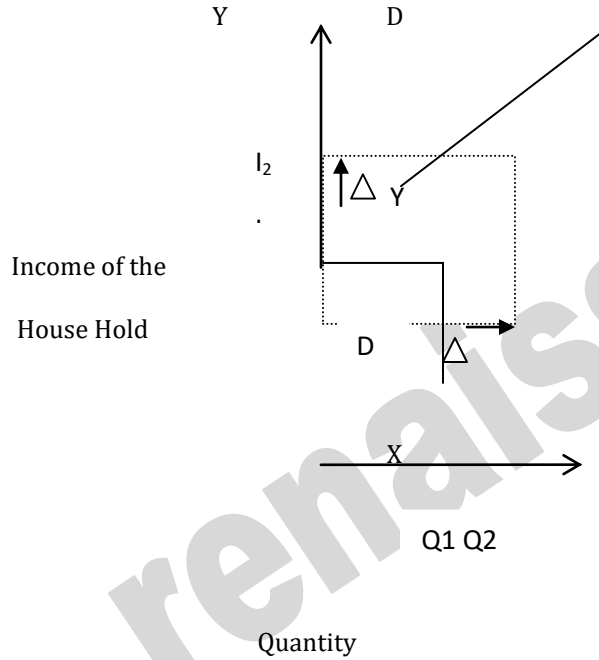
**Types of Income Elasticity**

1. High Income elasticity: - when the quantity demanded of good x increases by a larger % age change than the income of the consumer.  $E_y > 1$

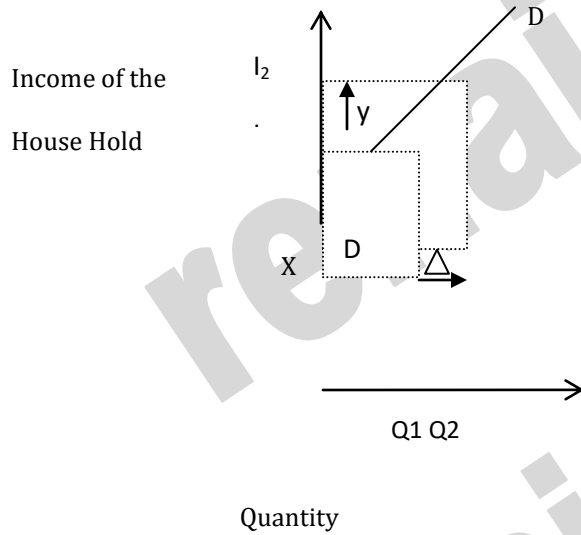




2. Unitary income elasticity: - The %age change in the quality demanded is equal to the %age change in money income.  $E_y=1$

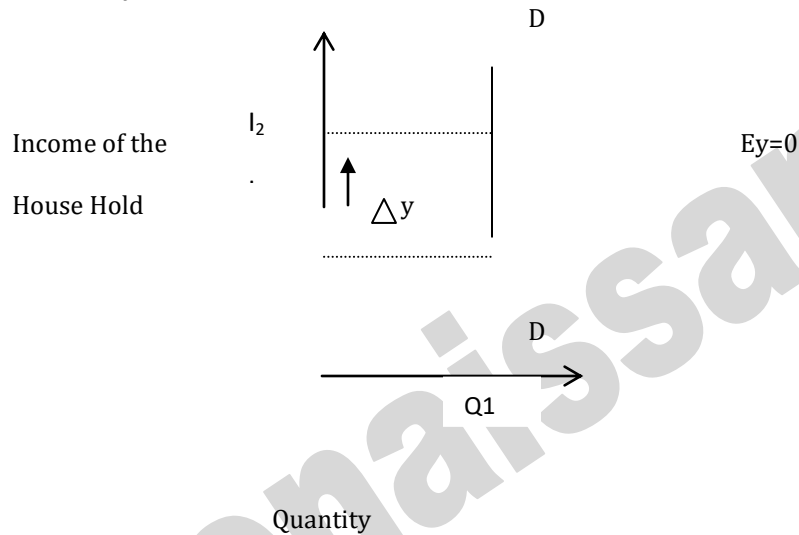


3. Low income elasticity: - income elasticity is low if the relative change in quantity demanded is less than the relative change in money.  $E_y < 1$

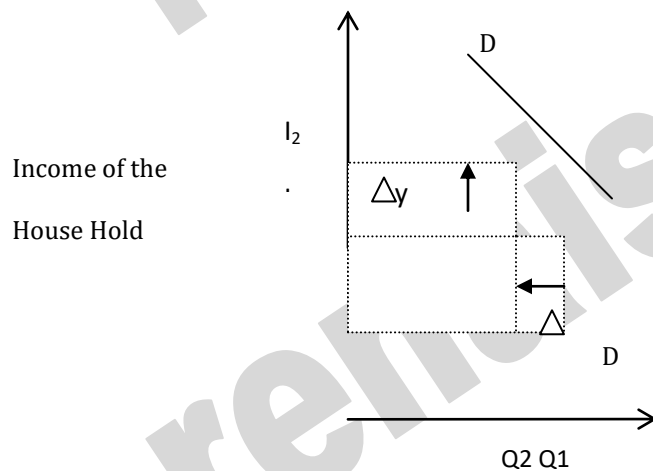




4. Zero income elasticity: -A change in the income will have effect on the quantity demanded for ex. Salt.  
 $E_y=0$



5. Negative income elasticity: - as the income increases, the demand decrease because less is bought at higher income and more is bought at lower income.  $E_y < 0$



We have high-income elasticity in case of luxury goods and low-income elasticity in case of necessity of goods.

#### Cross elasticity of demand

It is defined as the ratio of percentage change in demand for one goods due to a change in the price of some other related goods. The concept of cross elasticity is useful in inter commodity demand relation. This



change in the demand for one good due to a change in the price of some other goods comes about because often fact that the two goods may be either substitutes or complementary to each other.

$$E = \frac{\text{\%age change in demand of commodity x}}{\text{\%age change in price of commodity y}}$$

$$E = \frac{Q \Delta}{P_y \Delta} \frac{P_x}{Q_x}$$

1. If the two goods are **substitutes**, the value of cross-elasticity will be positive. In the case of **complementary** goods the value of cross elasticity of demand will be negative, because the change in the price of one good cause opposite change in the quality demanded of the other goods.





UNIT-II

PRODUCTION FUNCTION

- 1) Production is the process of conversion of inputs into outputs.
- 2) It is the creation of utility and addition of value
- 3) Production function is the relationship between inputs & output of a commodity
- 4) The mathematical expression of production function is -  
$$Q_x = f(x_1, x_2, x_3, \dots, x_n)$$
$$O_x \rightarrow \text{Output of commodity X.}$$
$$f = \text{Function of}$$
$$x_1, x_2, x_3, \dots, x_n \rightarrow \text{Inputs}$$
- 5) The inputs/resources used for production are called factors of production. These are namely land, labour, capital & entrepreneur.

**Attributes of production function**

1. It indicates a functional relationship between physical inputs and physical outputs. For example, if we have two factors, say, labour (L) and capital (K) then the production function  $Q = f(L, K)$
2. The production function is always in relation to a period of time. It denotes the flow of inputs resulting in a flow of outputs during a particular period of time. This is due to the fact when the firm wants to increase the production, it can either employ "some factors" additionally or increase "all the factors" in accordance with availability of the time period. Later we will study it as short period and long period.
3. The production function can specify either the maximum quantity of output that can be produced by a given set of input or the minimum quantity of inputs required for producing certain level of output.
4. The quantity of inputs is dependent upon the state of technology available and firm's managerial ability to use them. In order to simplify things the state of technology is considered to be given.
5. Production function takes into account the most efficient technology and methodology available at a time.
6. Production function is purely a technology relationship between input and output. It has nothing to do with the nominal relationship between input and output. It has nothing to do with the nominal price of factors; or value of quantity produced by them.

**Fixed factors & variable factors:**

**1) Fixed Factor (FF)**

- a. Fixed factors refer to those factors of production which cannot be changed during short run.
- b. These are used in a fixed quantity in the short run.
- c. These factors can be changed only in the long run.
- d. Example-land, plant and machinery, factory building etc.

**2) Variable Factor (VF)**



- a. Variable factor refer to those factors of production which can be changed during short period.
- b. The quantity of variable inputs varies according to the level of output.
- c. Example-labour, raw material etc.

### Time Element in Production Function

#### Short Run and Long Run

**Short Run:** Short refer to a period of time in which a firm cannot change its fixed factors of production only variable factors can be changed.

**Long Run:** Long run refers to a time period during which a firm can change all the factors of production. In the long run, all inputs are variable. Therefore the distinction between fixed factors and variable factors will disappear.

### Basic Concepts of Production

**1. Total product or Total physical product (TP or TPP)**

Total product refers to the total volume of a commodity produced by a firm with given inputs during a given period.

**2. Average product or Average physical product (AP or APP)**

Average product is per unit product of a variable input

It is obtained by dividing the total product (TP) by the units of a variable factor.

Symbolically,  $AP = \frac{TP}{L}$

**3. Marginal product or Marginal physical product (MP or MPP)**



Marginal product is an addition to the total product when an additional unit of variable factor (labour) is employed.

### Law of Variable Proportions

The Law of Variable Proportions (also called as returns to factor or Laws of Returns) is discussed under the situation of having one factor variable and another factor being used in fixed quantity if there are only two factors of production. This alters the proportions between factors; therefore, it is called as Law of Variable Proportions. The law is applicable for short run. Here  $Q=f(L)$ .

The law can be explained with the help of below table:

Units of Capital (K)	Units of Labour (L)	TP (Units) (Q)	AP ( $\frac{Q}{L}$ )	MP ( $\frac{\Delta Q}{\Delta L}$ )	
1	0	0	0	0	
1	1	70	70	70	Stage I
1	2	160	80	90	
1	3	270	90	110	
1	4	360	90	90	
1	5	430	86	70	Stage II
1	6	498	83	68	
1	7	546	78	48	
1	8	546	68.25	0	
1	9	522	58	-24	Stage III
1	10	470	47	-52	

#### First Stage- Stage of Increasing Returns

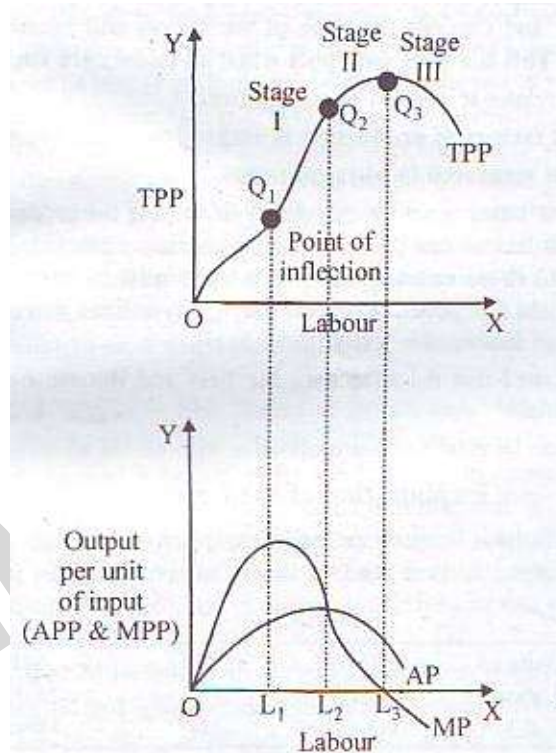
- In this stage as the input of variable factor (labour) increases, marginal product (MP) tends to increase and total product (TP) increases at increasing rate because there is underutilization of the fixed input
- MP also tends to rise along with AP.

#### Second Stage- Stage of Diminishing Returns

- In this stage, increase in the input of variable factor (Labour) is followed by a decrease in MP but it remains positive and TP increases at decreasing rate because there is pressure on fixed input.

#### Third Stage- Stage of Negative Returns

- In this stage, increase in the units of variable factor (labour) renders MP negative and TP starts declining because there is too much of variable input in relation to the fixed input.

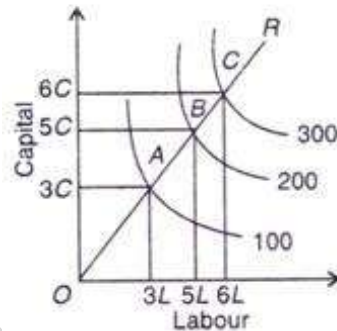


### THE LAWS OF RETURNS TO SCALE: PRODUCTION FUNCTION WITH TWO VARIABLE INPUTS

The laws of returns to scale refer to the effects of a change in the scale of factors (inputs) upon output in the long run when the combinations of factors are changed in the same proportion. If by increasing two factors, say labour and capital, in the same proportion, output increases in exactly the same proportion, there are constant returns to scale. If in order to secure equal increases in output, both factors are increased in larger proportionate units, there are decreasing returns to scale. If in order to get equal increases in output, both factors are increased in smaller proportionate units, there are increasing returns to scale.

#### Increasing Returns to Scale:

Below figure shows the case of increasing returns to scale where to get equal increases in output, lesser proportionate increases in both factors, labour and capital, are required.



**It follows that in the figure:**

100 units of output require  $3C + 3L$

200 units of output require  $5C + 5L$

300 units of output require  $6C + 6L$

So that along the expansion path OR,  $OA > AB > BC$ . In this case, the production function is homogeneous of degree greater than one. The increasing returns to scale are attributed to the existence of indivisibilities in machines, management, labour, finance, etc. Some items of equipment or some activities have a minimum size and cannot be divided into smaller units. When a business unit expands, the returns to scale increase because the indivisible factors are employed to their full capacity.

Increasing returns to scale also result from specialisation and division of labour. When the scale of the firm expands there is wide scope for specialisation and division of labour. Work can be divided into small tasks and workers can be concentrated to narrower range of processes. For this, specialized equipment can be installed.

**Thus with specialization efficiency increases and increasing returns to scale follow:**

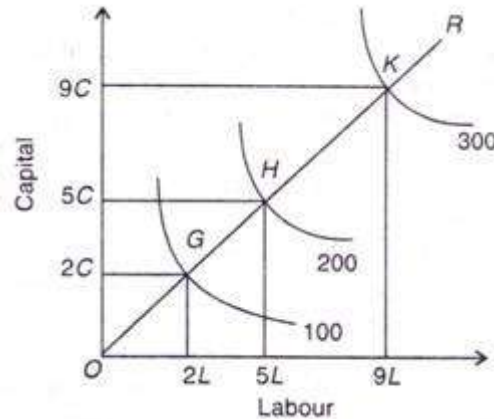
Further, as the firm expands, it enjoys internal economies of production. It may be able to install better machines, sell its products more easily, borrow money cheaply, procure the services of more efficient manager and workers, etc. All these economies help in increasing the returns to scale more than proportionately.

Not only this, a firm also enjoys increasing returns to scale due to external economies. When the industry itself expands to meet the increased long-run demand for its product, external economies appear which are shared by all the firms in the industry. When a large number of firms are concentrated at one place, skilled labour, credit and transport facilities are easily available.

Subsidiary industries crop up to help the main industry. Trade journals, research and training centres appear which help in increasing the productive efficiency of the firms. Thus these external economies are also the cause of increasing returns to scale.

**Decreasing Returns to Scale:**

Below Figure shows the case of decreasing returns where to get equal increases in output, larger proportionate increases in both labour and capital are required.



**It follows that:**

100 units of output require  $2C + 2L$

200 units of output require  $5C + 5L$

300 units of output require  $9C + 9L$

So that along the expansion path OR,  $OG < GH < HK$ .

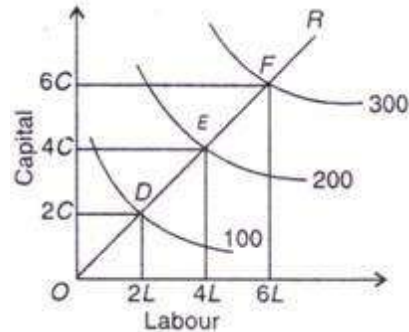
In this case, the production function is homogeneous of degree less than one. Returns to scale may start diminishing due to the following factors. Indivisible factors may become inefficient and less productive. Business may become unwieldy and produce problems of supervision and coordination.

Large management creates difficulties of control and rigidities. To these internal diseconomies are added external diseconomies of scale. These arise from higher factor prices or from diminishing productivities of the factors. As the industry continues to expand the demand for skilled labour, land, capital, etc. rises.

There being perfect competition, intensive bidding raises wages, rent and interest. Prices of raw materials also go up. Transport and marketing difficulties emerge. All these factors tend to raise costs and the expansion of the firms leads to diminishing returns to scale so that doubling the scale would not lead to doubling the output.

**Constant Returns to Scale:**

Below Figure shows the case of constant returns to scale. Where the distance between the isoquants 100, 200 and 300 along the expansion path OR is the same, i.e.,  $OD = DE = EF$ . It means that if units of both factors, labour and capital, are doubled, the output is doubled. To treble the output, units of both factors are trebled.



**It follows that:**

100 units of output require

$$1 (2C + 2L) = 2C + 2L$$

200 units of output require

$$2 (2C + 2L) = 4C + 4L$$

300 units of output require

$$3 (2C + 2L) = 6C + 6L$$

The returns to scale are constant when internal economies enjoyed by a firm are neutralised by internal diseconomies so that output increases in the same proportion. Another reason is the balancing of external economies and external diseconomies.

Constant returns to scale also result when factors of production are perfectly divisible, substitutable, homogeneous and their supplies are perfectly elastic at given prices. That is why, in the case of constant returns to scale, the production function is homogeneous of degree one.

### ECONOMIES AND DISECONOMIES OF SCALE

**Economies of scale** are advantages that arise for a firm because of its larger size, or scale of operation. These advantages translate into lower unit costs (or improved **productive efficiency**), although some economies of scale are not so easy to quantify.

In some markets, firms have to be of at least a certain size to be able to compete at all, because of the minimum level of investment required; economists call this **minimum efficient scale**.

On the other hand, inefficiencies can also creep in because of increased size, known as **diseconomies of scale**

In the correct sense of the term, **economies and diseconomies of scale** relate to advantages and disadvantages of an **increase** in the firm's productive capacity – such as moving to a larger factory or installing completely new technology. Do not confuse these terms with **capacity utilisation**, which is the degree to which the **current** scale of operations is actually being used.

Economies of scale can be 'internal' (specific to an individual firm) or external (advantages that benefit the industry as a whole).

The main kinds of **internal Economies of Scale** are:

**Purchasing** – firms producing on a larger scale should be able to *bulk buy* raw materials or product for resale in larger quantities. They may be able to cut out wholesalers by buying direct from producers, and transport costs per unit may also be reduced. The firm might also be buying in large



enough quantities to make very specific demands about product quality, specifications, service and so on, so that supplies exactly match their needs.

**Technical** – it may be cost-effective to invest in more advanced production machinery, IT and software when operating on a larger scale.

**Managerial** – larger firms can afford to have specialist managers for different functions within a business – such as Marketing, Finance and Human Resources. Furthermore, they may be able to pay the higher salaries required to attract the best people, leading to better planning and decision making.

**Specialisation** – with a larger workforce, the firm may be better able to divide up the work and recruit people whose skills very closely match the requirements of the job.

**Marketing** – more options are available for larger firms, such as television and other national media, which would not be cost-effective for smaller producers. The marketing cost for selling 10 million items might be no greater than to sell 1 million items. Larger firms might find it easier to gain publicity for new launches simply because of their existing reputation.

**Financial** – there is a wider range of finance options available to larger firms, such as the stock market, bonds and other kinds of bank lending. Furthermore, a larger firm is likely to be perceived by banks as a lower risk and the cost of borrowing is likely to be lower.

**Risk bearing** – a larger firm can be safer from the risk of failure if it has a more diversified product range. A larger firm may have greater resilience in the case of a downturn in its market because of larger reserves and greater scope to make cutbacks.

**Social and welfare** – larger firms are more likely to be able to justify additional benefits for employees such as pension funds, healthcare, sports and social facilities, which in turn can help attract and retain good employees.

### **External economies of scale**

External economies of scale arise from firms in related industries operating in a concentrated geographical area; suppliers of services and raw materials to all these firms can do so more efficiently. Infrastructure such as roads and sophisticated telecommunications are easier to justify.

There is also likely to be a growing local pool of skilled labour as other local firms in the industry also train workers. This gives a larger and more flexible labour market in the area.

### **Diseconomies of scale**

These are inefficiencies that can creep in when a firm operates on a larger scale (do not confuse with high capacity utilisation). The main diseconomies of scale are:

**Lack of motivation** – in larger firms, workers can feel that they are not appreciated or valued as individuals - see **Mayo** and **Herzberg**. It can be more difficult for managers in larger firms to develop the right kind of relationship with workers. If motivation falls, productivity may fall leading to inefficiencies.

**Poor communication** – it can be easier for smaller firms to communicate with all staff in a personal way. In larger firms, there is likely to be greater use written of notes rather than by explaining personally. Messages can remain unread or misunderstood and staff are not properly informed.

**Co-ordination** – a very large business takes a lot of organising, leading to an increase in meetings and planning to ensure that all staff know what they are supposed to be doing. New layers of management may be required, adding to costs and creating further links in the chain of communication.





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## UNIT-III

### What is Market?

#### Meaning

"Market refers to an arrangement, whereby buyers and sellers come in contact with each other directly or indirectly, to buy or sell goods."

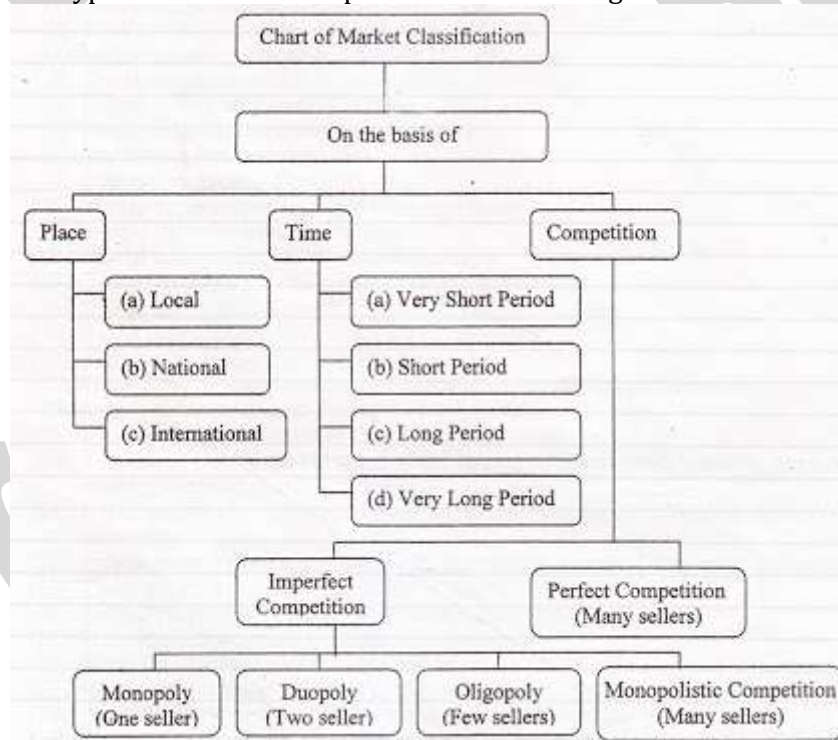
Thus, above statement indicates that face to face contact of buyer and seller is not necessary for market. E.g. In stock or share market, the buyer and seller can carry on their transactions through internet. So internet, here forms an arrangement and such arrangement also is included in the market.

#### Characteristics of Market

1. Existence of commodity which is to be bought and sold.
2. The existence of buyers and sellers.
3. A place, be it a certain region, a country or the entire world.
4. Communication between buyers and sellers that only one price should prevail for the same commodity at the same time.

#### Classification or Types of Market

The classification or types of market are depicted in the following chart.



Generally, the market is classified on the basis of:

1. Place,



2. Time and
3. Competition.

On the basis of **Place**, the market is classified into:

1. Local Market or Regional Market.
2. National Market or Countrywide Market.
3. International Market or Global Market.

On the basis of **Time**, the market is classified into:

1. Very Short Period Market.
2. Short Period Market.
3. Long Period Market.
4. Very Long Period Market.

On the basis of **Competition/Market Structure**, the market is classified into:

1. Perfectly Competitive Market Structure.
2. Imperfectly Competitive Market Structure.

(Market structure refers to number and types of firms operating in the industry.)

Both these market structures widely differ from each other in respect of their features, price, etc. Under imperfect competition, there are different forms of markets like monopoly, duopoly, oligopoly and monopolistic competition.

1. A monopoly has only one or a single (mono) seller.
2. Duopoly has two (duo) sellers.
3. Oligopoly has little or fewer (oligo) number of sellers.
4. Monopolistic competition has many or several numbers of sellers.

The suffix poly has its origin from Greek word *Polus* which means many or more than one.

### **What is Perfect Competition?**

- 1) Perfect Competition refers to a market situation where there are very large number of buyers and sellers dealing in a homogenous product at a price fixed by the market.
- 2) Perfect Competition is a market structure where there is a perfect degree of competition and single price prevails.
- 3) The concept of Perfect Competition was introduced by Dr. Alfred Marshall.
- 4) Nothing is 100% perfect in this world. So, this states that perfect competition is only a theoretical possibility and it does not exist in reality.

### **Main Features of Perfect Competition ↓**

The following are the characteristics or main features of perfect competition :-

#### **1. Many Sellers**

In this market, there are many sellers who form total of market supply. Individually, seller is a firm and collectively, it is an industry. In perfect competition, price of commodity is decided by market forces of demand and supply. i.e. by buyers and sellers collectively. Here, no individual seller is in a position to change the price by controlling supply. Because individual seller's individual supply is a very small part of total supply. So, if that seller alone raises the price, his product will become



costlier than other and automatically, he will be out of market. Hence, that seller has to accept the price which is decided by market forces of demand and supply. This ensures single price in the market and in this way, seller becomes price taker and not price maker.

## **2. Many Buyers**

Individual buyer cannot control the price by changing or controlling the demand. Because individual buyer's individual demand is a very small part of total demand or market demand. Every buyer has to accept the price decided by market forces of demand and supply. In this way, all buyers are price takers and not price makers. This also ensures existence of single price in market.

## **3. Homogenous Product**

In this case, all sellers produce homogeneous i.e. perfectly identical products. All products are perfectly same in terms of size, shape, taste, colour, ingredients, quality, trade marks etc. This ensures the existence of single price in the market.

## **4. Zero Advertisement Cost**

Since all products are identical in features like quality, taste, design etc., there is no scope for product differentiation. So advertisement cost is nil.

## **5. Free Entry and Exit**

There are no restrictions on entry and exit of firms. This feature ensures existence of normal profit in perfect competition. When profit is more, new firms enter the market and this leads to competition. Entry of new firms competing with each other results into increase in supply and fall in price. So, this reduces profit from abnormal to normal level.

When profit is low (below normal level), some firms may exit the market. This leads to fall in supply. So remaining firms raise their prices and their profits go up. So again this ensures normal level of profit.

## **6. Perfect Knowledge**

On the front of both, buyers and sellers, perfect knowledge regarding market and pricing conditions is expected. So, no buyer will pay price higher than market price and no seller will charge lower price than market price.

## **7. Perfect Mobility of Factors**

This feature is essential to keep supply at par with demand. If all factors are easily mobile (moveable) from one line of production to another, then it becomes easy to adjust supply as per demand.

Whenever demand is more additional factors should be moved into industry to increase supply and vice versa. In this way, with the help of stable demand and supply, we can maintain single price in the Market.

## **8. No Government Intervention**

Since market has been controlled by the forces of demand and supply, there is no government intervention in the form of taxes, subsidies, licensing policy, control over the supply of raw materials, etc.



### 9. No Transport Cost

It is assumed that buyers and sellers are close to market, so there is no transport cost. This ensures existence of single price in market.

### IMPERFECT COMPETITION

It is an important market category wherein individual firms exercise control over the price to a smaller or larger degree depending upon the degree of imperfection present in a case.

#### Monopoly

1. The term monopoly is derived from Greek words '*mono*' which means single and '*poly*' which means seller. So, monopoly is a market structure, where there only a single seller producing a product having no close substitutes.
2. This single seller may be in the form of an individual owner or a single partnership or a Joint Stock Company. Such a single firm in market is called monopolist. Monopolist is price maker and has a control over the market supply of goods. But it does not mean that he can set both price and output level. A monopolist can do either of the two things i.e. price or output. It means he can fix either price or output but not both at a time.

#### Characteristics / Features of Monopoly

Following are the features or characteristics of Monopoly :-

1. A single seller has complete control over the supply of the commodity.
2. There are no close substitutes for the product.
3. There is no free entry and exit because of some restrictions.
4. There is a complete negation of competition.
5. Monopolist is a price maker.
6. Since there is a single firm, the firm and industry are one and same i.e. firm coincides the industry.
7. Monopoly firm faces downward sloping demand curve. It means he can sell more at lower price and vice versa. Therefore, elasticity of demand factor is very important for him.

#### Classification / Kinds / Types of Monopoly

##### 1. Perfect Monopoly

It is also called as absolute monopoly. In this case, there is only a single seller of product having no close substitute; not even remote one. There is absolutely zero level of competition. Such monopoly is practically very rare.

##### 2. Imperfect Monopoly

It is also called as relative monopoly or simple or limited monopoly. It refers to a single seller market having no close substitute. It means in this market, a product may have a remote substitute. So, there is fear of competition to some extent e.g. Mobile (Cellphone) telcom industry (e.g. vodaphone) is having competition from fixed landline phone service industry (e.g. BSNL).



### **3. Private Monopoly**

When production is owned, controlled and managed by the individual, or private body or private organization, it is called private monopoly. e.g. Tata, Reliance, Bajaj, etc. groups in India. Such type of monopoly is profit oriented.

### **4. Public Monopoly**

When production is owned, controlled and managed by government, it is called public monopoly. It is welfare and service oriented. So, it is also called as 'Welfare Monopoly' e.g. Railways, Defence, etc.

### **5. Simple Monopoly**

Simple monopoly firm charges a uniform price or single price to all the customers. He operates in a single market.

### **6. Discriminating Monopoly**

Such a monopoly firm charges different price to different customers for the same product. It prevails in more than one market.

### **7. Legal Monopoly**

When monopoly exists on account of trademarks, patents, copy rights, statutory regulation of government etc., it is called legal monopoly. Music industry is an example of legal monopoly.

### **8. Natural Monopoly**

It emerges as a result of natural advantages like good location, abundant mineral resources, etc. e.g. Gulf countries are having monopoly in crude oil exploration activities because of plenty of natural oil resources.

### **9. Technological Monopoly**

It emerges as a result of economies of large scale production, use of capital goods, new production methods, etc. E.g. engineering goods industry, automobile industry, software industry, etc.

### **10. Joint Monopoly**

A number of business firms acquire monopoly position through amalgamation, cartels, syndicates, etc, it becomes joint monopoly. e.g. Actually, pizza making firm and burger making firm are competitors of each other in fast food industry. But when they combine their business, that leads to reduction in competition. So they can enjoy monopoly power in market.

### **Monopolistic Competition**

1. Pure monopoly and perfect competition are two extreme cases of market structure. In reality, there are markets having large number of producers competing with each other in order to sell their product in the market. Thus, there is monopoly on one hand and perfect competition on other hand. Such a mixture of monopoly and perfect competition is called as monopolistic competition. It is a case of imperfect competition.



2. Monopolistic competition has been introduced by American economist Prof. Edward Chamberlin, in his book 'Theory of Monopolistic Competition' published in 1933.

### Features of Monopolistic Competition ↓

The following are the features or characteristics of monopolistic competition :-

#### 1. Large Number of Sellers

There are large number of sellers producing differentiated products. So, competition among them is very keen. Since number of sellers is large, each seller produces a very small part of market supply. So no seller is in a position to control price of product. Every firm is limited in its size.

#### 2. Product Differentiation

It is one of the most important features of monopolistic competition. In perfect competition, products are homogeneous in nature. On the contrary, here, every producer tries to keep his product dissimilar than his rival's product in order to maintain his separate identity. This boosts up the competition in market. So, every firm acquires some monopoly power.

#### 3. Freedom of Entry and Exit

This feature leads to stiff competition in market. Free entry into the market enables new firms to come with close substitutes. Free entry or exit maintains normal profit in the market for a longer span of time.

#### 4. Selling Cost

It is a unique feature of monopolistic competition. In such type of market, due to product differentiation, every firm has to incur some additional expenditure in the form of selling cost. This cost includes sales promotion expenses, advertisement expenses, salaries of marketing staff, etc. But on account of homogeneous product in perfect competition and zero competition in monopoly, selling cost does not exist there.

#### 5. Absence of Interdependence

Large numbers of firms are different in their size. Each firm has its own production and marketing policy. So no firm is influenced by other firm. All are independent.

#### 6. Two Dimensional Competition

Monopolistic competition has two types of competition aspects viz.

- i. Price competition i.e. firms compete with each other on the basis of price.
- ii. Non price competition i.e. firms compete on the basis of brand, product quality advertisement.

#### 7. Concept of Group

In place of Marshallian concept of industry, Chamberlin introduced the concept of Group under monopolistic competition. An industry means a number of firms producing identical product. A group means a number of firms producing differentiated products which are closely related.



### 8. Falling Demand Curve

In monopolistic competition, a firm is facing downward sloping demand curve i.e. elastic demand curve. It means one can sell more at lower price and vice versa.

### Oligopoly

The term oligopoly is derived from two Greek words: 'oligi' means few and 'polein' means to sell. Oligopoly is a market structure in which there are only a few sellers (but more than two) of the homogeneous or differentiated products. So, oligopoly lies in between monopolistic competition and monopoly.

Oligopoly refers to a market situation in which there are a few firms selling homogeneous or differentiated products. Oligopoly is, sometimes, also known as 'competition among the few' as there are few sellers in the market and every seller influences and is influenced by the behaviour of other firms.

### Example of Oligopoly:

In India, markets for automobiles, cement, steel, aluminium, etc, are the examples of oligopolistic market. In all these markets, there are few firms for each particular product.

DUOPOLY is a special case of oligopoly, in which there are exactly two sellers. Under duopoly, it is assumed that the product sold by the two firms is homogeneous and there is no substitute for it. Examples where two companies control a large proportion of a market are: (i) Pepsi and Coca-Cola in the soft drink market; (ii) Airbus and Boeing in the commercial large jet aircraft market; (iii) Intel and AMD in the consumer desktop computer microprocessor market.

### Types of Oligopoly:

#### 1. Pure or Perfect Oligopoly:

If the firms produce homogeneous products, then it is called pure or perfect oligopoly. Though, it is rare to find pure oligopoly situation, yet, cement, steel, aluminum and chemicals producing industries approach pure oligopoly.

#### 2. Imperfect or Differentiated Oligopoly:

If the firms produce differentiated products, then it is called differentiated or imperfect oligopoly. For example, passenger cars, cigarettes or soft drinks. The goods produced by different firms have their own distinguishing characteristics, yet all of them are close substitutes of each other.

#### 3. Collusive Oligopoly:

If the firms cooperate with each other in determining price or output or both, it is called collusive oligopoly or cooperative oligopoly.

#### 4. Non-collusive Oligopoly:

If firms in an oligopoly market compete with each other, it is called a non-collusive or non-cooperative oligopoly.





## Features of Oligopoly:

The main features of oligopoly are elaborated as follows:

### 1. Few firms:

Under oligopoly, there are few large firms. The exact number of firms is not defined. Each firm produces a significant portion of the total output. There exists severe competition among different firms and each firm try to manipulate both prices and volume of production to outsmart each other. For example, the market for automobiles in India is an oligopolist structure as there are only few producers of automobiles.

The number of the firms is so small that an action by any one firm is likely to affect the rival firms. So, every firm keeps a close watch on the activities of rival firms.

### 2. Interdependence:

Firms under oligopoly are interdependent. Interdependence means that actions of one firm affect the actions of other firms. A firm considers the action and reaction of the rival firms while determining its price and output levels. A change in output or price by one firm evokes reaction from other firms operating in the market.

For example, market for cars in India is dominated by few firms (Maruti, Tata, Hyundai, Ford, Honda, etc.). A change by any one firm (say, Tata) in any of its vehicle (say, Indica) will induce other firms (say, Maruti, Hyundai, etc.) to make changes in their respective vehicles.

### 3. Non-Price Competition:

Under oligopoly, firms are in a position to influence the prices. However, they try to avoid price competition for the fear of price war. They follow the policy of price rigidity. Price rigidity refers to a situation in which price tends to stay fixed irrespective of changes in demand and supply conditions. Firms use other methods like advertising, better services to customers, etc. to compete with each other.

If a firm tries to reduce the price, the rivals will also react by reducing their prices. However, if it tries to raise the price, other firms might not do so. It will lead to loss of customers for the firm, which intended to raise the price. So, firms prefer non- price competition instead of price competition.

### 4. Barriers to Entry of Firms:

The main reason for few firms under oligopoly is the barriers, which prevent entry of new firms into the industry. Patents, requirement of large capital, control over crucial raw materials, etc, are some of the reasons, which prevent new firms from entering into industry. Only those firms enter into the industry which is able to cross these barriers. As a result, firms can earn abnormal profits in the long run.

### 5. Role of Selling Costs:

Due to severe competition and interdependence of the firms, various sales promotion techniques are used to promote sales of the product. Advertisement is in full swing under oligopoly, and many a times advertisement can become a matter of life-and-death. A firm under oligopoly relies more on non-price competition.



Selling costs are more important under oligopoly than under monopolistic competition.

#### **6. Group Behaviour:**

Under oligopoly, there is complete interdependence among different firms. So, price and output decisions of a particular firm directly influence the competing firms. Instead of independent price and output strategy, oligopoly firms prefer group decisions that will protect the interest of all the firms. Group Behaviour means that firms tend to behave as if they were a single firm even though individually they retain their independence.

#### **7. Nature of the Product:**

The firms under oligopoly may produce homogeneous or differentiated product.

- i. If the firms produce a homogeneous product, like cement or steel, the industry is called a pure or perfect oligopoly.
- ii. If the firms produce a differentiated product, like automobiles, the industry is called differentiated or imperfect oligopoly.

#### **8. Indeterminate Demand Curve:**

Under oligopoly, the exact behaviour pattern of a producer cannot be determined with certainty. So, demand curve faced by an oligopolist is indeterminate (uncertain). As firms are inter-dependent, a firm cannot ignore the reaction of the rival firms. Any change in price by one firm may lead to change in prices by the competing firms. So, demand curve keeps on shifting and it is not definite, rather it is indeterminate.

#### **Duopoly**

Duopoly is a limiting case of oligopoly, in the sense that it has all the characteristics of oligopoly except the number of sellers which are only two increase of duopoly as against a few in oligopoly. The main distinguishing feature of duopoly (and also of oligopoly) from other market situating is that the sellers' decisions are not independent of each other.

A change in price and output by our seller affect the former, and now the former may have to react. This process of action- reaction of the sellers may continue. This when a duopolist (or an oligopolist) takes any policy decision he also takes into account the reactions of his rivals. That is, such a market situation is characteristics by the mutual interdependence in policy-making.

Thus, Oligopoly is a situation where a few large firms complete against each other and there is an element of interdependence in the decision making of these firms. Each firm in the oligopoly recognizes this interdependence.

Any decision one firm makes (be it on price, product or promotion) will affect the trade of the competitors and so results in countermoves.

**In order to differentiate oligopoly situation from perfect and monopoly situations, it is essential to understand the following main features of oligopoly:**

- (a) Small number of large sellers.
- (b) Interdependence.



(c) Presence of monopoly element—so long products are differentiated, the firms enjoy some monopoly power, as each product will have some loyal customers.

(d) Existence of price rigidity.

(e) Advertising—Given high Gross elasticity demand for products and price rigidity in oligopoly the only way open to oligopolist is to raise his sales volume by either advertising or improving the quality.

Advertisement expenditure is aimed primarily at shifting the demand in favour of the product.

**Examples are:**

Pepsi and Coca-Cola soft drinks.

**Price Determination under Perfect Competition**

1. In perfect competition, price is determined by the market forces of demand and supply. All buyers and sellers are price takers and not price makers. Buyer represents demand side in the market. Every rational buyer aims at maximising his satisfaction by purchasing more at lower price and lower at higher price. This is called demand behaviour of buyer i.e. Law of Demand.
2. Seller represents supply side in the market. Every rational seller aims at maximizing his profits by selling more at higher price and lesser at lower price. This is called supply behaviour of seller i.e. Law of supply. But at a common price, buyer is ready to demand a particular quantity of goods and seller is also ready to supply exactly the same quantity of goods to buyer, such common price is called 'Equilibrium Price' and such quantity is called 'Equilibrium Quantity'.

**"Equilibrium Price is a price which equates both demand and supply".**

**Table - Sample Demand and Supply Schedules**

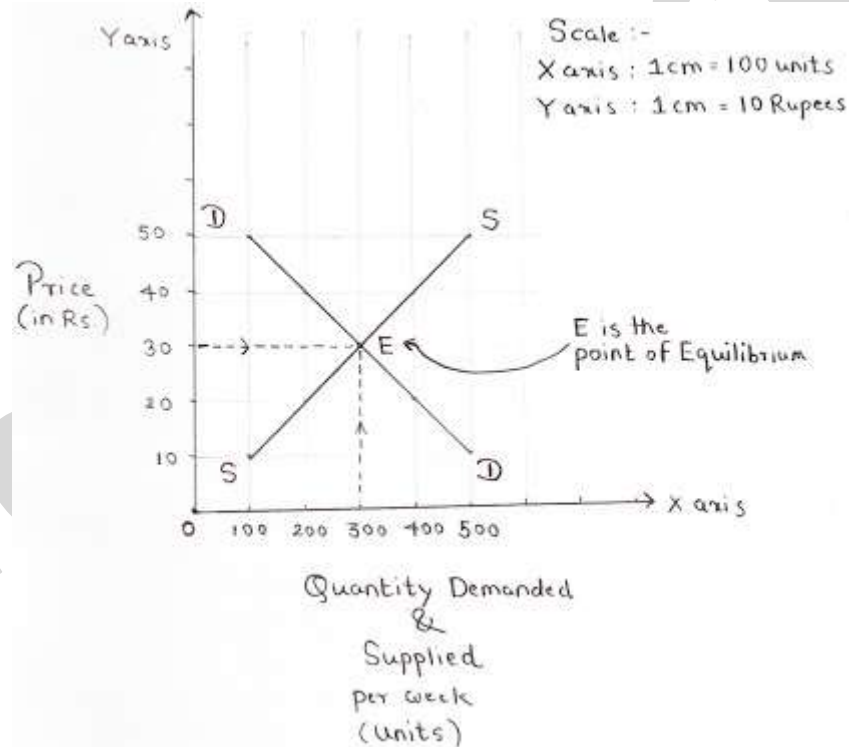
**Demand and Supply Schedules**

Price per unit of commodity (Rs.)	Quantity demanded per week (Units)	Quantity Supplied per week (Units)
50	100	500
40	200	400
30	300	300
20	400	200
10	500	100



It is the price at which total demand is exactly equal to total supply. Graphically it is the point where DD curve and SS curve intersect each other.

### Graph - Equilibrium Price Determination



In the above graphical diagram, the following points have been observed :-

1. On X axis, quantity demand and supplied per week has been given and on Y axis, price has been given.
2. Buyers are purchasing more at lower price and vice versa. This negative relationship is shown by downward sloping DD curve.
3. Sellers are selling more at higher price and vice versa. This positive relationship is shown by upward sloping SS curve.
4. As per the data given in table, Rs. 30 is that price at which demand equates supply (300 units). So, Rs. 30 is an equilibrium price and 300 units is an equilibrium quantity.
5. Suppose, price falls to Rs. 20/-, So this results into increase in demand (as per Law of Demand) and decrease in supply (as per Law of Supply). Since  $DD > SS$ , i.e. because of low supply, sellers will be dominant and competition will be among buyers, this leads to rise in price level. (i.e. from Rs. 20 to Rs. 30) Again price will come back at original level i.e. equilibrium price (Rs. 30).
6. Suppose, supply exceeds demand ( $DD < SS$ ) now buyers become dominant and competition will be among sellers. This leads to downfall in price. (i.e. from Rs. 40 to Rs.30). Again price will come back to original level. i.e. equilibrium price (Rs. 30).
7. Such automatic adjustment by demand and supply forces will keep single price in market.



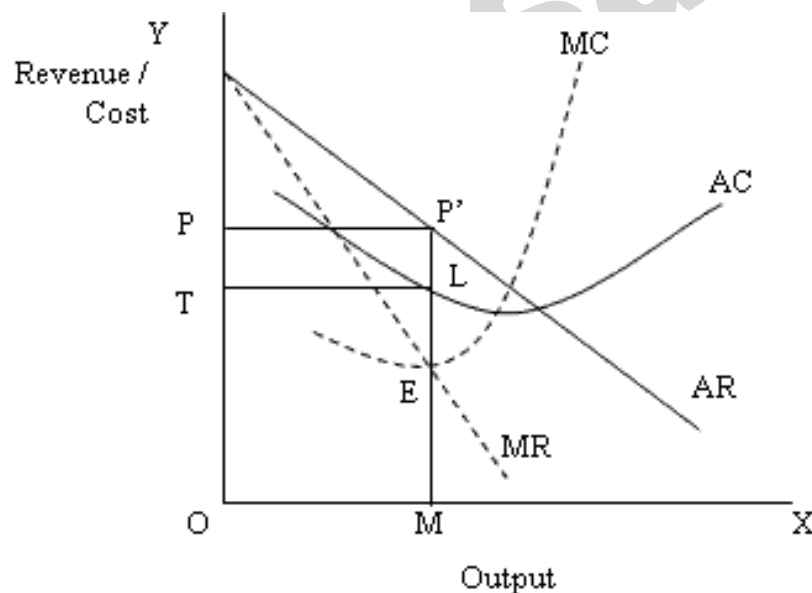
### Price Determination under Monopoly

1. *Monopoly is that market form in which a single producer controls the whole supply of a single commodity which has no close substitute.*
2. From this definition there are two points that must be noted:

**(i) Single Producer:** There must be only one producer who may be an individual, a partnership firm or a joint stock company. Thus single firm constitutes the industry. The distinction between firm and industry disappears under conditions of monopoly.

**(ii) No Close Substitute:** The commodity produced by the producer must have no closely competing substitutes, if he is to be called a monopolist. This ensures that there is no rival of the monopolist. Therefore, the cross elasticity of demand between the product of the monopolist and the product of any other producer must be very low.

3. A firm under monopoly faces a downward sloping demand curve or average revenue curve. Further, in monopoly, since average revenue falls as more units of output are sold, the marginal revenue is less than the average revenue. In other words, under monopoly the MR curve lies below the AR curve.
4. The Equilibrium level in monopoly is that level of output in which marginal revenue equals marginal cost. The producer will continue producer as long as marginal revenue exceeds the marginal cost. At the point where MR is equal to MC the profit will be maximum and beyond this point the producer will stop producing.



5. It can be seen from the diagram that up till OM output, marginal revenue is greater than marginal cost, but beyond OM the marginal revenue is less than marginal cost. Therefore, the monopolist will be in equilibrium at output OM where marginal



revenue is equal to marginal cost and the profits are the greatest. The corresponding price in the diagram is  $MP'$  or  $OP$ . It can be seen from the diagram at output  $OM$ , while  $MP'$  is the average revenue,  $ML$  is the average cost, therefore,  $P'L$  is the profit per unit. Now the total profit is equal to  $P'L$  (profit per unit) multiply by  $OM$  (total output).

6. In the short run, the monopolist has to keep an eye on the variable cost, otherwise he will stop producing. In the long run, the monopolist can change the size of plant in response to a change in demand. In the long run, he will make adjustment in the amount of the factors, fixed and variable, so that  $MR$  equals not only to short run  $MC$  but also long run  $MC$ .

### **Price Determination under Monopolistic Competition:**

Now the question arises at which price-output level the monopolistic competitive firm will be in equilibrium position? Here we have to remember that every seller, whether a monopolist or one working under perfectly or imperfectly competitive situations, wants to maximise his profits.

The seller will go on producing till the extra receipts to be had from additional production exceed the extra cost incurred in the production process. In other words, profits will be maximised when marginal revenue is equal to marginal cost. So long as marginal revenue is greater than marginal cost, the seller will find it profitable to expand his output, and if marginal revenue is less than marginal cost, obviously it is to his advantage to reduce his output to the point where marginal revenue is equal to marginal cost. In the short run, therefore, the firm will be in equilibrium when it is maximising its profits, i.e., when

$$\text{Marginal Revenue} = \text{Marginal Cost}$$

In the short run, a monopolistically competitive firm may either realise abnormal profits or be faced with losses. But, in the long run, such supernormal profits disappear. This is because we assume that entry is free and new firms will enter the industry if the existing firms are making supernormal profits.

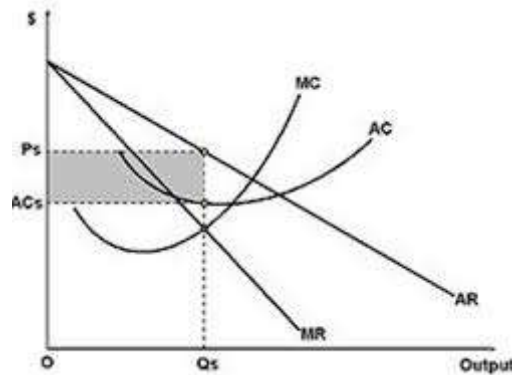
As new firms enter and start production, the demand curve or average revenue curve faced by the firms will fall (shift to the left) and, therefore, the supernormal profits will be competed away, and the firms will be earning only normal profits.

Similarly, if in the short run firms are suffering losses, then in the long run some firms will leave the industry so that the remaining firms are able to earn normal profits. Another point which is to be noted in regard to the long-run equilibrium under monopolistic competition is that average revenue curve in the long run will be more elastic, since large number of substitutes will be available in the long run. Therefore, in the long run, equilibrium is restored when firms are earning only normal profits. Now, profits are normal only when

$$\text{Average Revenue} = \text{Average Cost.}$$

Therefore, equilibrium in the long run under imperfect competition holds when

$$\text{Average Revenue} = \text{Average Cost.}$$



### Price determination under Oligopoly:

In an oligopoly, the number of sellers is small as against a sole seller under monopoly and many sellers under monopolistic competition.

### Principal Characteristics of Oligopoly

The principal features of oligopoly are as under:

#### (i) Interdependence:

Owing to a small number of sellers, the price-output decisions of one firm are taken note of by other firms and affect their decisions too.

#### (ii) Indeterminate Demand Curve:

Since no firm is able to predict the reaction or behaviour of other firms consequent on price output decision of one firm, there is uncertainty, and no firm can be sure of the quantity of the commodity it can sell at a price. The demand curve is thus indeterminate.

#### (iii) High Pressure Salesmanship:

There being only a small number of firms in the field, there is a tendency for a firm in oligopoly to increase its selling costs and indulge in advertisement so that it may capture as much of the market as possible. There is a counter-campaign by the rivals.

#### (iv) Sticky Prices:

In order to avoid adverse reaction by the rivals, there is a tendency for the firms to avoid changing the price of their products. Hence comparative price stability rules in the oligopolistic market.

### How is Price Determined under Oligopoly?

Since price-output decisions by one firm affect the decisions of other firms, nobody can be sure of their reaction. As pointed out above, the demand curve is indeterminate and no single price-output decision is possible.

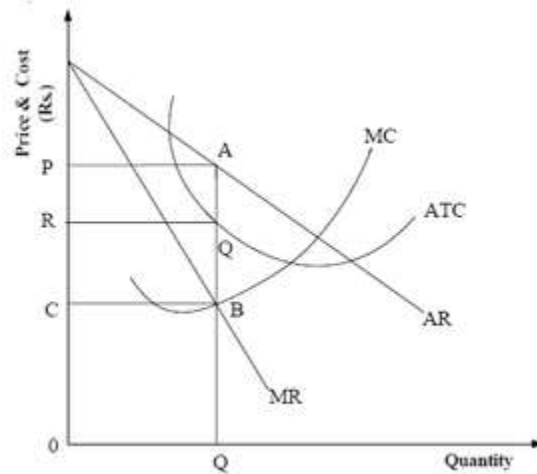


**renaissance**

college of commerce & management

B.Com (Hons.) I Year

Subject: Managerial Economics







UNIT-IV

FACTORS OF PRODUCTION

FACTORS OF PRODUCTION

- 1) Production is the process of conversion of inputs into outputs.
- 2) By production, we mean the process by which man utilizes or converts the natural resources, working upon them so as to make them satisfy human wants.
- 3) It is the creation of utility and addition of value. This creation of utility may be by way of creating goods in physical terms (called commodities) or non-physical terms (called services).
- 4) Production of all goods and services require the use of certain factors (or inputs). The inputs/resources used for production are called factors of production. These are namely land, labour, capital & entrepreneur.

LAND -

**The term 'Land' in economics is often used in a wider sense. It does not mean only the surface of the soil, but it also includes all those natural resources which are the free gifts of nature.**

It, therefore, means all the free gifts of nature. These natural gifts include: (i) rivers, forests, mountains and oceans; (ii) heat of sun, light, climate, weather, rainfall, etc. which are above the surface of land; (iii) minerals under the surface of the earth such as iron, coal, copper, water, etc. According to Marshall, "By land is meant... materials and forces which nature gives freely for man's aid in land, water, air, light and heat." Therefore, land is a stock of free gifts of nature

**Characteristics of Land:**

Land possesses the following characteristics:

**1. Free Gift of Nature:**

Man has to make efforts in order to acquire other factors of production. But to acquire land no human efforts are needed. Land is not the outcome of human labour. Rather, it existed even long before the evolution of man.

**2. Fixed Quantity:**

The total quantity of land does not undergo any change. It is limited and cannot be increased or decreased with human efforts. No alteration can be made in the surface area of land.

**3. Land is Permanent:**

All man-made things are perishable and these may even go out of existence. But land is indestructible. Thus it cannot go out of existence. It is not destructible.

**4. Land is a Primary Factor of Production:**

In any kind of production process, we have to start with land. For example, in industries, it helps to provide raw materials, and in agriculture, crops are produced on land.

**5. Land is a Passive Factor of Production:**

This is because it cannot produce anything by itself. For example, wheat cannot grow on a piece of land automatically. To grow wheat, man has to cultivate land. Labour is an active factor but land is a passive factor of production.



**6. Land is Immovable:**

It cannot be transported from one place to another. For instance, no portion of India's surface can be transported to some other country.

**7. Land has some Original Indestructible Powers:**

There are some original and indestructible powers of land, which a man cannot destroy. Its fertility may be varied but it cannot be destroyed completely.

**8. Land Differs in Fertility:**

Fertility of land differs on different pieces of land. One piece of land may produce more and the other less.

**9. Supply of Land is Inelastic:**

The demand for a particular commodity makes way for the supply of that commodity, but the supply of land cannot be increased or decreased according to its demand.

**10. Land has Many Uses:**

We can make use of land in many ways. On land, cultivation can be done, factories can be set up, roads can be constructed, buildings can be raised and shipping is possible in the sea and big rivers.

**LABOUR**

Labour includes both physical and mental work undertaken for some monetary reward. In this way, workers working in factories, services of doctors, advocates, ministers, officers and teachers are all included in labour. Any physical or mental work which is not undertaken for getting income, but simply to attain pleasure or happiness, is not labour.

For example, the work of a gardener in the garden is called labour, because he gets income for it. But if the same work is done by him in his home garden, it will not be called labour, as he is not paid for that work. So, if a mother brings up her children, a teacher teaches his son and a doctor treats his wife, these activities are not considered 'labour' in economics. It is so because these are not done to earn income.

**Characteristics of Labour:**

Labour has the following peculiarities which are explained as under:

**1. Labour is Perishable:**

Labour is more perishable than other factors of production. It means labour cannot be stored. The labour of an unemployed worker is lost forever for that day when he does not work. Labour can neither be postponed nor accumulated for the next day. It will perish. Once time is lost, it is lost forever.

**2. Labour cannot be separated from the Labourer:**

Land and capital can be separated from their owner, but labour cannot be separated from a labourer. Labour and labourer are indispensable for each other. For example, it is not possible to bring the ability of a teacher to teach in the school, leaving the teacher at home. The labour of a teacher can work only if he himself is present in the class. Therefore, labour and labourer cannot be separated from each other.

**3. Less Mobility of Labour:**

As compared to capital and other goods, labour is less mobile. Capital can be easily transported from one place to other, but labour cannot be transported easily from its present place to other



places. A labourer is not ready to go too far off places leaving his native place. Therefore, labour has less mobility.

#### **4. Weak Bargaining Power of Labour:**

The ability of the buyer to purchase goods at the lowest price and the ability of the seller to sell his goods at the highest possible price is called the bargaining power. A labourer sells his labour for wages and an employer purchases labour by paying wages. Labourers have a very weak bargaining power, because their labour cannot be stored and they are poor, ignorant and less organised.

Moreover, labour as a class does not have reserves to fall back upon when either there is no work or the wage rate is so low that it is not worth working. Poor labourers have to work for their subsistence. Therefore, the labourers have a weak bargaining power as compared to the employers.

#### **5. Inelastic Supply of labour:**

The supply of labour is inelastic in a country at a particular time. It means their supply can neither be increased nor decreased if the need demands so. For example, if a country has a scarcity of a particular type of workers, their supply cannot be increased within a day, month or year. Labourers cannot be 'made to order' like other goods.

The supply of labour can be increased to a limited extent by importing labour from other countries in the short period. The supply of labour depends upon the size of population. Population cannot be increased or decreased quickly. Therefore, the supply of labour is inelastic to a great extent. It cannot be increased or decreased immediately.

#### **6. Labourer is a Human being and not a Machine:**

Every labourer has his own tastes, habits and feelings. Therefore, labourers cannot be made to work like machines. Labourers cannot work round the clock like machines. After continuous work for a few hours, leisure is essential for them.

#### **7. A Labourer sells his Labour and not Himself:**

A labourer sells his labour for wages and not himself. 'The worker sells work but he himself remains his own property'. For example, when we purchase an animal, we become owners of the services as well as the body of that animal. But we cannot become the owner of a labourer in this sense.

#### **8. Increase in Wages may reduce the Supply of Labour:**

The supply of goods increases, when their prices increase, but the supply of labourers decreases, when their wages are increased. For example, when wages are low, all men, women and children in a labourer's family have to work to earn their livelihood. But when wage rates are increased, the labourer may work alone and his wife and children may stop working. In this way, the increase in wage rates decreases the supply of labourers. Labourers also work for less hours when they are paid more and hence again their supply decreases.

#### **9. Labour is both the Beginning and the End of Production:**

The presence of land and capital alone cannot make production. Production can be started only with the help of labour. It means labour is the beginning of production. Goods are produced to satisfy human wants. When we consume them, production comes to an end. Therefore, labour is both the beginning and the end of production.

#### **10. Differences in the Efficiency of Labour:**

Labourer differs in efficiency. Some labourers are more efficient due to their ability, training and skill, whereas others are less efficient on account of their illiteracy, ignorance, etc.



### **11. Indirect Demand for Labour:**

The consumer goods like bread, vegetables, fruit, milk, etc. have direct demand as they satisfy our wants directly. But the demand for labourers is not direct, it is indirect. They are demanded so as to produce other goods, which satisfy our wants. So the demand for labourers depends upon the demand for goods which they help to produce. Therefore, the demand for labourers arises because of their productive capacity to produce other goods.

### **12. Difficult to find out the Cost of Production of Labour:**

We can easily calculate the cost of production of a machine. But it is not easy to calculate the cost of production of a labourer i.e., of an advocate, teacher, doctor, etc. If a person becomes an engineer at the age of twenty, it is difficult to find out the total cost on his education, food, clothes, etc. Therefore, it is difficult to calculate the cost of production of a labourer.

### **13. Labour creates Capital:**

Capital, which is considered as a separate factor of production is, in fact, the result of the reward for labour. Labour earns wealth by way of production. We know that capital is that portion of wealth which is used to earn income. Therefore, capital is formulated and accumulated by labour. It is evident that labour is more important in the process of production than capital because capital is the result of the working of labour.

### **14. Labour is an Active Factor of Production:**

Land and capital are considered as the passive factors of production, because they alone cannot start the production process. Production from land and capital starts only when a man makes efforts. Production begins with the active participation of man. Therefore, labour is an active factor of production.

## **DIVISION OF LABOUR AND EFFICIENCY OF LABOUR**

Division of labour first originated from the division of workers in different occupations. Now, when the production is done on a large scale with the help of heavy machines, it is split up into a number of processes and many people join to produce an article.

It is called the division of labour. For instance, in a large scale readymade garment factory, a man does cutting of cloth, the second man stitches clothes with machines, the third buttons, the fourth makes folding and packing, etc.

This way of doing the work is called division of labour because different workers are engaged in performing different parts of production. In the words of Watson, "Production by division of labour consists in splitting up the productive process into its component parts."

In fact, one cannot produce all the goods he requires. Production has become so technical and complex that different workers are put to different tasks according to their capacity and ability. One becomes specialised in the production of those goods for which he or she is best suited. Different workers perform different parts of production on the basis of their specialisation.

The result is that goods come to the final shape with the cooperation of many workers. Thus, division of labour means that the main process of production is split up into many simple parts and each part is taken up by different workers who are specialised in the production of that specific part.

### **Forms of Division of Labour:**



The division of labour has been divided into different forms by the economists which can be explained as follows:

**1. Simple Division of Labour:**

When the production is split up into different parts and many workers come together to complete the work, but the contribution of each worker cannot be known, it is called simple division of labour. For example, when many persons carry a huge log of wood, it is difficult to assign how much labour has been contributed by an individual worker. It is simple division of labour.

**2. Complex Division of Labour:**

When the production is split up into different parts and each part is performed by different workers who have specialised in it, it is called complex division of labour. For example, in a shoe factory one worker makes the upper portion, the second one prepares the soles, the third one stitches them, the fourth one polishes them, and so on. In this way, shoes are manufactured. It is a case of complex division of labour.

**3. Occupational Division of Labour:**

When the production of a commodity becomes the occupation of the worker, it is called occupational division of labour. Thus, the production of different goods has created different occupations. The caste system in India is perhaps the best example of the occupational division of labour. The work of farmers, cobblers, carpenters, weavers and blacksmiths is known as occupational division of labour.

**4. Geographical or Territorial Division of Labour:**

Sometimes, due to different reasons, the production of goods is concentrated at a particular, place, state or country. This particular type of division of labour comes into being when the workers or factories having specialised in the production of a particular commodity are found at a particular place. That place may be the most suitable geographically for the production of that commodity. This is called the geographical or territorial division of labour. For example, Assam has specialised in the production of tea, whereas the textile industry is localised in Mumbai and the jute production in West Bengal.

**Merits and Demerits of Division of Labour:**

Division of labour possesses the following merits and demerits:

**Its Merits:**

**Division of labour has the following merits:**

**1. Increase in Production:**

With the adoption of division of labour, the total production increases. Adam Smith has explained the advantage of division of labour with the help of an example that a worker can produce only 20 pins daily. If the making of pins in a modern factory is divided into 18 processes, then 18 workers can produce 48,000 pins in a single day.

**2. Increase in Efficiency of Labour:**

With division of labour, a worker has to do the same work time and again, and he gets specialisation in it. In this way, the division of labour leads to a great increase in efficiency.

**3. Increase in Skill:**



Division of labour contributes to the development of skill, because with the repetition of the same work, he becomes specialised in it. This specialisation enables him to do the work in the best possible way, which improves his skill.

**4. Increase in Mobility of Labour:**

Division of labour facilitates greater mobility of labour. In it, the production is split up into different parts and a worker becomes trained in that very specific task in the production of the commodity which he performs time and again. He becomes professional, which leads to the occupational mobility. On the other hand, division of labour implies a large-scale production and labourers come to work from far and near. Thus, it increases geographical mobility of labour.

**5. Increase in Use of Machines:**

The division of labour is the result of the large-scale production, which implies more use of machines. On the other hand, the division of labour increases the possibility of the use of machines in the small-scale production also. Therefore, in modern times the use of machines is increasing continuously due to the increase in the division of labour.

**6. Increase in Employment Opportunities:**

Division of labour leads to the diversity of occupations which further leads to the employment opportunities. On the other hand, the scale of production being large, the number of employment opportunities also increases.

**7. Work According to Taste:**

Workers have their own taste in production. For example, a person can take up that type of job for which he considers himself to be the most suitable and which is in accordance with his taste. Division of labour extends the work to such an extent that every person can find work according to his taste and interest.

**8. Work for Disable:**

Division of labour splits up the production work in small processes and different persons can work at different places with the help of machines. Certain machines can be operated with the help of hands only and others with the help of foot as well. Therefore, the disabled persons can also find work according to their suitability.

**9. Best Use of Tools:**

In this system, it is not necessary to provide each worker with a complete set of tools. He needs a few tools only for the job in which he can make their best use. Therefore, the continuous use of tools is possible which are used at different stages.

**10. Best Selection of the Workers:**

Division of labour helps the employers in the best selection of workers.

As the work is divided into different parts and each part is taken up by such a worker who is more suitable for it, the employer can select very easily the man who is best suited for the work.

**11. Saving of Capital and Tools:**

Division of labour helps in the saving of capital and tools. It is not essential to provide a complete set of tools to every worker. He needs a few tools only for the job he has to do. Thus there is the saving of tools as well as capital. For instance, if a tailor stitches the shirt, he requires a sewing machine, scissors, etc. But on the basis of division of labour, one can do the cutting and the other can stitch the clothes. In this way, two tailors can work with the help of one pair of scissors and one machine only.



**12. Goods of Superior Quality:**

Division of labour is beneficial in making goods of superior quality. When the worker is entrusted with the work for which he is best suited, he will produce superior quality goods.

**13. Saving of Time:**

There is no need for the worker to shift from one process to another. He is employed in a definite process with certain tools. He, therefore, goes on working without loss of time, sitting at one place. Continuity in work also saves time and helps in more production at less cost.

**14. Right Man at the Right Job:**

Division of labour implies splitting up of production into a number of processes. Each person is given the job for which he is best suited. There will be no round pegs in square holes. In this way, a right man is placed at the right job.

**15. Reduction in the Cost of Production:**

If a shoe-maker makes himself two pairs of shoes daily, then four shoe-makers can make more than eighth pairs of shoes if they work in cooperation with each other. In this way, division of labour increases production which reduces the average cost of production. Saving of capital, tools and machinery, etc. also help in the reduction of cost of production.

**16. Cheap Goods:**

Division of labour helps in mass production. Thus production becomes less expensive and more economical. Therefore, cheaper goods are turned out, which improve the standard of living of the people.

**17. Saving of Time and Expenses in Training:**

Under division of labour, a worker has to train himself in a small part of production. There is no need to learn the whole process of production. It ensures saving of time as well as expenses in training.

**18. Spirit of Co-operation among Workers:**

Division of labour gives chances of working under the same roof and with the cooperation of each other. It further gives rise to the feeling of cooperation and trade unionism in their daily lives. The work cannot be completed unless they cooperate with each other. They help each other at the time of adversities as well.

**19. Development of International Trade:**

Division of labour increases the tendency of specialisation not only in the workers or industries, but in different countries also. On the basis of specialisation, every country produces only those goods in which it has a comparative advantage and imports such goods from those countries which have also greater comparative advantage. Therefore, division of labour is beneficial for the development of international trade also.

**Its Demerits:**

The division of labour has also certain demerits which are explained below:

**1. Monotony:**

Under division of labour, a worker has to do the same job time and again for years together. Therefore, after some time, the worker feels bored or the work becomes irksome and monotonous.



There remains no happiness or pleasure in the job for him. It has an adverse effect on the production.

**2. Loss of Joy:**

In the absence of division of labour, he feels a lot of pleasure on the successful completion of his goods. But under division of labour, nobody can claim the credit of making it. The work gives him neither pride nor pleasure. Therefore, there is total loss of joy, happiness and interest in the work.

**3. Loss of Responsibility:**

Many workers join hands to produce a commodity. If the production is not good and adequate, none can be held responsible for it. It is generally said that 'every man's responsibility is no man's responsibility.' Therefore, the division of labour has the disadvantage of loss of responsibility.

**4. Loss of Mental Development:**

When the labourer is made to work only on a part of the work, he does not possess complete knowledge of the work. Thus, division of labour proves to be a hurdle in the way of mental development.

**5. Loss of Efficiency:**

Division of labour is sometimes accounted for the loss of efficiency. For instance, if a cobbler goes on cutting the leather for a long time, he may lose the efficiency of making shoes.

**6. Reduction in Mobility of Labour:**

The mobility of labour is reduced on account of division of labour. The worker performs only a part of the whole task. He is trained to do that much part only. So, it may not be easy for him to trace out exactly the same job somewhere else, if he wants to change the place. In this way, the mobility of labour gets retarded.

**7. Increased Dependence:**

When the production is split up into a number of processes and each part is performed by different workers, it may lead to over-dependence. For instance, in the case of a readymade garments factory, if the man cutting cloth is lazy, the work of stitching, buttoning, etc. will suffer. Therefore, increased dependence is the result of division of labour.

**8. Danger of Unemployment:**

The danger of unemployment is another disadvantage of division of labour. When the worker produces a small part of goods, he gets specialised in it and he does not have complete knowledge of the production of goods. For instance, a man is expert in buttoning the clothes. If he is dismissed from the factory, it is difficult for him to find the job of buttoning. Thus division of labour has a fear of unemployment.

**9. Increased Dependence on Machines:**

As division of labour increases, there will be an increased use of machines. Almost all the workers work on different types of machines. It is difficult for them to work without machines. Thus, division of labour increases the dependence on machines.

**10. Danger of Over-Production:**

Over-production means that the supply of production is comparatively more than its demand in the market. Because of the division of labour, when production is done on a large scale, the demand for production lags much behind its increased supply. Such conditions create overproduction which is very harmful for the producers as well as for the workers when they become unemployed.

**11. Exploitation of Labour:**





Division of labour is concerned with large scale production in big factories which are owned by the capitalists. No poor worker can afford to start his own production. Therefore, they have to seek employment in big factories of the capitalists. These employers pay less wages to them as compared to their marginal productivity, because there is no other alternative to the workers but to work at very low wages. Therefore, division of labour results in the exploitation of labour.

**12. Evils of Factory System:**

The modern industrial or factory system has been developed as a result of the division of labour. This system further gives rise to the evils like dense population, pollution, bad habits of gambling and drinking, low standard of living, poor food, clothes and housing, etc.

**13. Employment of Women and Children:**

Division of labour results in the large scale production in which children and women are also employed. It is because a simple and small part of the whole task can easily be performed by them. Thus the number of employed women and children increases. They are also exploited by the employers by paying them lower wages.

**14. Industrial Disputes:**

The industrial disputes mean strikes by workers, closure of factory, etc. due to clashes between the employees and the employers. Division of labour results in the division of society into workers and employers. The employer always tries to increase his profits by exploiting the workers and workers form trade unions against the employers to put an end to their exploitation or to make them increase their wages. It gives rise to a severe conflict between the employers and the workers in the form of strikes, closures and lockouts of factories.

**Conclusion:**

To sum up, we can say that division of labour is beneficial to the workers, to the producers and to the society as a whole. Its merits outweigh its demerits.

**EFFICIENCY OF LABOUR :-** The working capacity of the labour is called his efficiency being given the same time limit and given the same type of work.

***FACTORS DETERMINING THE EFFICIENCY OF LABOUR***

**1. PERSONAL QUALITIES :-** Some people have some personal qualities and they are suitably built for certain heavy labour. On other hand some people are very suitable for mental labour. Family background also plays very important role in this regard.

**2. EDUCATION :-** It is the basic and essential element which determines the efficiency of labour. Educated labourer is more efficient as compared to the illiterate worker.

**3. TRAINING AND SKILL :-** The modern world requires highly skilled labourers. A labourer with sound technical training will be more effective as compared to a labourer who has no training. It increases the efficiency of the labourer.

**4. CLIMATIC CONDITIONS :-** Climates also plays an important role in increasing or decreasing the



efficiency. Hot weather has a vital factor for the low efficiency of labour in Asia and Middle East. On other hand cold weather is an important element for increasing the efficiency in labour in U.S.A and Europe.

**5. WAGES AND BENEFITS :-** If wages, allowances, bonuses and other frigs benefits are given to the workers, then their working efficiency increases. Labourer works very hard if he has attractive salary. On other hand if wages rate is low then efficiency of the labourer will be also low.

**6. COMBINATION OF PRODUCTION FACTORS :-** If the other three factors of production combination is ideal then efficiency of labourer will be high otherwise low.

**7. WORKING HOURS :-** If working hours of labourer are reasonable then the efficiency will be high. If the working time is very long and without extra payment then efficiency of the worker will be low.

**8. ENVIRONMENT :-** If the working environment is pleasant then efficiency of labourer will be high. It is observed that labourer working in air conditions rooms and healthy conditions are more efficient as compared to others.

**9. RACIAL QUALITIES :-** By birth some races are very hard working and strong built so they are more efficient as compared to other races.

### ***FACTORS PROMOTING EFFICIENCY OF LABOUR***

Following are the important factors which promote the efficiency of labour.

**1. INCREASE IN WAGES :-** Increase in wages and fringe benefits promote the efficiency of labour. When wages and incentives will increase it will make the labourer hard worker and efficient.

**2. TECHNICAL EDUCATION :-** Vocational, technical and commercial colleges, should be opened to provide technical skill to the people. Modern industry, agriculture, banking, transport and commerce require highly skilled persons. Such type of training and skill is provided in the colleges and universities.

**3. CARE OF HEALTH :-** Health facilities should be provided to the labourers. A healthy worker can work more efficiently as compared to sick worker. All the factory owners should opened the health clinics in their factories and regular medical check-up should be compulsory.

**4. INCREASES IN ALLOWANCES :-** Various types of allowances like dearness and bonus must be increased. Special allownces should be given to the efficient workers.

**5. LABOUR LAWS :-** Government should also frame the strict labour laws. In case of accident special compensation should be given. In case of industrial dispute courts should be established. This step will provide the security to the labourers and they will work with full concentration.



**6. SPECIAL STORES :-** To provide the goods on lower rates to the labourers special stores should be opened for the workers.

**7. ESTABLISHMENT OF THE CANTEEN :-** Lunch and dinner facility should be provided to the workers. On the lower rates food should be provided during the working interval. In this way time of the workers will be saved and their efficiency will increase.

### **MOBILITY OF LABOUR**

Mobility refers to the willingness and actual movement of labour from one place to another-near or far and distant. This mobility may be for searching jobs or for better job prospects. This mobility may be territorial, occupational or intra-regional.

### **FACTORS AFFECTING MOBILITY OF LABOUR:**

- 1) Means of transport and communication
- 2) Knowledge and Information
- 3) Stage of development
- 4) Family bonds
- 5) Urge to excel

### **CAPITAL**

#### **Meaning**

The term, 'Capital', in economics does not mean merely money as the accountants call it. Capital is that part of wealth which can be used for further production of wealth. According to Marshall, "Capital consists of all kinds of wealth, other than free gifts of nature, which yield income." Therefore, every type of wealth other than land which helps in further production of income is called capital.

In this way, money, machine, factories, etc. are included in capital provided they are used in production. For instance, if a man has an income of Rs 10,000 per month and out of it he invests Rs 6,000 in a business, this amount of Rs 6000 is called capital. In the same way, plough, tractor and other agricultural implements of farmers are also capital. The house in which a man resides is his wealth and the house which is given on rent is his capital.

### **Characteristics of Capital:**

Capital has its own peculiarities which distinguish it from other factors of production. Capital possesses the following main characteristics:

#### **1. Man Produces Capital:**

Capital is that wealth which is used in the production of goods. Capital is the result of human labour. Thus, every type of capital such as roads, machines, buildings and factories etc. are produced by man. It is a produced factor of production.

#### **2. Capital is a Passive Factor of Production:**

Capital cannot produce without the help of the active services of labour. To produce with machines, labour is required. Thus, labour is an active, whereas capital is a passive factor of production. Capital on its own cannot produce anything until labour works on it.



### **3. Capital is a Produced Means of Production:**

The composition or supply of capital is not automatic, but it is produced with the joint efforts of labour and land. Therefore, capital is a produced means of production.

### **4. Capital is Variable:**

The total supply of land cannot be changed, whereas the supply of capital can be increased or decreased. If the residents of a country produce more or save more from their income, and these savings are invested in factories or capital goods, it increases the supply of capital.

### **5. Capital is more Mobile than other Factors of Production:**

Of all the factors of production, capital is the most mobile. Land is perfectly immobile. Labour and entrepreneur also lack mobility. Capital can be easily transported from one place to another.

### **6. Capital Depreciates:**

As we go on using capital, the value of capital goes on depreciating. When machines are used continuously for some time, these depreciate and their value falls.

### **7. Capital is Stored-up Labour:**

Scholars like Marx admit that capital is stored-up labour. By putting in his labour man earns wealth. A part of this wealth is spent on consumption goods and the rest of it is saved. When saving is invested, it becomes capital. In other words, capital is the result of accumulation of savings of a man. Therefore, capital is stored-up labour.

### **8. Capital is Destructible:**

All capital goods are destructible and are not permanent. Because of the continuous use, machines and tools become useless with the passage of time.

#### Classification of Capital

The functional classification of capital is as follows:

- 1) Real capital and financial capital: Real capital refers to physical goods (capital goods as they are known to be) used for further production like, equipments, machinery, structure, plants etc. Financial capital is monetary resources available for investment into these physical goods.
- 2) Private capital and social capital: Private capital includes the amount and type of investment made by the private sector, usually, for earning some profits. Social capital, on the other hand, is created and developed by the state, for example, construction of roads, bridges, educational institutions and some such economic organizations.
- 3) Fixed and Floating capital: The long-term capital like plant and machinery is fixed capital whereas cash, inventories required for production is floating or circulating capital.
- 4) Tangible and Intangible capital: Any capital which has physical manifestation like plant and machinery, building etc. is called tangible capital, Intangible capital is, which is not physically existing but contributing to the production of goods and services like goodwill, brand image etc.
- 5) Indigenous and Foreign capital: Such capital having its sources from within the country is called indigenous capital whereas the capital, in any form, brought from abroad is called foreign capital.



## Capital Formation

Production is an ongoing process. Whatever amount of goods and services are produced in a certain period of time (usually in a year) is not consumed instantaneously. A part of it is set aside for "Some future use" in production. This keeps on increasing and used for further production sometime somewhere. This 'setting aside of a portion of current production' and used for further production is known as 'capital formation'. We may define capital formation as the surplus of production over consumption in a certain period which is used for further production.

## Role of Capital:

- 1) Capital formation plays a very crucial role in the process of economic development of a country. Higher the rate of capital formation higher will be the growth prospects of the economy. The fact is that capital formation shows the potentials of the economy.
- 2) Another contribution of capital accumulation (or formation) is that it makes the technology development possible in an economy. Without capital formation, new discoveries, inventions will remain unused and efforts in researching and developing them will go waste.
- 3) Capital formation also creates job opportunities in the economy both at the level of production of capital and at the level of utilization of such capital.

## Stages of Capital Formation:

- Stage 1: Savings
- Stage 2: Mobilisation of Savings
- Stage 3: Investment

## ORGANIZATION AND ENTERPRISE (ENTREPRENEURSHIP)

### Features of Entrepreneurship

The entrepreneur as an organizer of the process of production is the fore-runner of economic development of a country.

#### 1. Scarc human resource

Entrepreneurship is a very scarce human factor as it involves specific talent, organizational capacity, innovative spirit and boldness to bear risk which is not found in every person. In developing countries like India lack of entrepreneurship is a major impediment to development.

#### 2. Heterogeneous factor

Entrepreneurship is a heterogeneous factor of production because efficiency, talents, organizing skills, ability to bear risk, foresights and innovating capacities, etc. vary from entrepreneur to entrepreneur. The nature of enterprise varies with various forms of business organizations like sole trading, partnership, co-operatives, Joint Stock Company and public undertakings. In a small business, the same person may work as an entrepreneur, manager and capitalist.



### 3. Indispensable factor

In modern business entrepreneur is a very important factor of production as he organizes production of goods & services by coordinating the other factors in an optimum way. He is an organiser & owner of the firm. Production is impossible in his absence.

### 4. Intangible factor

Entrepreneurship is an abstract phenomenon. It is intangible. Entrepreneurial efforts cannot be measured in quantitative terms while we can measure in terms of hours of work and number of days. We can calculate the number of individual workers and their contribution to the firm but it is not possible to measure entrepreneurship as the firm itself is the enterprise.

### 5. Highly mobile

Of all factors entrepreneur possess a higher degree of mobility as he can easily move from one industry to another or from one region to another. An entrepreneur's ability to move from one industry to another depends upon his knowledge, experience and specialization.

### 6. Cannot be Bought & Sold

Land labour and capital can be bought and sold in factor markets but it is not possible to deal with entrepreneurs in a factor market. Since enterprise is an intangible factor, it cannot be bought and sold. Hence, like land, labour and capital market there is no entrepreneurial market where entrepreneurship can be bought and sold. Transaction is not possible in case of enterprise.

We cannot derive the demand and supply curves in case of entrepreneur. Hence, the Demand and Supply Theory of value cannot be applied to the factor enterprise or organization to determine its price.

### 7. Residual reward

Entrepreneurship is a reward in terms of profit which is a residual reward, i.e. an income which is left after meeting all business expenses from the total sales revenue.

### Functions of an Entrepreneur:

- 1) Co-ordinating functions
- 2) Risk bearing functions
- 3) Innovating functions



### THEORY OF WAGES

#### Wages

1) A wage is monetary compensation (or remuneration) paid by an employer to an employee in exchange for work done. Payment may be calculated as a fixed amount for each task completed (a task wage or piece rate), or at an hourly or daily rate, or based on an easily measured quantity of work done.

2) *Wages* is best associated with employee compensation based on the number of hours worked multiplied by an hourly rate of pay. For example, an employee working in an assembly plant might work 40 hours during the work week. If the person's hourly rate of pay is Rs.15, the employee will receive a paycheck showing *gross wages* of Rs. 600 (40 x Rs. 15)

#### Salary

1) Salary is a fixed amount of money or compensation paid to an employee by an employer in return for work performed. Salary is commonly paid in fixed intervals, for example, monthly payments of one-twelfth of the annual salary.

2) *Salary* is best associated with employee compensation quoted on an annual basis. For example, the manager of the assembly plan might earn a *salary* of Rs.120,000 per year. If the salaried manager is paid semi-monthly (perhaps on the 15th and last day of each month), her or his paycheck will show gross *salary* of Rs. 5,000 for the half-month.

3) Salary is typically determined by comparing market pay rates for people performing similar work in similar industries in the same region.

#### Wages V/s salary

- 1) Wage earners are paid by the hour whereas Salary earners are paid by the year.
- 2) Salary earners usually receive paid time when they are not working whereas Wage earners often have to give up pay for time off, Salaries are often calculated as packages
- 3) Wage earners get paid more for working more than 40 hours per week, Salary workers are rarely offered overtime pay.
- 4) Salaries can contain all kinds of benefits and perks whereas wage doesn't.

### THE SUBSISTENCE THEORY OF WAGES

- 1) This theory was originated with the Physiocratic School of the French economists and was developed by Adam Smith and the later economists of the classical school. The German economist Lassalle called it the Iron Law of Wages or the Brazen Law of Wages. Karl Marx made it the basis of his theory of exploitation.



- 2) According to this theory, wages tend to settle at the level just sufficient to maintain the worker and his family at the minimum subsistence level. If wages rise above the subsistence level, the workers are encouraged to marry and to have large families. The large supply of labour brings wages down to the subsistence level. If wages fall below this level, marriages and births are discouraged and under-nourishment increases death rate. Ultimately, labour supply is decreased, until wages rise again to the subsistence level. It is supposed that the labour supply is infinitely elastic, that is, its supply would increase if the price (i.e. wage) offered rises.

### **Criticism of subsistence theory**

- 1) This theory is almost completely outdated and has no such practical application, especially in advanced countries. The theory was based on the Malthusian Theory of Population. It is inappropriate to say that every increase in wages must inevitably be followed by an increase in birth rate. An increase in wages may be followed by a higher standard of living.
- 2) Ricardo was one of the exponents of the subsistence theory. He stressed the influence of custom and habit in determining what was necessary for the workers. But habits and customs change over time. Hence, the theory cannot hold good for a longer period of time, especially of a world characterised by fast changing habits. Ricardo, therefore, admitted that wages might rise above the subsistence level for an indefinite period in an improving society.
- 3) The second criticism against this theory is that the subsistence level is more or less uniform for all working classes with certain exceptions. The theory, thus, does not explain differences of wages in different employment.
- 4) The third criticism is that the theory explains wages only with reference to supply; the demand side has been entirely ignored. On the demand side, the employer has to consider the amount of work which the employee gives him and not the subsistence of the worker.
- 5) The fourth criticism is that the theory explains the adjustment of wages over the lifetime of a generation and does not explain wage fluctuations from year to year.
- 6) The fifth and the final criticism is that the term 'subsistence' has a very vague impression. Does it refer to the minimum requirements of a modern man or of a tribal savage?

### **MARGINAL PRODUCTIVITY THEORY OF WAGES**

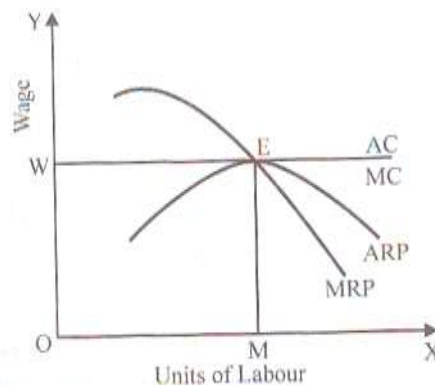
- 1) The marginal productivity theory was first stated by Von-Thunen. The theory has been developed by Wicksteed, Walras, J.B. Clark and many others.
- 2) Statement of the theory: Marginal productivity theory of wage explains that under perfect competition a worker's wage is equal to marginal as well as average revenue





productivity. In other words marginal revenue productivity and average revenue productivity (ARP) of a worker determine his wages.

- 3) According to this theory wage of a laborer is determined by his marginal productivity. In other words  $MRP = M.W$ . Marginal productivity is the addition made to total productivity by employing one more unit of labour. As the laborers are given money wage their marginal productivity is calculated in terms of money. This is called marginal revenue productivity (MRP). MRP is the addition made to the total revenue by employing one more unit of a worker. A producer will maximize his profit when the wage of a laborer is equal to the marginal revenue product.
- 4) If MW is greater than MRP ( $MW > MRP$ ) wage is greater than marginal revenue product. The producer will sustain loss then. If MW for labour is higher than its marginal revenue product then the employers get less and pay more. Thus he loses.
- 5) On the other hand if the producer pays wage less than MRP. ( $ME < MRP$ ) he will gain. But his gain will not be maximized. Thus he will gain by employing workers so long when  $MW = MRP$ . Thus the wage of a laborer will be determined where  $MRP = M.W$ .



$$VMP = MPP \times P.$$

*In Perfect competition  $MRP = VMP$*

*In imperfect competition  $MRP \neq VMP$*

Point E in the diagram is the point of equilibrium where  $MRP = ARP = MC = AC$

### Assumptions of marginal productivity theory

- (1) Perfect competition prevails in both product and factor market.
- (2) Law of diminishing marginal returns operates on the marginal productivity of labour.
- (3) Labour is homogeneous.
- (4) Full employment prevails.
- (5) The theory is based on long run.
- (6) Modes of production in constant.

### Criticism of marginal productivity theory:



1. The theory is based on the assumption of perfect competition. But perfect competition is unreal and imaginary. Thus theory seems in practicable.
2. The theory puts too much on demand side. It ignores supply side.
3. Production is started with the combination of four factors of production. It is ridiculous to say that production has increased by the additional employment of one worker. Employment of an additional laborer amounts nothing in a big scale industry.
4. The theory is static. It applies only when no change occurs in the economy. Under depression wage cut will not increase employment.
5. This, theory explains that wages will be equal to MRP and ARP.
6. It is difficult to measure MRP because any product is a joint product of both fixed and variable factors.
7. According to Watson the theory is cruel and harsh. This theory never takes into consideration the marginal product of old, aged, blind etc.

#### **THE WAGES-FUND THEORY OF WAGES**

- 1) Wages Fund Theory: This theory is associated with the name of J.S. Mill. According to Wages Fund Theory wages depend upon two quantities, viz.:
  - (i) The wage fund or the circulating capital set aside for the purchase of labour, and
  - (ii) The number of labourers seeking employment.
- 2) Since, the theory takes the wage fund as fixed, wages could rise only by a reduction in the number of workers. According to this theory, the efforts of trade unions to raise wages are futile. If they succeeded in raising wages in one trade, it can only be at the expense of another, since the wage fund is fixed and the trade unions have no control over population. According to this theory, therefore, trade unions cannot raise wages for the labour class as a whole.
- 3) This theory has been widely criticised and stands rejected now. Even J.S. Mill himself recanted it in the second edition of his book 'Principles of Political Economy'. Mill thought that wages were paid out of circulating capital alone. Whether the source of wages is capital or the present products, has been the subject of a keen controversy in the past. The fact is that in some cases, where the process of production is short (e.g., final stages of the productive process), wages are paid out of the present production. On the other hand, when a process of production is long, the labourer obviously does not obtain wages from the product of his labour either directly or through exchange. In such cases, wages mainly come out of capital. This theory is inapplicable in highly industrialized countries, but, it is applicable in an under-developed country suffering from capital deficiency, where the wages cannot be increased unless national income is increased and capital accumulated through industrialisation.

#### **MODERN OR SUPPLY -DEMAND THEORY OF WAGES**

**Modern Theory of Wages:**



- 1) According to this theory, the wages are determined by the interaction of demand and supply as in the case of ordinary commodity. Thus, this theory is also referred to demand and supply theory.
- 2) Demand for Labour: According to the modern theory of wages, the demand for labour reflects partly labourer's productivity and partly the market value of the product at different levels of production.
- 3) **Demand of Labour:** The demand of labour depends on:
  - a) **Derived Demand:** The demand for labour is a derived demand. It is derived from the demand for the commodities it helps to produce. Greater the consumer demand for the product, greater the producer demand for labour required to produce that commodity. It may be observed that it is expected demand and not existing demand for the product that determines demand for labour. Hence, the expected increase in the demand for a product will increase the demand for labour.
  - b) **Elasticity of Demand for Labour:** The elasticity of demand for labour depends on the elasticity of demand for commodity. According to this theory, the demand for labour will generally be inelastic if their wages form only a small proportion of the total wages. The demand, on the other hand, will be elastic if the demand for product is also elastic or if cheaper substitutes are available.
  - c) **Prices & Quantities of Co-Operating Factors:** The demand for labour also depends on the prices and the quantities of the co-operating factors. If the machines are costly, the demand for labour will be increased. The greater the demand for the co-operating factors the greater will be the demand for labour, and vice versa.
  - d) **Technical Progress:** Another factor that influences the demand for labour is technical progress. In some cases labour and machineries are used in definite proportions.
  - e) After considering all relevant factors as discussed above, the employer is governed by one fundamental factor, viz., marginal productivity.
- 4) **Supply of Labour:** The supply of labour depends on:
  - (a) The number of workers of a given type of labour which would offer themselves for employment at various wage rates, and
  - (b) The number of hours per day or the number of days per week they are prepared to work,

Over a short period of time, reduction in wages may not cause any reduction in the supply of labour. But if wages are driven too low, competition among employers themselves will push them up. Even over a long period, the supply of labour is not very elastic.

Thus, the supply of labour will depend on the elasticity of demand for income which will vary according to the worker's temperament and social environment. When the workers' standard of living is low, they may be able to satisfy their wants with a small income and when they have made that much, they may prefer leisure to work. That is why it happens that sometimes increase in wages leads to a contraction of the supply of labour.



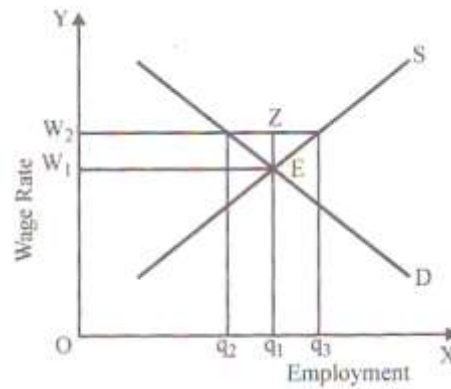
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5) Interaction of Demand and Supply: The final wage rate is determined by the equilibrium of demand & supply.





**UNIT-V**

**MEANING OF INDUSTRIAL POLICY**

The Industrial Policy specifies the relevant roles of the public, private, joint and co-operative sectors; small, medium and large scale industries. It also explains the Government's policy towards industries, their establishment, functioning, progress and management; foreign capital and technology, labour policy, and tariff policy.

**OBJECTIVES OF INDUSTRIAL POLICY**

The major objectives of industrial policy are:

- (i) Rapid Industrial Development:
- (ii) Balanced Industrial Structure:
- (iii) Prevention of Concentration of Economic power:
- (iv) Balanced Regional Growth:

**POST-INDEPENDENT INDUSTRIAL POLICES OF INDIA**

After independence, the various announced Industrial policies are as follows:

- 1. Industrial Policy 1948
- 2. Industrial policy 1956
- 3. Industrial policy 1977
- 4. Industrial policy 1980
- 5. Industrial policy 1990
- 6. Industrial policy 1991

Policies of 1948, 1956 and 1991 are basically industrial policies, while the others *i.e.* 1977, 1980, and 1990 were only Directive Policies.

**INDUSTRIAL POLICY OF 1948**

After having attained independence, the Government of India declared its first Industrial Policy on 6<sup>th</sup> April, 1948, The Industrial Policy 1948 was presented in the Parliament by then Industry Minister Dr, Shyama Prasad Mukherjee.

**Salient Features of Industrial Policy of 1948**

The following are the main features of Industrial Policy of 1948:

- i) Category of Industries
  - a) Public sector
  - b) Public-cum-private sector
  - c) Controlled private sector
  - d) Private and co-operative
- ii) Cottage and small scale industries
- iii) Employee-employer relation
- iv) Control over foreign capital
- v) Development of infrastructure



### **Industrial Policy Resolution of 1956**

The industrial policy resolution of 1956 was based upon the Mahalanobis Model of growth. The four fold classification of the 1948 industrial policy was changed now to a threefold classification in schedule A, B and C industries.

### **Threefold classification of the industries -**

- 1) Schedule 'A' Industries - This comprised 17 industrial areas which were strictly under the central government.
- 2) Schedule 'B' Industries - This category comprised 12 industries that were put to the State Governments to take measures and was left to the state government to follow up with the private sector with provisions of compulsory licensing.
- 3) Schedule 'C' Industries - The industrial areas which were left out of the schedule A and B were left with the private sectors subject to licensing and regulation under the IDR Act.

### **India's new Industrial Policy, 1991**

The new government by Shri Narasimha Rao, which took office in June 1991, announced a package of liberalization measures under its Industrial Policy on July 24, 1991.

### **Main Heads of the New Industrial Policy**

- 1) Abolition of Industrial Licensing
- 2) De-reservation of Industries for Public Sector
  - a) Reduced reservation for public sector
  - b) Efforts to revive loss making enterprise
  - c) Disinvestment in selected public sector industrial units.
- 3) Liberalised policy towards foreign capital and technology
  - a) Relaxation in Upper Limit of Foreign Investment
  - b) Automatic permission for foreign technology agreement
- 4) Abolition of MRTP Act

## **INDUSTRIAL GROWTH**

### **Advantages of Industrial Growth**

- 1) Increase in National Income
- 2) Increases the Rate of capital formation
- 3) Improve Occupational Structure of Population
- 4) Promotes Foreign trade
- 5) Promoting import substitution
- 6) Increase in Employment Opportunities
- 7) Provides support to Agriculture Development
- 8) Promotes Tertiary sector
- 9) Promotes balanced sectoral development
- 10) Ensures use of Natural resources
- 11) Helpful in market extension

### **Various Phases of Industrial Growth in India**



The change in Industrial development or growth during the planning era can be divided into four phases as under:

Phase I: High Growth Phase (1950-51 to 1965-66)

Phase II: Industrial Deceleration and Structural Retrogression (1966-80)

Phase III: The Period of Industrial recovery (1981-91)

Phase IV: Reforms Phase (July 1991 onwards)

**Phase I: High Growth Phase (1950-51 to 1965-66)**

Building up of strong industrial structure

First and most important factor responsible for high growth was the emphasis on industrialisation; particularly since the second five year plan. High priority was given to industrial growth vis-à-vis other objectives in first three plans.

Secondly, this was a period of price stability and the food grain prices remained stable.

**Phase II: Industrial Deceleration and Structural Retrogression (1966-80)**

The second phase of industrial growth covers the period of three Ad-hoc Annual Plans, Fourth Plan and Fifth Plan. This phase is also known as Low Growth Phase or Industrial Deceleration, particularly the period from 1965-74.

**Causes of Deceleration and Retrogression in Phase-II**

Drought conditions in some years; Infrastructural constraints and bottlenecks, and the Oil crisis of 1973 were responsible for the slowdown of growth.

**The main causes of deceleration and structural retrogression during the second phase of Industrial growth can be summed up as follows:**

- a) The wars of 1962, 1965 and 1971. During this period investment was made into unproductive uses.
- b) Successive droughts of 1965-67 and 1971-73, and oil crisis of 1973 was also responsible for supply constraints.
- c) Considerable slackening of real investment.
- d) Unequal distribution of income in favour of the rich followed by stagnation in demand for consumer goods;
- e) Unsatisfactory performance of the agricultural sector;
- f) Policy constraints and bureaucratic obstacles on industrial growth;
- g) Conflicts in the dominant coalition between proprietary classes, capitalist class and the class representing rich agricultural farmers.

**Phase III – The Period of Industrial Recovery (1981-91)**

The third phase of industrial growth covers the period of eighties consisting of both Sixth and Seventh Plan.

**Causes of Industrial Recovery in Phase-III**

- 1) Liberal Fiscal Regime
- 2) Contribution of the Agricultural Sector



- 3) Infrastructural Development
- 4) Growth of Service Sector

### **Phase IV – Reforms Phase (July 1991 onwards)**

The fourth phase of industrial growth covers the early part of nineties, i.e., from 1991-92 to 1997-98.

### **Causes of Industrial Slowdown –**

The factors responsible for industrial slowdown in the fourth phase of India's industrial growth are summarized as below –

- a) Decline in the growth of export to 4.6 percent in the first eight months between April and November, 1997.
- b) The impact of the tight money policy followed in 1995-96 when the monetary expansion was about 13.7 percent.
- c) Significant build up industrial capacity in the first phase of liberalization;
- d) In some cases the rate of demand growth was over-estimated.

## **DISINVESTMENT**

### **Disinvestment Meaning -**

Disinvestment can be defined as the action of an organization (or government) selling or liquidating an asset or subsidiary. It is also referred to as 'divestment'.

Disinvestment is defined as the action of a government aimed at selling or liquidating its shareholding in a public sector enterprise in order to get the government out of the business of production and increase its presence and performance in the provision of public goods and basic public services such as infrastructure, education, health etc.

Privatization is described as the transfer of control of ownership of economic resources from the public sector to the private sector. It means a decline in the role of the public sector as there is a shift in the property rights from the state to private ownership.

### **Difference between Privatization and Disinvestment –**

- 1) Privatization involves transforming the ownership of a public sector business to the private sector known as strategic buyer.
- 2) Disinvestment is also a transformation process that happens while retaining 26% or, in some contexts, 51% percent of share right (i.e. the voting power) with the public sector organization. The rest is transferred to the desired partner.
- 3) In privatization, full ownership is transferred to the strategic partner.
- 4) In Disinvestment, usually, 26% or 51% of share is retained with the government company, and the rest is transferred to the strategic partner.

### **Types of Disinvestment in India**

- 1) Token Disinvestment
- 2) Strategic Disinvestment





### **Merits/Objectives of Disinvestment -**

- 1) Disinvestment releases of the large amount of public resources locked up in non-strategic public sector units for re-employment in areas that are much higher on the social priority e.g. health, family welfare etc. and to reduce the public debt that is assuming threatening proportions.
- 2) Privatization through Disinvestment would help stemming further outflows of the scarce public resources of sustaining the unviable non-strategic public sector unit.
- 3) Privatization vis-à-vis disinvestment would facilitate transferring the commercial risk to which the tax payer's money locked up in the public sector is exposed to the private sector wherever the private sector is willing to step in.
- 4) Privatization through Disinvestment would release tangible and intangible resources such as large manpower locked up in managing PSU's and release them for deployment in high priority social sector.
- 5) Disinvestment would expose privatized companies to market disciplines and help them become self-reliant.
- 6) Disinvestment would result in wider distribution of wealth by offering shares of privatized companies to small investors and employees.

### **Demerits/Criticism of Disinvestment -**

- 1) The actual achievements against set targets of Disinvestment were not fulfilled in maximum number of years. The amount raised through Disinvestment from 1991-2001 was Rs. 2051 crore per year which is too meager. Further, the way money released by Disinvestment is being used, remaining undisclosed.
- 2) The loss of PSU's is rising. It was Rs. 9305 crore in 1998 and Rs. 10060 crore in 2000.
- 3) This is welcome but Disinvestment of profit making public sector units will rob the government of good returns. Further, if department of Disinvestment wants to get away with commercial risks, why should it retain equity in disinvested PSU's e.g. Balco (49%), Modern Foods (26%) etc.
- 4) The growth in social sector is not in any way hindered by non availability of manpower.
- 5) This is true but only when the govt, ensures that the market system regulates and disciplines privatized firms taking care of public's interest.
- 6) Privatization programme is generally not been affected through the public sales of shares. Earlier, sale of shares (1991-96) attracted the employees to a limited extent and was not friendly to small investors and employees.

### **FOREIGN DIRECT INVESTMENT**

Foreign Direct Investment (FDI) is an important factor for acquiring investments and growing the local market with foreign finances when local investment is unavailable. It is a company of one nation putting up a physical investment into building a facility (factory) in another country.

### **Types of Foreign Direct Investment -**



- 1) Horizontal
- 2) Vertical
- 3) Conglomerate

**Vehicles of Foreign Direct Investment**

- 1) Reciprocal distribution agreements
- 2) Joint venture and other hybrid strategic alliances
- 3) Portfolio investment

**Liberalized Foreign Direct Investment Policy, 2016 -**

The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has given its ex-post-facto approval for the FDI policy amendments announced by the Government on 20<sup>th</sup> June, 2016.

- 1) Radical Changes for promoting Food Products manufactured
- 2) Foreign Investment in Defence Sector upto 100 percent
- 3) Review of Entry Routes in Broadcasting Carriage Services.
- 4) Pharmaceutical
- 5) Civil Aviation
- 6) Private Security Agencies
- 7) Establishment of branch office, liaison office or project office.
- 8) Animal Husbandry
- 9) Single Brand Retail Trading

**Advantages of Foreign Direct Investment**

- 1) Economic Development Stimulation
- 2) Easy International Trade
- 3) Employment and Economic Boost
- 4) Development of Human Capital Resources
- 5) Tax Incentives
- 6) Resource Transfer
- 7) Reduced Disparity between Revenues and Costs
- 8) Increased Productivity
- 9) Increment in Income

**Disadvantages of Foreign Direct Investment**

- 1) Hindrance to Domestic Investment
- 2) Risk from Political Changes
- 3) Negative Influence on Exchange Rates
- 4) Higher Costs
- 5) Economic Non-viability
- 6) Expropriation
- 7) Negative Impact on the Country's Investment
- 8) Modern-Day Economic Colonialism.



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