

# **Engineering Economics and Management**

**Subject Code: 2130004/2140003**

**For semester 3<sup>rd</sup> and 4<sup>th</sup> GTU**

## **CHAPTER 1 INTRODUCTION TO ECONOMICS**

### **❖ What is Economics?**

*"Economics is a social science concerned with the production, distribution and consumption of goods and services. It studies how individuals, businesses, governments and nations make choices on allocating resources to satisfy their wants and needs, and tries to determine how these groups should organize and coordinate efforts to achieve maximum output."*

*"Economic analysis often progresses through deductive processes, much like mathematical logic, where the implications of specific human activities are considered in a "means-ends" framework"*

#### **→ General Definition of Economics:**

The English word economics is derived from the ancient Greek word oikonomia—meaning the management of a family or a household. It is thus clear that the subject economics was first studied in ancient Greece. What was the study of household management to Greek philosophers like Aristotle (384-322 BC) was the “study of wealth” to the mercantilists in Europe between the sixteenth and eighteenth centuries.

Economics, as a study of wealth, received great support from the Father of economics, Adam Smith, in the late eighteenth century

Since then, the subject has travelled a long and this Greek or Smithian definition serves our purpose no longer. Over the passage of time, the focus of attention has been changed. As a result, different definitions have evolved.

#### **→ Adam Smith's Wealth Definition:**

“The great object of the Political Economy of every country is to increase the riches and power of that country.” Like the mercantilists, he did not believe that the wealth of a nation lies in the accumulation of precious metals like gold and silver.

To him, wealth may be defined as those goods and services which command value-in-exchange. Economics is concerned with the generation of the wealth of nations. Economics is not to be concerned only with the production of wealth but also the distribution of wealth. The manner in which production and distribution of wealth will take place in a market economy is the Smithian ‘invisible hand’ mechanism or the ‘price system’. Anyway, economics is regarded by Smith as the ‘science of wealth.’

#### **→ Marshall's Welfare Definition:**

Alfred Marshall in his book ‘Principles of Economics published in 1890 placed emphasis on human activities or human welfare rather than on wealth. Marshall defines economics as “a study of men as they live and move and think in the ordinary business of life.” He argued that economics, on one side, is a study of wealth and, on the other, is a study of man.

Emphasis on human welfare is evident in Marshall’s own words: “Political Economy or Economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well-being.”

Thus, "Economics is on the one side a study of wealth; and on the other and more important side, a part of the study of man." According to Marshall, wealth is not an end in itself as was thought by classical authors; it is a means to an end—the end of human welfare.

→ **Robbins' Scarcity Definition:**

The most accepted definition of economics was given by Lord Robbins in 1932 in his book 'An Essay on the Nature and Significance of Economic Science'. According to Robbins, neither wealth nor human welfare should be considered as the subject-matter of economics. His definition runs in terms of scarcity: "Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses."

❖ **Micro V/S Macro Economics.**

BASIS FOR COMPARISON	MICROECONOMICS	MACROECONOMICS
Meaning	The branch of economics that studies the behaviour of an individual consumer, firm, family is known as Microeconomics.	The branch of economics that studies the behaviour of the whole economy, (both national and international) is known as Macroeconomics.
Deals with	Individual economic variables	Aggregate economic variables
Business Application	Applied to operational or internal issues	Environment and external issues
Scope	Covers various issues like demand, supply, product pricing, factor pricing, production, consumption, economic welfare, etc.	Covers various issues like, national income, general price level, distribution, employment, money etc.
Importance	Helpful in determining the prices of a product along with the prices of factors of production (land, labour, capital, entrepreneur etc.) within the economy.	Maintains stability in the general price level and resolves the major problems of the economy like inflation, deflation, reflation, unemployment and poverty as a whole.
Limitations	It is based on unrealistic assumptions, i.e. In microeconomics it is assumed that there is a full employment in the society which is not at all possible.	It has been analysed that 'Fallacy of Composition' involves, which sometimes doesn't prove true because it is possible that what is true for aggregate may not be true for individuals too.
Examples	House hold, a person, Personal income.	National Income, GDP.GNP, Unemployment.

## ❖ Key Differences between Micro and Macro Economics.

- Microeconomics studies the particular market segment of the economy, whereas Macroeconomics studies the whole economy that covers several market segments.
- Micro economics stresses on individual economic units. As against this, the focus of macroeconomics is on aggregate economic variables.  
While microeconomics is applied to operational or internal issues, environmental and external issues are the concern of macroeconomics.
- Microeconomics deals with an individual product, firm, household, industry, wages, prices, etc., while Macroeconomics deals with aggregates like national income, national output, price level, etc.
- Microeconomics covers issues like how the price of a particular commodity will affect its quantity demanded and quantity supplied and vice versa while Macroeconomics covers major issues of an economy like unemployment, monetary/fiscal policies, poverty, international trade, etc.
- Microeconomics determines the price of a particular commodity along with the prices of complementary and the substitute goods, whereas the Macroeconomics is helpful in maintaining the general price level.  
While analysing any economy, micro economics takes a bottom-up approach, whereas the macroeconomics takes a top-down approach into consideration.

## ❖ What are Need, Want and Demand?

**Need-** It is a basic state of deprivation. Basic necessities like food, clothing and shelter are needs.

**Want-** A desire for a particular product or service; it is not required for basic existence. Example- Water is a need but cold drink is a want. Thirst can be quenched by drinking water but if a person asks for cold drink in particular, than it turns into a want.

**Demand-** Want backed by ability and willingness to pay for a product or service. Thus, demand comprises of three things-

- 1) Desire to buy a product
- 2) Ability to buy
- 3) Willingness to buy.
- 4) Mean of that Product

*For example- A person wants to purchase a cold drink. He has a desire. He has money with him; this means he has an ability to pay for cold drink. Now, he is willing to pay to shopkeeper and get cold drink in return. Thus, here customer has a demand for a cold drink.*

## ❖ Factor Affecting the Demand/ Determinants of demand

### 1. Price of the Given Commodity:

It is the most important factor affecting demand for the given commodity. Generally, there exists an inverse relationship between price and quantity demanded. It means, as price increases, quantity demanded falls due to decrease in the satisfaction level of consumers.

*For example, If price of given commodity (say, tea) increases, its quantity demanded will fall as satisfaction derived from tea will fall due to rise in its price.*

### 2. Price of Related Goods:

Demand for the given commodity is also affected by change in prices of the related goods. Related goods are of two types:

#### → Substitute Goods:

Substitute goods are those goods which can be used in place of one another for satisfaction of a particular want, like tea and coffee. An increase in the price of substitute leads to an increase in the demand for given commodity and vice-versa. For example, if price of a substitute good (say, coffee) increases, then demand for given commodity (say, tea) will rise as tea will become relatively cheaper in comparison to coffee. So, demand for a given commodity is directly affected by change in price of substitute goods.

#### → Complementary Goods:

Complementary goods are those goods which are used together to satisfy a particular want, like tea and sugar. An increase in the price of complementary good leads to a decrease in the demand for given commodity and vice-versa. For example, if price of a complementary good (say, sugar) increases, then demand for given commodity (say, tea) will fall as it will be relatively costlier to use both the goods together. So, demand for a given commodity is inversely affected by change in price of complementary goods.

*Examples of Substitute and Complementary Goods:*

#### **Substitute Goods:**

1. Tea and Coffee
2. Coke and Pepsi
3. Pen and Pencil
4. CD and DVD
5. Ink pen and Ball Pen
6. Rice and Wheat

#### **Complementary Goods:**

1. Tea and Sugar
2. Pen and Ink
3. Car and Petrol
4. Bread and Butter
5. Pen and Refill
6. Brick and Cement

### **3. Income of the Consumer:**

Income of the consumer also effect on demand there is two products which affected by income of a consumer:

→ **Durable Product**

If the income of the consumer is increase he demand more durable product if his income decreased than he demand less durable product.

→ **Non-Durable Product**

Income of the consumer does not affect some product that means the product demand remain same for long term.

*Examples of Durable and Non-durable Products:*

**Durable Products:**

*Car, Bike, TV, House, AC*

**Non- durable Product**

*Sugar, Salt, Wheat, Rice*

### **4. Tastes and Preferences:**

Tastes and preferences of the consumer directly influence the demand for a commodity. They include changes in fashion, customs, habits, etc. If a commodity is in fashion or is preferred by the consumers, then demand for such a commodity rises. On the other hand, demand for a commodity falls, if the consumers have no taste for that commodity.

### **5. Expectation of Change in the Price in Future:**

If the price of a certain commodity is expected to increase in near future, then people will buy more of that commodity than what they normally buy. There exists a direct relationship between expectation of change in the prices in future and change in demand in the current period. For example, if the price of petrol is expected to rise in future, its present demand will increase.

❖ **Law the Demand.**

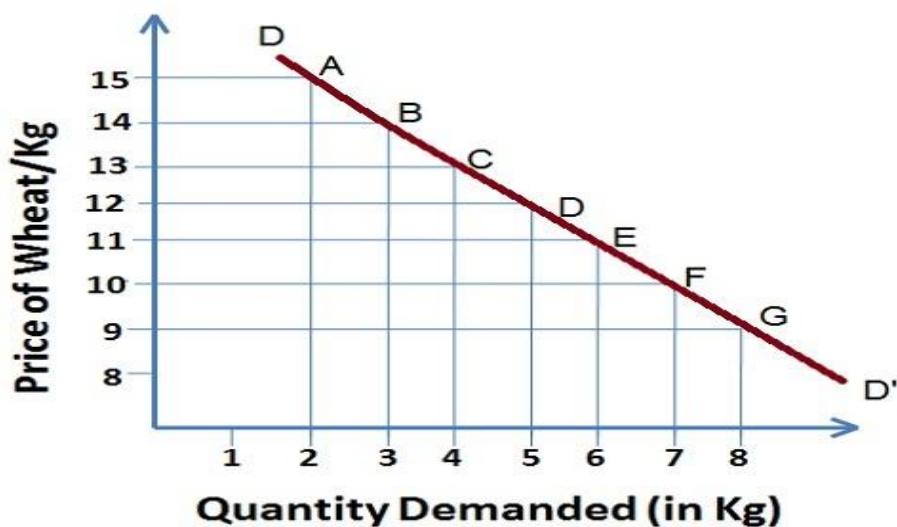
*"When other things remain unchanged than the price of the product and demand of the product shows inverse relationship between each other that means if the price of the product increase the customer demand less product and if the price of the product is decrease than customer demand more product."*

In the definition, the "other things" are the factors that influence the demand such as consumer's income, price of related goods, consumer's tastes and preferences, advertisement, etc. The law of demand can be further illustrated by the Demand Schedule and the Demand Curve.

**Demand Schedule:** The demand schedule is a tabular presentation of series of prices arranged in some chronological order, i.e. either in ascending or descending order along with their corresponding quantities which the consumers are willing to purchase per unit of time. A hypothetical daily demand schedule for the commodity (Wheat) is given below:

Price of Wheat/Kg	Wheat Demanded by Family/Day (In Kg)	Price Quantity Combinations
15	2	A
14	3	B
13	4	C
12	5	D
11	6	E
10	7	F
9	8	G

**Demand Curve:** Demand curve is formed when the demand and price data in the demand schedule is plotted on a graph. Thus, the demand curve is the graphical representation of the demand schedule. The above demand schedule is represented graphically in the figure below:



The DD' is the demand curve that depicts the law of demand. The demand curve is downward sloping towards the right, which shows that as the price of the wheat decreases the quantity demanded increases.

While plotting the demand curve the following assumptions are to be taken into the consideration:

- The consumer's tastes and preferences remain unchanged.
- The discontinuous change is ignored, and therefore the price-demand relationship is considered continuous.
- The consumer's income remains same.

- No individual can influence the price.
- The price of the related goods remains the same.

Thus, it is clear from the above explanation that the law of demand strictly follows an inverse relationship between the price of the product and its quantity demanded, i.e. the quantity decreases with the increase in the price and vice-versa.

### **❖ Limitations/Exceptions of law of demand.**

#### **1. Inferior goods/ Giffen goods**

Some special varieties of inferior goods are termed as giffen goods. Cheaper varieties of goods like low priced rice, low priced bread, etc. are some examples of Giffen goods.

This exception was pointed out by Robert Giffen who observed that when the price of bread increased, the low paid British workers purchased lesser quantity of bread, which is against the law of demand. Thus, in case of Giffen goods, there is indirect relationship between price and quantity demanded.

#### **2. Goods having prestige value**

This exception is associated with the name of the economist, T.Velben and his doctrine of conspicuous conception. Few goods like diamond can be purchased only by rich people. The prices of these goods are so high that they are beyond the capacity of common people. The higher the price of the diamond the higher the prestige value of it.

In this case, a consumer will buy less of the diamonds at a low price because with the fall in price, its prestige value goes down. On the other hand, when price of diamonds increase, the prestige value goes up and therefore, the quantity demanded of it will increase.

#### **3. Price expectation**

When the consumer expects that the price of the commodity is going to fall in the near future, they do not buy more even if the price is lower.

On the other hand, when they expect further rise in price of the commodity, they will buy more even if the price is higher. Both of these conditions are against the law of demand.

#### **4. Fear of shortage**

When people feel that a commodity is going to be scarce in the near future, they buy more of it even if there is a current rise in price.

*For example: If the people feel that there will be shortage of L.P.G. gas in the near future, they will buy more of it, even if the price is high.*

#### **5. Change in income**

The demand for goods and services is also affected by change in income of the consumers.

If the consumers' income increases, they will demand more goods or services even at a higher price. On the other hand, they will demand less quantity of goods or services even at lower price if there is decrease in their income. It is against the law of demand.

## 6. Change in fashion

The law of demand is not applicable when the goods are considered to be out of fashion.

If the commodity goes out of fashion, people do not buy more even if the price falls. For example: People do not purchase old fashioned shirts and pants nowadays even though they've become cheap. Similarly, people buy fashionable goods in spite of price rise.

## 7. Basic necessities of life

In case of basic necessities of life such as salt, rice, medicine, etc. the law of demand is not applicable as the demand for such necessary goods does not change with the rise or fall in price.

### ❖ Law of Supply.

The Law of Supply posits that there is a positive relationship between the supply of a commodity and its price, such that the supply of the commodity increases with the increase in its price and decreases with the fall in its price, other things remaining constant.

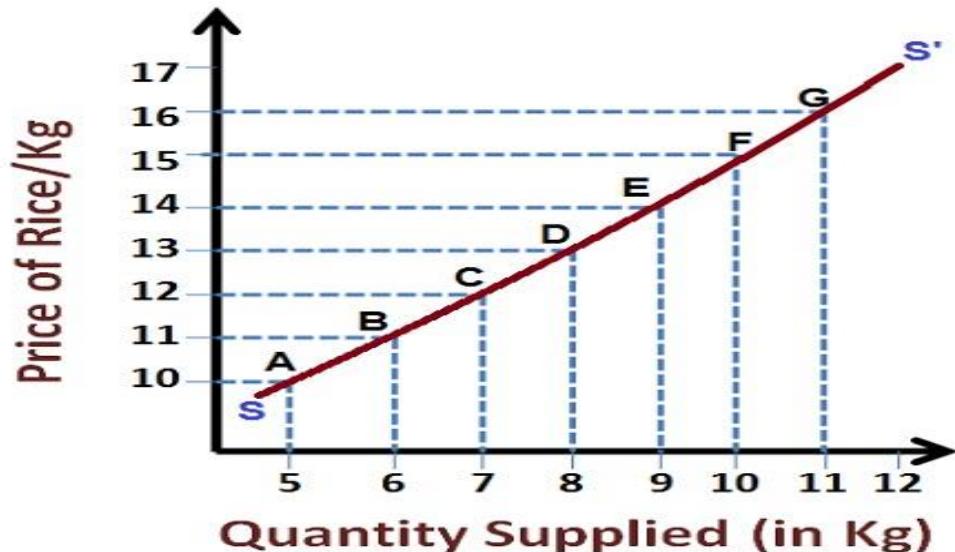
Here, "other things" are the factors that influence the supply of the commodity such as technology, input prices, price of related products, nature and size of the industry, government policy, etc. The law of supply is based on the notion that as the price of a product increases the suppliers with an objective to maximize their profits increases the production of a commodity for sale.

**Supply Schedule:** The supply schedule is the tabular representation of the different prices of the commodity and the corresponding quantities that the suppliers are willing to offer for sale. A hypothetical daily supply schedule of rice is given below:

Price of Rice/Kg	Supply of Rice/day (In Kg)	Price quantity combinations
10	5	A
11	6	B
12	7	C
13	8	D
14	9	E
15	10	F
16	11	G

The law of supply is well substantiated through the table above, which shows that the supply of rice increases with the increase in the price. Such as when the price of rice is Rs 14/kg the supply of rice is 9/Kg and as the price rise to Rs 15/kg the supply also increases to 10/kg.

**Supply Curve:** The supply curve is the graphical representation of the supply schedule which shows different combinations between the price and the quantity supplied.

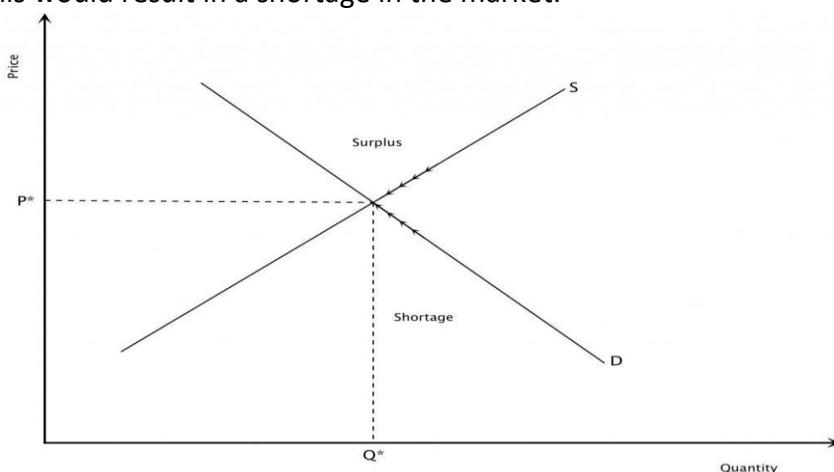


SS' is the upward sloping supply curve, which depicts the law of supply, i.e. the supply of rice increases with the increase in its price.

#### ❖ Equilibrium between demand and supply.

At a higher price, there would be more quantity supplied than demanded so the seller would have to lower his price to sell his goods. If the sellers raise their price too high, where the demand is less than what they have to offer, then they will have a surplus that will force them to lower their price until they can sell their entire supply.

At a lower price, there would be more quantity demanded than supplied so the buyer would have to spend more to buy goods. If the sellers set their price too low, then they will sell their entire supply before they can satisfy the demands of the market. This would result in a shortage in the market.



❖ **Elasticity of Demand.**

❖ **Types of Elasticity of demand:**

- **Price elasticity of demand**
- **Income elasticity of demand**
- **Cross elasticity of demand**

→ **Price Elasticity of Demand:**

*Price elasticity of demand is a measure of the change in the quantity demanded or purchased of a product in relation to its price change.*

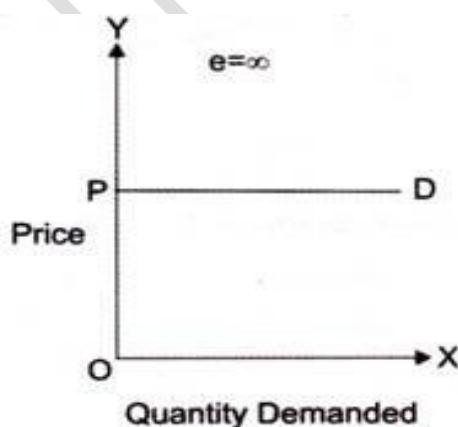
$$\text{Income Elasticity of Demand} = \frac{\% \text{ Change in Quantity Demanded}}{\% \text{ Change in Price}}$$

❖ **Types of Price elasticity of Demand:**

1. **Perfectly Elastic Demand ( $e_p = \infty$ ):**

When a small change in price of a product causes a major change in its demand, it is said to be perfectly elastic demand. In perfectly elastic demand, a small rise in price results in fall in demand to zero, while a small fall in price causes increase in demand to infinity. In such a case, the demand is perfectly elastic.

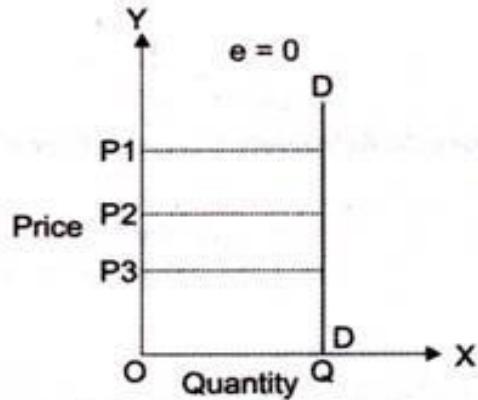
The degree of elasticity of demand helps in defining the shape and slope of a demand curve. Therefore, the elasticity of demand can be determined by the slope of the demand curve. Flatter the slope of the demand curve, higher the elasticity of demand.



2. **Perfectly Inelastic Demand ( $e_p=0$ ):**

A perfectly inelastic demand is one when there is no change produced in the demand of a product with change in its price. The numerical value for perfectly inelastic demand is zero.

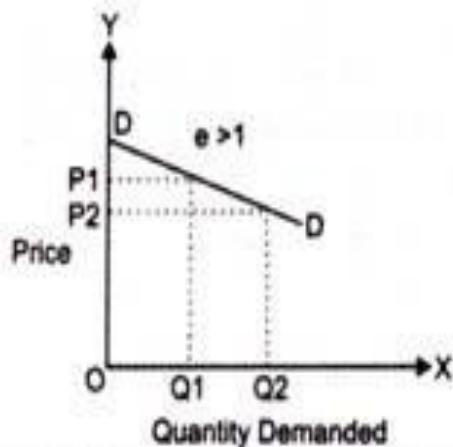
It can be interpreted from Figure that the movement in price from OP<sub>1</sub> to OP<sub>2</sub> and OP<sub>2</sub> to OP<sub>3</sub> does not show any change in the demand of a product (OQ). The demand remains constant for any value of price. Perfectly inelastic demand is a theoretical concept and cannot be applied in a practical situation. However, in case of essential goods, such as salt, the demand does not change with change in price. Therefore, the demand for essential goods is perfectly inelastic.



### 3. Relatively Elastic Demand ( $e>1$ ):

Relatively elastic demand refers to the demand when the proportionate change produced in demand is greater than the proportionate change in price of a product. The numerical value of relatively elastic demand ranges between one to infinity. Mathematically, relatively elastic demand is known as more than unit elastic demand ( $e>1$ ). For example, if the price of a product increases by 20% and the demand of the product decreases by 25%, then the demand would be relatively elastic.

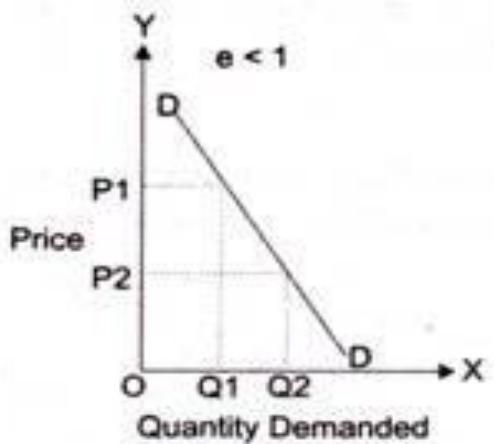
It can be interpreted from Figure that the proportionate change in demand from OQ<sub>1</sub> to OQ<sub>2</sub> is relatively larger than the proportionate change in price from OP<sub>1</sub> to OP<sub>2</sub>. Relatively elastic demand has a practical application as demand for many of products respond in the same manner with respect to change in their prices.



For example, the price of a particular brand of cold drink increases from Rs. 15 to Rs. 20. In such a case, consumers may switch to another brand of cold drink. However, some of the consumers still consume the same brand. Therefore, a small change in price produces a larger change in demand of the product.

### 4. Relatively Inelastic Demand( $e<1$ ):

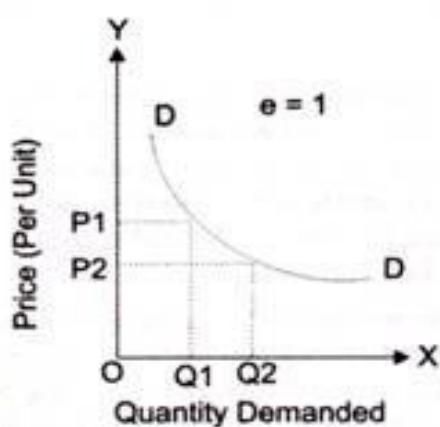
Relatively inelastic demand is one when the percentage change produced in demand is less than the percentage change in the price of a product. For example, if the price of a product increases by 30% and the demand for the product decreases only by 10%, then the demand would be called relatively inelastic. The numerical value of relatively elastic demand ranges between zero to one ( $e<1$ ). Marshall has termed relatively inelastic demand as elasticity being less than unity.



It can be interpreted from Figure that the proportionate change in demand from OQ<sub>1</sub> to OQ<sub>2</sub> is relatively smaller than the proportionate change in price from OP<sub>1</sub> to OP<sub>2</sub>. Relatively inelastic demand has a practical application as demand for many of products respond in the same manner with respect to change in their prices.

##### **5. Unitary Elastic Demand ( $e=1$ ):**

When the proportionate change in demand produces the same change in the price of the product, the demand is referred as unitary elastic demand. The numerical value for unitary elastic demand is equal to one ( $e=1$ ).



From Figure, it can be interpreted that change in price OP<sub>1</sub> to OP<sub>2</sub> produces the same change in demand from OQ<sub>1</sub> to OQ<sub>2</sub>. Therefore, the demand is unitary elastic.

## → Income elasticity of demand:

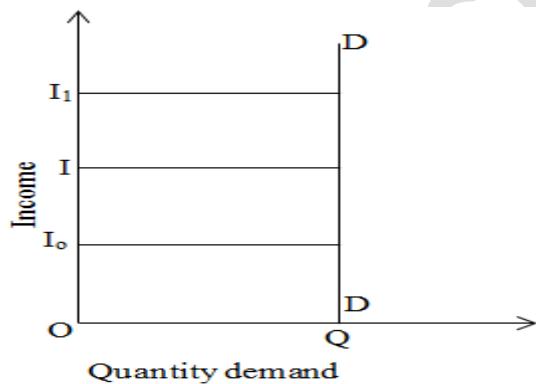
In economics, income elasticity of demand measures the responsiveness of the quantity demanded for a good or service to a change in the income of the people demanding the good. It is calculated as the ratio of the percentage change in quantity demanded to the percentage change in income.

$$\text{Income Elasticity of Demand} = \frac{\% \text{ Change in Quantity Demanded}}{\% \text{ Change in Income}}$$

### ❖ Types of Income elasticity of demand:

#### 1. Zero Income Elasticity of Demand:

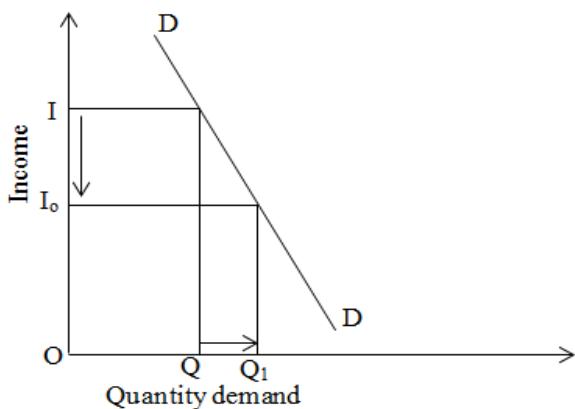
If there is no any change in quantity of demand due to certain percentage change in income then it is known as zero income elasticity of demand.



On the above figure, in initial stage price is OI and quantity of demand is OQ, when income increase to I<sub>1</sub> and decreases to I<sub>0</sub>, there is no any change in quantity of demand.

#### 2. Negative Income Elasticity of Demand:

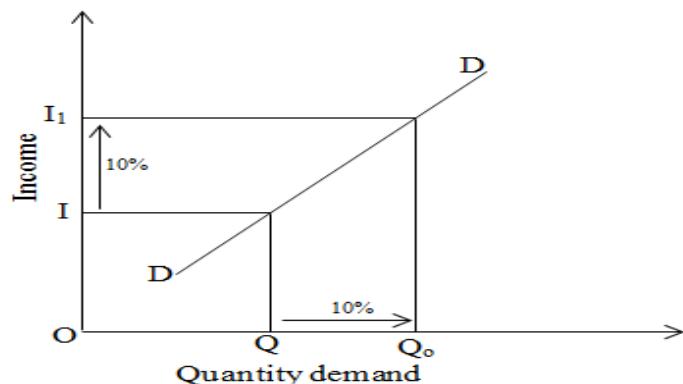
If there is negative relationship between income and demand in this case income elasticity is negative. In this case, inferior goods income elasticity is negative.



On the above figure, x and y axis represent demand for inferior goods and income respectively. When income is OI then quantity demand is OQ and when income decreases from I to I<sub>0</sub> then quantity demand increases from Q to Q<sub>1</sub>.

### **3. Income elasticity of demand equal to one:**

If the percentage change in quantity demand is equal to percentage change in income is known as income elasticity of demand equal to one. We can explain on the basis of the given figure:



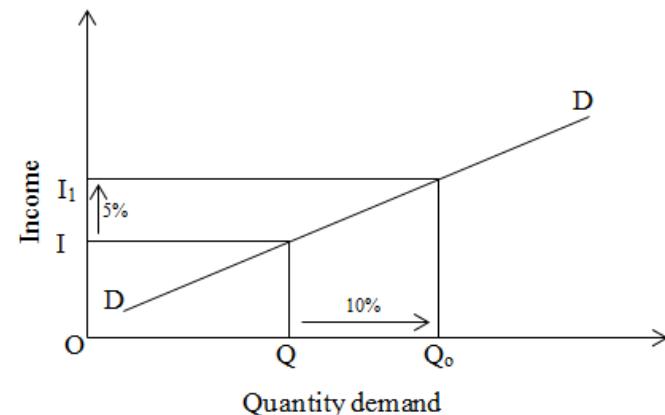
On the above figure, initial income is  $OI$  and quantity demand is  $OQ$ . When income is increased from  $I$  to  $I_1$  by 10% then the quantity demand is also increased from  $Q$  to  $Q_1$  by 10%.

### **4. Income elasticity of demand greater than one:**

If the percentage change in quantity demand is greater than the percentage change in income is known as income elasticity of demand greater than one.

For example, change in demand by 10% due to change in income by 5%.

We can explain it by the help of given figure:

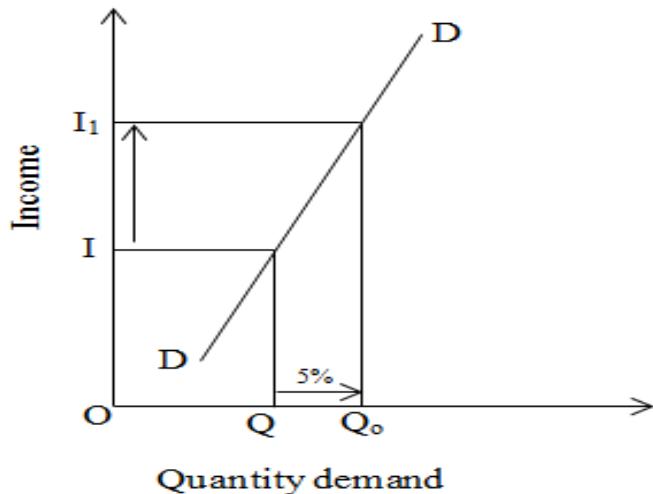


On the above figure x and y axis measures quantity demand and income respectively. DD is demand curve. In initial stage, income and demand is  $OI$  and  $OQ$ . When income is increased from  $I$  to  $I_1$  by 5% then demand is increased from  $Q$  to  $Q_1$  by 10%. This case is known is income elasticity of demand greater than one.

### **5. Income elasticity of demand less than one:**

If the percentage change in quantity demand is less than the percentage change in income is known as income elasticity of demand less than one.

For example, change in demand by 5% due to change in income by 10%.



On the above figure, initial income is  $I_0$  and quantity demand is  $Q_0$ . When income increases from  $I$  to  $I_1$  by 10% then demand increases from  $Q$  to  $Q_1$  by 5%. This is known as elasticity of demand less than one.

#### → Cross Elasticity Of Demand:

It is the ratio of proportionate change in the quantity demanded of Y to a given proportionate change in the price of the related commodity X.

It is a measure of relative change in the quantity demanded of a commodity due to a change in the price of its substitute/complement. It can be expressed as:

$$\text{Cross Elasticity of Demand} = \frac{\% \text{ Change in Quantity Demanded of Y}}{\% \text{ Change in Price of X}}$$

Cross elasticity may be infinite or zero if the slightest change in the price of X causes a substantial change in the quantity demanded of Y. It is always the case with goods which have perfect substitutes for one another. Cross elasticity is zero, if a change in the price of one commodity will not affect the quantity demanded of the other. In the case of goods which are not related to each other, cross elasticity of demand is zero.

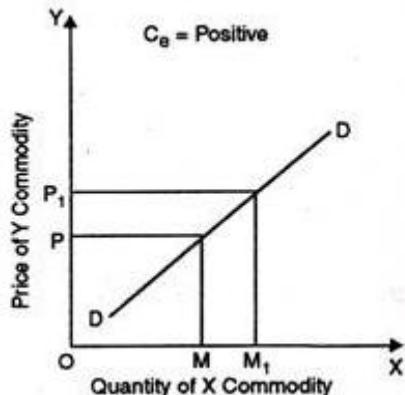
*"The cross elasticity of demand is the proportional change in the quantity of X good demanded resulting from a given relative change in the price of a related good Y"*  
Ferguson

*"The cross elasticity of demand is a measure of the responsiveness of purchases of Y to change in the price of X"* Leibafsky

## ❖ Types of Cross Elasticity of Demand:

### 1. Positive:

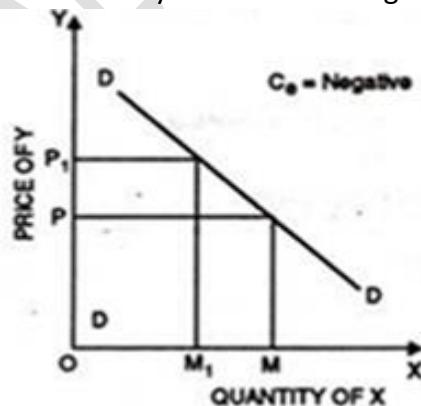
When goods are substitute of each other than cross elasticity of demand is positive. In other words, when an increase in the price of Y leads to an increase in the demand of X. For instance, with the increase in price of tea, demand of coffee will increase.



In figure quantity has been measured on OX-axis and price on OY-axis. At price OP of Y-commodity, demand of X-commodity is OM. Now as price of Y commodity increases to  $OP_1$  demand of X-commodity increases to  $OM_1$ . Thus, cross elasticity of demand is positive.

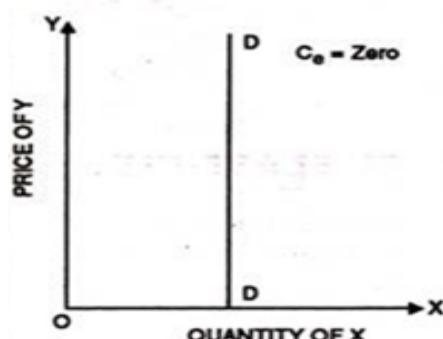
### 2. Negative:

In case of complementary goods, cross elasticity of demand is negative. A proportionate increase in price of one commodity leads to a proportionate fall in the demand of another commodity because both are demanded jointly. In figure quantity has been measured on OX-axis while price has been measured on OY-axis. When the price of commodity increases from OP to  $OP_1$  quantity demanded falls from OM to  $OM_1$ . Thus, cross elasticity of demand is negative.



### 3. Zero:

Cross elasticity of demand is zero when two goods are not related to each other. For instance, increase in price of car does not affect the demand of cloth. Thus, cross elasticity of demand is zero. It has been shown in figure.



❖ **Determinants the elasticity of demand:**

**1. The Availability of Substitutes:**

Of all the factors determining price elasticity of demand the availability of the number and kinds of substitutes for a commodity is the most important factor. If for a commodity close substitutes are available, its demand tends to be elastic. If the price of such a commodity goes up, the people will shift to its close substitutes and as a result the demand for that commodity will greatly decline.

**2. The Proportion of Consumer's Income Spent:**

Another important determinant of the elasticity of demand is how much it accounts for in consumer's budget. In other words, the proportion of consumer's income spent on a particular commodity also influences the elasticity of demand for it. The greater the proportion of income spent on a commodity, the greater will be generally its elasticity of demand, and vice versa.

**3. The Number of Uses of a Commodity:**

The greater the number of uses to which a commodity can be put, the greater will be its price elasticity of demand. If the price of a commodity having several uses is very high, its demand will be small and it will be put to the most important uses and if the price of such a commodity falls it will be put to less important uses also and consequently its quantity demanded will rise significantly.

**4. Complementarity between Goods:**

Complementarity between goods or joint demand for goods also affects the price elasticity of demand. Households are generally less sensitive to the changes in price of goods that are complementary with each other or which are jointly used as compared to those goods which have independent demand or used alone. For example, for the running of automobiles, besides petrol, lubricating oil is also used.

**5. Time and Elasticity:**

The element of time also influences the elasticity of demand for a commodity. Demand tends to be more elastic if the time involved is long. This is because consumers can substitute goods in the long run. In the short run, substitution of one commodity by another is not so easy. The longer the period of time, the greater is the ease with which both consumers and businessmen can substitute one commodity for another.

## **CHAPTER 2 THEORY OF PRODUCTION**

### **❖ What is Factor of Production? Explain in detail.**

Whatever is used in producing a commodity is called its inputs. For example, for producing wheat, a farmer uses inputs like soil, tractor, tools, seeds, manure, water and his own services.

All the inputs are classified into two groups—primary inputs and secondary inputs. Primary inputs render services only whereas secondary inputs get merged in the commodity for which they are used.

In the above example, soil, tractor, tools and farmer's services are primary inputs because they render services only whereas seeds, manure, water and insecticides are secondary inputs because they get merged in the commodity for which they are used. It is primary inputs which are called factors of production.

Primary inputs are also called factor inputs and secondary inputs are known as non-factor inputs. Alternatively, production is undertaken with the help of resources which can be categorised into natural resources (land), human resources (labour and entrepreneur) and manufactured resources (capital).

#### **1. Land:**

It refers to all natural resources which are free gifts of nature. Land, therefore, includes all gifts of nature available to mankind—both on the surface and under the surface, e.g., soil, rivers, waters, forests, mountains, mines, deserts, seas, climate, rains, air, sun, etc

- Land is free gift of nature.
- It is fixed in quantity.
- It is not perishable.
- It is immobile factor of production.
- It is differ in quality.

#### **2. Labour:**

Human efforts done mentally or physically with the aim of earning income is known as labour. Thus, labour is a physical or mental effort of human being in the process of production. The compensation given to labourers in return for their productive work is called wages (or compensation of employees).

Land is a passive factor whereas labour is an active factor of production. Actually, it is labour which in cooperation with land makes production possible. Land and labour are also known as primary factors of production as their supplies are determined more or less outside the economic system itself.

- Labour cannot be separable from labourer.
- It is most perishable factor of production.
- Its efficiency is differing from each other.
- Labour also affected by some external factor.
- Labour is mobile factor.

### **3. Capital:**

All man-made goods which are used for further production of wealth are included in capital. Thus, it is man-made material source of production. Alternatively, all man-made aids to production, which are not consumed/or their own sake, are termed as capital.

It is the produced means of production. Examples are—machines, tools, buildings, roads, bridges, raw material, trucks, factories, etc. An increase in the capital of an economy means an increase in the productive capacity of the economy. Logically and chronologically, capital is derived from land and labour and has therefore, been named as Stored-Up labour.

- Capital is a part of wealth.
- Capital is accountable.
- Capital is highly mobile factor.
- Capital quantity depends on rate of return.

### **4. Entrepreneur:**

An entrepreneur is a person who organises the other factors and undertakes the risks and uncertainties involved in the production. He hires the other three factors, brings them together, organises and coordinates them so as to earn maximum profit. For example, Mr. X who takes the risk of manufacturing television sets will be called an entrepreneur.

An entrepreneur acts as a boss and decides how the business shall run. He decides in what proportion factors should be combined. What and where he will produce and by what method. He is loosely identified with the owner, speculator, innovator or inventor and organiser of the business. Thus, entrepreneurship is a trait or quality owned by the entrepreneur.

- It is live factor of production.
- It is highest mobile factor.
- It bears loss and gaining profit.

## **❖ Types of Cost.**

### **1. Real Cost:**

The term “real cost of production” refers to the physical quantities of various factors used in producing a commodity. in other-words—Real cost signifies the aggregate of real productive resources absorbed in the production of a commodity or a service.

Marshall has described “real cost” as the production of a commodity generally requires many different kinds of labour and the use of capital in many forms.

The exertions of all the different kinds of labour that are directly or indirectly involved in making it, together with the abstinences or rather the waiting's required for saving the capital used in making it ; all these efforts and sacrifices together will be called the real cost of production of a commodity. Further, he had said that the real cost of production connotes the toil, trouble and sacrifice of factors in producing a commodity.

## **2. Opportunity Cost:**

The opportunity cost is also known as ‘transfer cost’ or ‘alternate cost’.

Prof. Lipsey has defined it as “the opportunity cost of using any factor is what is currently forgone by using it.”

Whereas Mrs. Joan Robinson has defined opportunity cost in terms of transfer cost. According to her, ‘The price which is necessary to retain a given unit of factor in a certain industry may be called its transfer earning or transfer price.’

The utility of the study of opportunity cost lies in the theory of production. The factor must be paid at least that price which they are able to obtain in the alternate use. If the

Opportunity cost in another field is more the labour will shift from one industry to those industries where transfer earning is more. But the main drawback of this concept is that it is not applicable to a specific factor i.e., a factor which can be put to single use. Since the factor is a single use factor, it can have no alternative or opportunity cost.

## **3. Money Cost:**

‘Money Cost’ is the monetary expenditure on inputs of various kinds. It is that total money expenses incurred by a firm in producing a commodity. They include wages and salaries of labour; cost of raw-material, expenditure on machines and equipment, depreciation and obsolescence charges on machines building and other capital goods; rent on building; interest on capital invested and borrowed ; normal profits of business, expenses on power, light, fuel, advertisement and transportation, insurance charges and all types of taxes.

### **(a) Explicit Costs:**

This includes those payments which are made by the producer to those factors of production which do not belong to the producer himself. These costs are mostly in the nature of contractual payment made by the producer to the owner of those factors whose services were bought by him for the purpose of production, e.g., the payment made for raw- materials, power, light, fuel the wages and salaries paid to the workers and other staff, the rent paid on the land and the interest paid on the borrowed capital etc. Payments on all such accounts will be included in explicit cost.

### **(b) Implicit Costs:**

Implicit costs are also known as imputed costs. These costs arise in the case of those factors which are possessed and supplied by the producer himself. Here we cannot assign exact money value but can term them in imputed values, e.g., a producer may contribute his own building or premises for running the business, his own capital and working also as Managing Director of the firm.

## **4. Production Costs:**

Production costs have been called as the total amount of money spent in the production of goods. They include the cost of raw materials and freight thereon, the costs of manufacture, i.e., the wages of workers engaged in the manufacture of the commodity and salaries of the manager and other office staff including those of peons etc.

They also include and cover other overheads expenses like—rent, interest on capital, taxes, insurance and other incidental expenses like—cost of repairs and replacements. They include both prime costs and supplementary costs.

### **5. Selling Costs:**

Selling costs are the costs of marketing, advertisement and salesmanship. These costs are incurred to attract customers, expand market and capture more business and retain the existing business. These costs are the essential costs of the competitive economy.

They are especially important in the case of imperfect competition in which goods are not identical but substitutes. The manufacturers resort to what is called product differentiation in order to change the demand curve of a particular seller to his advantage.

Selling costs are an important aspect of an imperfect market and have no place in a fully competitive market where the dealers are supposed to be fully aware of the quality of the goods and the conditions of the market.

### **6. Fixed and Variable Costs:**

Cost refer to the prices paid to the factors of production, we find prices paid to fixed factors, and the prices paid to the variable factors which are termed as the fixed costs and the variable costs respectively. Thus, the cost of production of a commodity is composed of two types of costs, i.e., Variable Costs and Fixed Costs, also called Prime and Supplementary Costs respectively.

### **7. Total Cost:**

$$\text{Total Cost} = \text{Fixed cost} + \text{Variable cost}$$

### **8. Average Cost:**

$$\text{Average Cost} = \text{Total Cost}/\text{Total No.of Production}$$

### **9. Sunk Cost:**

In economics and business decision-making, a sunk cost is a cost that has already been incurred and cannot be recovered. Sunk costs (also known as retrospective costs) are sometimes contrasted with prospective costs, which are future costs that may be incurred or changed if an action is taken.

A sunk cost is a cost that has already been incurred and thus cannot be recovered. A sunk cost differs from future costs that a business may face, such as decisions about inventory purchase costs or product pricing. Sunk costs (past costs) are excluded from future business decisions, because the cost will be the same regardless of the outcome of a decision.

*Example: registry Cost, College fees.*

### **10. Marginal Cost:**

Marginal Cost is the cost of producing an additional unit of output. In other-words, marginal cost is the addition made to the total cost by producing one more unit of output.

## ❖ Law of variable proportion.

*"As the proportion of the factor in a combination of factors is increased after a point, first the marginal and then the average product of that factor will diminish." Benham*

*"An increase in some inputs relative to other fixed inputs will in a given state of technology cause output to increase, but after a point the extra output resulting from the same additions of extra inputs will become less and less." Samuelson*

### ❖ Assumptions:

#### → Constant Technology:

The state of technology is assumed to be given and constant. If there is an improvement in technology the production function will move upward.

#### → Factor Proportions are Variable:

The law assumes that factor proportions are variable. If factors of production are to be combined in a fixed proportion, the law has no validity.

#### → Homogeneous Factor Units:

The units of variable factor are homogeneous. Each unit is identical in quality and amount with every other unit.

#### → Short-Run:

The law operates in the short-run when it is not possible to vary all factor inputs.

Units of Land	Units of Labour	Total Production	Average Production	Marginal Production
10 Acres	0	—	—	—
”	1	20	20	20
”	2	50	25	30 } 1st stage
”	3	90	30	40 } MP > AP
”	4	120	30	30 } AP = MP
”	5	140	28	20 }
”	6	150	25	10 } 2nd stage
”	7	150	21.3	0 } MP=0 and TP Maximum
”	8	140	17.5	-10 } 3rd stage MP < 0

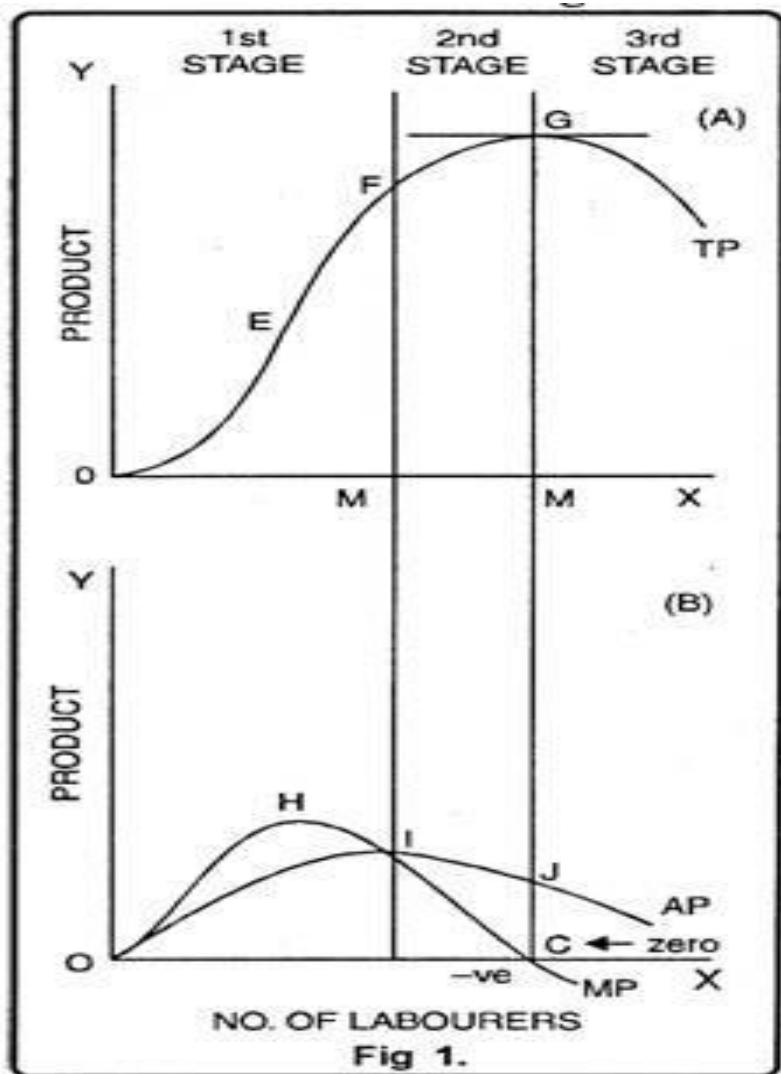
From the table 1 it is clear that there are three stages of the law of variable proportion. In the first stage average production increases as there are more and more doses of labour and capital employed with fixed factors (land). We see that total product, average product, and marginal product increases but average product and marginal product increases up to 40 units. Later on, both start decreasing because proportion of workers to land was sufficient and land is not properly used. This is the end of the first stage.

The second stage starts from where the first stage ends or where  $AP=MP$ . In this stage, average product and marginal product start falling. We should note that marginal product falls at a faster rate than the average product. Here, total product increases at a diminishing rate. It is also maximum at 70 units of labour where marginal product becomes zero while average product is never zero or negative.

The third stage begins where second stage ends. This starts from 8th unit. Here, marginal product is negative and total product falls but average product is still positive. At this stage, any additional dose leads to positive nuisance because additional dose leads to negative marginal product.

→ **Graphic Presentation:**

In fig. 1, on OX axis, we have measured number of labourers while quantity of product is shown on OY axis. TP is total product curve. Up to point 'E', total product is increasing at increasing rate. Between points E and G it is increasing at the decreasing rate. Here marginal product has started falling. At point 'G' i.e., when 7 units of labourers are employed, total product is maximum while, marginal product is zero. Thereafter, it begins to diminish corresponding to negative marginal product. In the lower part of the figure MP is marginal product curve.



Up to point 'H' marginal product increases. At point 'H', i.e., when 3 units of labourers are employed, it is maximum. After that, marginal product begins to decrease. Before point 'I' marginal product becomes zero at point C and it turns negative. AP curve represents average product. Before point 'I', average product is less than marginal product. At point 'I' average product is maximum. Up to point T, average product increases but after that it starts to diminish.

Three Stages of the Law:

**1. First Stage:**

First stage starts from point 'O' and ends up to point F. At point F average product is maximum and is equal to marginal product. In this stage, total product increases initially at increasing rate up to point E. between 'E' and 'F' it increases at diminishing rate.

Similarly marginal product also increases initially and reaches its maximum at point 'H'. Later on, it begins to diminish and becomes equal to average product at point T. In this stage, marginal product exceeds average product ( $MP > AP$ ).

## **2. Second Stage:**

It begins from the point F. In this stage, total product increases at diminishing rate and is at its maximum at point 'G' correspondingly marginal product diminishes rapidly and becomes 'zero' at point 'C'. Average product is maximum at point 'I' and thereafter it begins to decrease. In this stage, marginal product is less than average product ( $MP < AP$ ).

## **3. Third Stage:**

This stage begins beyond point 'G'. Here total product starts diminishing. Average product also declines. Marginal product turns negative. Law of diminishing returns firmly manifests itself. In this stage, no firm will produce anything. This happens because marginal product of the labour becomes negative. The employer will suffer losses by employing more units of labourers. However, of the three stages, a firm will like to produce up to any given point in the second stage only.

### **❖ Break Even Analysis.**

Break-even analysis is of vital importance in determining the practical application of cost functions. It is a function of three factors, i.e., sales volume, cost and profit. It aims at classifying the dynamic relationship existing between total cost and sale volume of a company.

Hence it is also known as "cost-volume-profit analysis". It helps to know the operating condition that exists when a company 'breaks-even', that is when sales reach a point equal to all expenses incurred in attaining that level of sales.

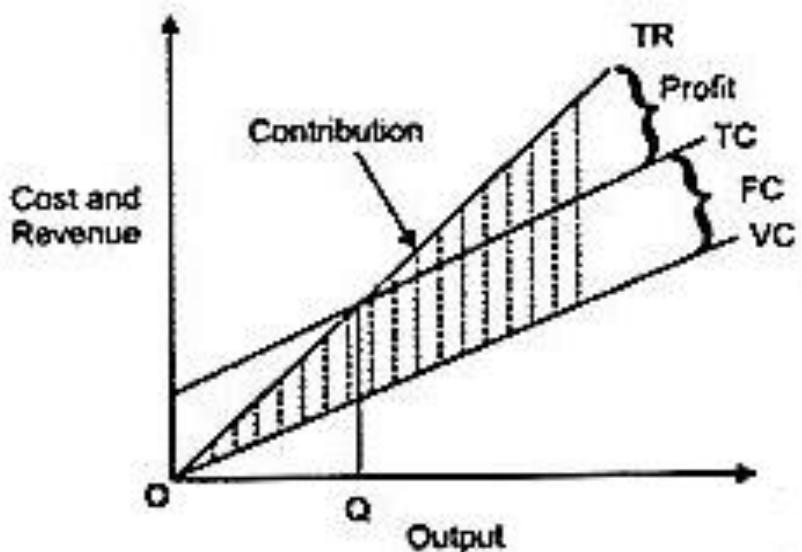
*According to Matz, Curry and Frank, "a break-even analysis indicates at what level, cost and revenue are in equilibrium."*

*According to Keller and Ferrara, "the break-even point of a unit of a company is the level of sales income which will equal the sum of its fixed costs and its variable costs."*

*According to Charles T. Homogreen, "the break-even point of activity (sales volume) is where total revenue and total expenses are equal. It is the point of zero profit and zero loss."*

The important aspect of understanding break-even analysis is the break-even point at which there is no net loss or gain of an organization as expenses equals revenue.

Refers to the analysis of incremental or additional revenue and costs of a business. Contribution is the difference between total revenue and variable costs.



Fixed costs are addition to variable costs. Thus, TC line is parallel to the variable costs line. In the Figure, OQ is the break-even point. TC minus VC equals FC. Below OQ, contribution is less than fixed cost whereas beyond OQ, contribution exceeds fixed cost. The shaded portion between TR and VC is the contribution.

❖ **Assumption of Break-even Analysis:**

- The total costs may be classified into fixed and variable costs. It ignores semi-variable cost.
- The cost and revenue functions remain linear.
- The price of the product is assumed to be constant.
- The volume of sales and volume of production are equal.
- The fixed costs remain constant over the volume under consideration.
- It assumes constant rate of increase in variable cost.
- It assumes constant technology and no improvement in labour efficiency.
- The price of the product is assumed to be constant.
- The factor price remains unaltered.
- Changes in input prices are ruled out.
- In the case of multi-product firm, the product mix is stable.

❖ **The limitations of break-even analysis**

- Fails to be applied effectively in the multiple products situation
- Fails to be implemented in the situation where cost and price cannot be ascertained and where historical data is not available
- Assumes fixed costs to be constant
- Assumes that quantity of goods produced is equal to the quantity of goods sold, which may not be always true
- Ignores changes in selling prices
- Ignores market conditions.

## **Chapter 3, Concept of Market and National Income**

### **❖ What is market?**

*"A market is defined as the sum total of all the buyers and sellers in the area or region under consideration. The area may be the earth, or countries, regions, states, or cities"*

The value, cost and price of items traded are as per forces of supply and demand in a market. The market may be a physical entity, or may be virtual. It may be local or global, perfect and imperfect.

A market can be called the 'available market' - that of all the people in the area. Within the available market, there is the 'market minimum'- or the market size, which will buy goods without any marketing effort. This is the lowest sale that a company could get without any action on its part. In today's world, this level is sinking ever lower.

There is also the 'market potential', which is the maximum market size that will buy goods when subjected to the greatest marketing action that a company can do. Beyond this market potential, the costs outweigh the gains. The market potential is therefore the upper limit for a marketplace and sales.

### **❖ Types of Market.**

- 1. Perfect Competition Market.**
- 2. Monopoly Market.**
- 3. Monopolistic Market.**
- 4. Oligopoly Market.**

#### **1. Perfect Competition Market:**

Perfect competition describes a market structure where competition is at its greatest possible level. To make it more clear, a market which exhibits the following characteristics in its structure is said to show perfect competition:

##### **Features:**

- Large number of buyers and sellers.
- Homogenous product is produced by every firm.
- Free entry and exit of firms.
- Zero advertising cost.
- Consumers have perfect knowledge about the market and are well aware of any changes in the market. Consumers indulge in rational decision making.
- All the factors of production, viz. labour, capital, etc, have perfect mobility in the market and are not hindered by any market factors or market forces.
- No government intervention.
- No transportation costs.
- Each firm earns normal profits and no firms can earn super-normal profits.
- Every firm is a price taker. It takes the price as decided by the forces of demand and supply. No firm can influence the price of the product.

#### **2. Monopoly Competition Market:**

The word monopoly has been derived from the combination of two words i.e., 'Mono' and 'Poly'. Mono refers to a single and poly to control.

*"Pure monopoly is represented by a market situation in which there is a single seller of a product for which there are no substitutes; this single seller is unaffected by and does not affect the prices and outputs of other products sold in the economy." Bilas*

*"A pure monopoly exists when there is only one producer in the market. There are no dire competitions." –Ferguson*

**Features:**

- One Seller and Large Number of Buyers.
- No Close Substitutes.
- Difficulty of Entry of New Firms.
- Price Maker.
- Monopolist firm can control the supply.
- Restriction on entry.

**3. Monopolist Competition Market:**

Monopolistic competition is a market structure which combines elements of monopoly and competitive markets. Essentially a monopolistic competitive market is one with freedom of entry and exit, but firms can differentiate their products. Therefore, they have an inelastic demand curve and so they can set prices. However, because there is freedom of entry, supernormal profits will encourage more firms to enter the market leading to normal profits in the long term.

**Features:**

- Many firms.
- Freedom of entry and exit.
- Firms produce differentiated products.
- Firms have price inelastic demand; they are price makers because the good is highly differentiated.
- Selling cost determine the demand of product.
- Firms make normal profits in the long run but could make supernormal profits in the short term.

**4. Oligopoly Competition Market:**

The Oligopoly Market characterized by few sellers, selling the homogeneous or differentiated products. In other words, the Oligopoly market structure lies between the pure monopoly and monopolistic competition, where few sellers dominate the market and have control over the price of the product.

**Features:**

- Few Sellers.
- Interdependence.
- Advertising.
- Competition.
- Entry and Exit Barriers.
- Lack of Uniformity.

#### ❖ National Income Concept

There are various concepts of National Income. The main concepts of NI are: GDP, GNP, NNP, NI, PI, DI, and PCI. These different concepts explain about the phenomenon of economic activities of the various sectors of the various sectors of the economy.

#### 1. Gross Domestic Product (GDP):

The most important concept of national income is Gross Domestic Product. Gross domestic product is the money value of all final goods and services produced within the domestic territory of a country during a year.

$$\text{GDP} = (P \cdot Q)$$

Where,

- GDP=Gross Domestic Product
- P=Price of goods and service
- Q=Quantity of goods and service

Denotes the summation of all values.

According to expenditure approach, GDP is the sum of consumption, investment, government expenditure, net foreign exports of a country during a year.

Algebraic expression under expenditure approach is,

$$\text{GDP} = C + I + G + (X - M)$$

Where,

- C=Consumption
- I=Investment
- G=Government expenditure
- (X-M)=Export minus import

GDP includes the following types of final goods and services. They are:

- Consumer goods and services.
- Gross private domestic investment in capital goods.
- Government expenditure.
- Exports and imports.

#### 2. Gross National Product (GNP):

Gross National Product is the total market value of all final goods and services produced annually in a country plus net factor income from abroad. Thus, GNP is the total measure of the flow of goods and services at market value resulting from current production during a year in a country including net factor income from abroad. The GNP can be expressed as the following equation:

$$\text{GNP} = \text{GDP} + \text{NFIA} \text{ (Net Factor Income from Abroad)}$$

$$\text{or, } \text{GNP} = C + I + G + (X - M) + \text{NFIA}$$

Hence, GNP includes the following:

- Consumer goods and services.

- Gross private domestic investment in capital goods.
- Government expenditure.
- Net exports (exports-imports).
- Net factor income from abroad.

### **3. Net National Product (NNP):**

Net National Product is the market value of all final goods and services after allowing for depreciation. It is also called National Income at market price. When charges for depreciation are deducted from the gross national product, we get it. Thus,

$$\text{NNP} = \text{GNP} - \text{Depreciation}$$

$$\text{Or, } \text{NNP} = \text{C} + \text{I} + \text{G} + (\text{X} - \text{M}) + \text{NFIA} - \text{Depreciation}$$

### **4. National Income (NI):**

National Income is also known as National Income at factor cost. National income at factor cost means the sum of all incomes earned by resources suppliers for their contribution of land, labour, capital and organizational ability which go into the year's net production. Hence, the sum of the income received by factors of production in the form of rent, wages, interest and profit is called National Income. Symbolically,

$$\text{NI} = \text{NNP} + \text{Subsidies} - \text{Interest Taxes}$$

$$\text{or, GNP} - \text{Depreciation} + \text{Subsidies} - \text{Indirect Taxes}$$

$$\text{or, NI} = \text{C} + \text{G} + \text{I} + (\text{X} - \text{M}) + \text{NFIA} - \text{Depreciation} - \text{Indirect Taxes} + \text{Subsidies}$$

### **5. Personal Income (PI):**

Personal Income is the total money income received by individuals and households of a country from all possible sources before direct taxes. Therefore, personal income can be expressed as follows:

$$\begin{aligned} \text{PI} &= \text{NI} - \text{Corporate Income Taxes} - \text{Undistributed Corporate Profits} - \text{Social Security} \\ &\quad \text{Contribution} + \text{Transfer Payments} \end{aligned}$$

### **6. Disposable Income (DI):**

The income left after the payment of direct taxes from personal income is called Disposable Income. Disposable income means actual income which can be spent on consumption by individuals and families. Thus, it can be expressed as:

$$\text{DI} = \text{PI} - \text{Direct Taxes}$$

From consumption approach,

$$\text{DI} = \text{Consumption Expenditure} + \text{Savings}$$

### **7. Per Capita Income (PCI):**

Per Capita Income of a country is derived by dividing the national income of the country by the total population of a country. Thus,

$$\text{PCI} = \text{Total National Income} / \text{Total National Population}$$

## **Chapter 4 Basic Economic Problems**

### **❖ What is Basic Economic Problem? Main Economic Problem.**

The economic problem – sometimes called the basic or central economic problem – asserts that an economy's finite resources are insufficient to satisfy all human wants and needs. It assumes that human wants are unlimited, but the means to satisfy human wants are limited.

### **❖ Main Economic Problem:**

1. **Poverty**
2. **Unemployment**
3. **Inflation**

### **❖ Poverty:**

Poverty means the economic situation of the individual or social group in which they cannot satisfy a certain range of minimum requirement.

*"Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time.*

*Poverty has many faces, changing from place to place and across time, and has been described in many ways. Most often, poverty is a situation people want to escape. So poverty is a call to action -- for the poor and the wealthy alike -- a call to change the world so that many more may have enough to eat, adequate shelter, access to education and health, protection from violence, and a voice in what happens in their communities."*

### **❖ Types of poverty**

#### **1. Absolute poverty:**

It is the extreme kind of poverty involving the chronic lack of basic food, clean water, health and housing. People in absolute poverty tend to struggle to live and experience a lot of child deaths from preventable diseases like malaria, cholera and water-contamination related diseases. This type is usually long term in nature, and often handed to them by generations before them. This kind of poverty is usually not common in the developed world.

Absolute poverty is measured against a pre-determined level of living that families should be able to afford. Consumption of food grains, vegetables, milk products and other items that are necessary for a healthy living and access to other non-food items are included in the absolute minimum consumption basket.

#### **2. Relative Poverty:**

This kind is usually in relation to other members and families in the society. For example, a family can be considered poor if it cannot afford vacations, or cannot buy presents for children at Christmas, or cannot send its young to the university. Even though they have access to government support for food, water, medicine and free housing, they are considered poor because the rest of the community have access to superior services and amenities.

Relative poverty is closely associated with the issues of inequality. The income or consumption of the last quintile of the population would be termed poor even though on absolute poverty definition none of the people in the last quintile group may be poor. Per capita income of a country could also be used to identify the poor.

❖ **Causes of Poverty:**

**1. Heavy pressure of population:**

Population has been rising in India at a rapid speed. This rise is mainly due to fall in death rate and more birth rate. India's population was 84.63 crores in 1991 and became 102.87 crores in 2001 and in 2017 it reached Above 132.42 crores. This pressure of population proves hindrance in the way of economic development.

**2. Unemployment and under employment:**

Due to continuous rise in population, there is chronic unemployment and under employment in India. There is educated unemployment and disguised unemployment. Poverty is just the reflection of unemployment.

**3. Capital Deficiency:**

Capital is needed for setting up industry, transport and other projects. Shortage of capital creates hurdles in development.

**4. Under-developed economy:**

The Indian economy is under developed due to low rate of growth. It is the main cause of poverty.

**5. Increase in Price:**

The steep rise in prices has affected the poor badly. They have become more poor.

**6. Net National Income:**

The net national income is quite low as compared to size of population. Low per capita income proves its poverty. The per capita income in 2003-04 was Rs. 20989 which proves India is one of the poorest nations.

**7. Rural Economy:**

Indian economy is rural economy. Indian agriculture is backward. It has great pressure of population. Income in agriculture is low and disguised unemployment is more in agriculture.

**8. Lack of Skilled Labour:**

In India, unskilled labour is in abundant supply but skilled labour is less due to insufficient industrial education and training.

**9. Deficiency of efficient Entrepreneurs:**

For industrial development, able and efficient entrepreneurs are needed. In India, there is shortage of efficient entrepreneurs. Less industrial development is a major cause of poverty.

**10. Lack of proper Industrialisation:**

Industrially, India is a backward state. 3% of total working population is engaged in industry. So industrial backwardness is major cause of poverty.

**11. Low rate of growth:**

The growth rate of the economy has been 3.7% and growth rate of population has been 1.8%. So compared to population, per capita growth rate of economy has been very low. It is the main cause of poverty.

**12. Out-dated Social institutions:**

The social structure of our country is full of out-dated traditions and customs like caste system, laws of inheritance and succession. These hamper the growth of economy.

### **13. Improper use of Natural Resources:**

India has large natural resources like iron, coal, manganese, mica etc. It has perennial flowing rivers that can generate hydroelectricity. Man power is abundant. But these sources are not put in proper use.

### **14. Lack of Infrastructure:**

The means of transport and communication have not been properly developed. The road transport is inadequate and railway is quite less. Due to lack of proper development of road and rail transport, agricultural marketing is defective. Industries do not get power supply and raw materials in time and finished goods are not properly marketed.

#### **❖ Measures to reduce poverty:**

##### **1. Population Control:**

Population in India has been increasing rapidly. Growth rate of population is 1.8%. For removal of poverty the growth rate of population should be lowered.

##### **2. Increase in Employment:**

Special measures should be taken to solve the problems of unemployment and disguised unemployment. Agriculture should be developed. Small scale and cottage industries should be developed in rural areas to generate employment.

##### **3. Equal distribution of Income:**

Mere increase in production and control on population growth will not remove poverty in India. It is necessary that inequality in the distribution of income should be reduced.

##### **4. Regional poverty:**

In States like Orissa, Nagaland, U.P and Bihar etc. the percentage of the poor to the total population is high. Govt. should give special concession for investment in these regions. More PSU's should be established in these states.

##### **5. Problem of Distribution:**

The public distribution system (PDS) should be strengthened to remove poverty. Poor section should get food grains at subsidized rates and in ample quantity.

##### **6. Fulfilment of minimum needs of the Poor:**

Govt. should take suitable steps to meet minimum needs of the poor e.g., supply of drinking water and provision of primary health centres and primary education.

##### **7. Increase in the productivity of the Poor:**

To remove poverty, it is necessary to increase productivity of the poor. The poor should be given more employment. More investment should be made in public and private sectors to generate employment.

##### **8. Changes in techniques of Production:**

India should adopt labour intensive techniques of production. We should have technical development in our economy in such a way that labour resources could be fully employed.

##### **9. Stability in Price Level:**

Stability in prices helps to remove poverty. If prices continue to rise, the poor will become more poor. So Govt. should do its best to keep the prices under control.

## **10. Development of Agriculture:**

The agriculture should be developed to remove poverty. Rapid rate of growth of agriculture production will help to remove urban as well as rural poverty. Agriculture should be mechanized and modernized. Marginal farmers should be given financial assistance.

## **11. Increase in the rate of growth:**

Slow rate of growth is the main cause of poverty. So growth rate must be accelerated. In 2003-04 the growth rate has been 6.5% despite that 26% of population remains below poverty line.

### **❖ Unemployment :**

*According to A.C. Pigou "Unemployment means, all those who are willing to work are not able to find job".*

*"When a person is actively searching for employment, but unable to find the job, is called unemployed"*

### **❖ Types of Unemployment:**

#### **1. Frictional:**

Such unemployment exists in almost every economy all the time. This type of un-employment occurs due to the normal working of the economy. **As John Beardshaw has rightly put it, "It is inevitable in a developing economy that people will from time to time change jobs and may perhaps be unemployed for some weeks as they wait to take up the next job."**

In truth, some unemployment is due to economic frictions arising from changes in employers' demands for different types of labour. Thus the skill of certain workers may be made obsolete by changes in the technique of production.

#### **2. Seasonal:**

This type of unemployment occurs due to the seasonal nature of some industries. In some industries the demand for goods or services fluctuates seasonally. For example, hotels, restaurants, and ice-cream factories are fully staffed by employees during the summer but many of those workers are laid off during the winter.

#### **3. Technological:**

There is no doubt that improvements in technology have reduced the demand for labour. However, one may expect with some degree of optimism that in the long run improvements in technology and the resultant increases in productivity will create jobs by leading to an expansion of the economy.

#### **4. Residual or voluntary:**

In addition there are some people who are not willing to work but get their names registered with employment exchanges in order to receive compensation from the government. Person has the qualification for job and he also offered job Form Company but he don't want to work than he become voluntary unemployed.

#### **5. Structural:**

This type of unemployment occurs due to a change in the structure of the economy. For example, the setting up of large mechanized manufacturing units in India led to the decline of handi-crafts. Most artisans were displaced because they did not have sufficient marketable skill. Thus this type of employment results from the imbalance caused by the decline of one industry and the rise of another. In other words, structural unemployment results when industries fail to create enough jobs to

absorb those made redundant, or because the new industry is situated in a different area or requires different skills.

#### **6. General or Cyclical:**

All of the types of unemployment considered so far are the result of changes in the economy. However, the most severe unemployment of the type experienced in the 1930s as also in the 1980s is a result of the general depression of the whole country. The name 'cyclical' carries the significance that this type of unemployment is the result of depression, which is an important phase of the business (trade) cycle.

This form of unemployment arises from the trade cycle and is sometimes referred to as mass unemployment. Since the Industrial Revolution at the end of the eighteenth century, the volume of economic activity (and hence the level of employment) has proceeded in a succession of 'booms' and 'slumps'. A period of good trade has declined into a bad one which in turn was followed by an upswing of renewed activity. Unemployment occurs during the downswing of the trade cycle and is at its worst in the trough of the cycle.

#### **7. Casual Unemployment:**

Casual unemployment means when some people depend on day to day production process income and if some time that production process shutdown than he becomes casual unemployment.

##### **❖ Causes of unemployment:**

###### **1. Caste System:**

In India caste system is prevalent. The work is prohibited for specific castes in some areas. In many cases, the work is not given to the deserving candidates but given to the person belonging to a particular community. So this gives rise to unemployment.

###### **2. Slow Economic Growth:**

Indian economy is underdeveloped and rate of economic growth is very slow. This slow growth fails to provide enough unemployment opportunities to the increasing population.

###### **3. Increase in Population:**

Constant increase in population has been a big problem in India. It is one of the main causes of unemployment. The rate of unemployment is 11.1% in 10th Plan.

###### **4. Agriculture is a Seasonal Occupation:**

Agriculture is underdeveloped in India. It provides seasonal employment. Large part of population is dependent on agriculture. But agriculture being seasonal provides work for a few months. So this gives rise to unemployment.

###### **5. Joint Family System:**

In big families having big business, many such persons will be available who do not do any work and depend on the joint income of the family. Many of them seem to be working but they do not add anything to production. So they encourage disguised unemployment.

###### **6. Fall of Cottage and Small industries:**

The industrial development had adverse effect on cottage and small industries. The production of cottage industries began to fall and many artisans became unemployed.

**7. Slow Growth of Industrialisation:**

The rate of industrial growth is slow. Though emphasis is laid on industrialisation yet the avenues of employment created by industrialisation are very few.

**8. Less Savings and Investment:**

There is inadequate capital in India. Above all, this capital has been judiciously invested. Investment depends on savings. Savings are inadequate. Due to shortage of savings and investment, opportunities of employment have not been created.

**9. Causes of Under Employment:**

Inadequate availability of means of production is the main cause of under employment. People do not get employment for the whole year due to shortage of electricity, coal and raw materials.

**10. Defective Planning:**

Defective planning is the one of the cause of unemployment. There is wide gap between supply and demand for labour. No Plan had formulated any long term scheme for removal of unemployment.

**11. Expansion of Universities:**

The number of universities has increased manifold. There are 385 universities. As a result of this educated unemployment or white collar unemployment has increased.

**12. Inadequate Irrigation Facilities:**

Even after the completion of 9th five plans, 39% of total cultivable area could get irrigation facilities. Due to lack of irrigation, large area of land can grow only one crop in a year. Farmers remain unemployed for most time of the year.

**13. Immobility of labour:**

Mobility of labour in India is low. Due to attachment to the family, people do not go too far off areas for jobs. Factors like language, religion, and climate are also responsible for low mobility. Immobility of labour adds to unemployment.

**❖ Measures to control unemployment:**

**1. Change in industrial technique:**

Production technique should suit the needs and means of the country. It is essential that labour intensive technology should be encouraged in place of capital intensive technology.

**2. Policy regarding seasonal unemployment:**

Seasonal unemployment is found in agriculture sector and agro based industries.

- Agriculture should have multiple cropping,
- Plantations, horticulture, dairying and animal husbandry should be encouraged,
- Cottage industries should be encouraged.

**3. Change in education system:**

Educational pattern should be completely changed. Students who have liking for higher studies should be admitted in colleges and universities. Emphasis should be given on vocational education. Qualified engineers should start their own small units.

**4. Expansion of Employment exchanges:**

More employment exchanges should be opened. Information regarding employment opportunities should be given to people.

**5. More assistance to self-employed people:**

Most people in India are self-employed. They are engaged in agriculture, trade, cottage and small scale industries etc. These persons should be helped financially, providing raw materials and technical training.

**6. Full and more productive employment:**

The main objective of country's employment policy should be to increase employment opportunities and productivity of labour. Govt. should adopt a policy that provides employment to all people.

**7. Increase in Production:**

To increase employment, it is essential to increase production in agriculture and industrial sectors. Development of small and cottage industries should be encouraged.

**8. More importance to employment programmes:**

In five year plans more importance should be given to employment. The programmes like irrigation, roads, flood control, power, agriculture, rural electrification can provide better employment to people.

**9. High rate of capital formation:**

Rate of capital formation in the country should be accelerated. Capital formation should be particularly encouraged in such activities which generate greater employment opportunities. Capital output ratio should be kept low.

**10. Industries in co-operative sector:**

Industries in co-operative sector should be encouraged. Kerala Govt.' set up a textile mill covering 600 unemployed persons on co-operative basis. This is a novel approach to fight against unemployment. Different State Govt. should take necessary steps in this direction.

**11. Decentralisation of industrial activity:**

Decentralisation of Industrial activity is necessary to reduce unemployment. If industrial activities are centralised at one place, there will be less employment opportunities in the under developed areas. So Govt. should adopt such policies which encourage decentralisation of industrial activity.

**12. Population control:**

The growth of population should be checked in order to solve unemployment, problem. Family planning programme should be implemented widely and effectively

❖ **Inflation:**

*"The word inflation in the broadest possible sense refers to any increase in the general price-level which is sustained and non-seasonal in character"- Peterson.*

*According to Coulborn inflation can be defined as, "too much money chasing too few goods."*

*According to Parkin and Bade, "Inflation is an upward movement in the average level of prices. Its opposite is deflation, a downward movement in the average level of prices. The boundary between inflation and deflation is price stability."*

*According to Samuleson-Nordhaus, "Inflation is a rise in the general level of prices."*

❖ **Types of inflation:**

**1. Demand-pull inflation:**

This occurs when Aggregate Demand increases at a faster rate than Aggregate supply. Demand pull inflation will typically occur when the economy is growing faster than the long run trend rate of growth. If demand exceeds supply, firms will respond by pushing up prices. It occurs when the total demand for goods and services in an economy exceeds available supply, so price of them rise in a market economy.

**2. Cost-push inflation:**

This occurs when there is an increase in the cost of production for firms causing aggregate supply to shift to the left. Cost-push inflation could be caused by rising energy and commodity prices. Sometimes cost-push inflation is known as the 'wrong type of inflation' because this inflation is associated with falling living standards. It is hard for the Central Bank to deal with cost push inflation because they face both inflation and falling output.

Inflation in an economy may arise from the overall increase in the cost of production. This type of inflation is known as cost-push inflation (henceforth CPI). Cost of production may rise due to an increase in the prices of raw materials, wages, etc. Often trade unions are blamed for wage rise since wage rate is not completely market-determined. Higher wage means high cost of production. Prices of commodities are thereby increased.

A wage-price spiral comes into operation. But, at the same time, firms are to be blamed also for the price rise since they simply raise prices to expand their profit margins. Thus, we have two important variants of CPI wage-push inflation and profit-push inflation.

**3. Pricing Power Inflation:**

It occurs whenever business in general decides to boost their prices to increase their profit margins. This does not occur normally in recession but when the economy is booming and sales are strong.

**4. Sectorial Inflation:**

The term applies whenever any of the other three factors hits a basic industry causing inflation. Since the industry in which inflation has occurred is a major supplier to many other industries, the prices of their products also increase and hence inflation also occurs in that industry.

❖ **Causes of inflation:**

**1. Increase in money supply:**

Over the last few years the rate of increase in money supply has varied between 15 and 18 per cent, whereas the national output has increased at an annual average rate of only 4 per cent.

Hence the rate of increase in output has not been sufficient to absorb the rising quantity of money in the economy. Inflation is the obvious result.

**2. Deficit financing:**

When the government is unable to raise adequate revenue for its expenditure, it resorts to deficit financing. During the sixth and seventh Plans, massive doses of deficit financing had been resorted to. It was Rs. 15,684 crores in the sixth Plan and Rs. 36,000 crores in the seventh Plan.

**3. Increase in government expenditure:**

Government expenditure in India during the recent years has been rising very fast. What is more disturbing, proportion of non-development expenditure increased rapidly, being about 40 per cent of total government expenditure. Non-development expenditure does not create real goods; it only creates purchasing power and hence leads to inflation.

Not only the above mentioned factors on the Demand side cause inflation, factors on the Supply side also add fuel to the flame of inflation.

**4. Inadequate agricultural and industrial growth:**

Agricultural and industrial growth in our country has been much below what we had targeted for. Over the four decades period, food grains output has increased and-i.e. of 3.2 per cent per annum.

But there are years of crop failure due to droughts. In the years of scarcity of food grains not only the prices of food articles increased, the general price level also rose. Failure of crops always encouraged big wholesale dealers to indulge in hoarding which accentuated scarcity conditions and pushed up the price level.

**5. Rise in administered prices:**

In our economy a large part of the market is regulated by government action. There are a number of important commodities, both agricultural and industrial, for which the price level is administered by the government. The government keeps on raising prices from time to time in order to cover up losses in the public sector. This policy leads to cost-push inflation.

The upward revision of administered prices of coal, iron and steel, electricity and fertilisers were made at regular intervals. Once the administered prices are raised, it is a signal for other price to go up.

**6. Rising import prices:**

Inflation has been a global phenomenon. International inflation gets imported into the country through major imports like fertilisers, edible oil, steel, cement, chemicals, and machinery. Increase in the import price of petroleum has been most spectacular and its contribution to domestic price rise is very high.

**7. Rising taxes:**

To raise additional financial resources, government is depending more and more on indirect taxes such as excise duties and sales tax. These taxes invariably raise the price level.

❖ Remedies to control inflation:

**1. Monetary Measures:**

➤ **Credit Control:**

One of the important monetary measures is monetary policy. The central bank of the country adopts a number of methods to control the quantity and quality of credit. For this purpose, it raises the bank rates, sells securities in the open market, raises the reserve ratio, and adopts a number of selective credit control measures, such as raising margin requirements and regulating consumer credit. Monetary policy may not be effective in controlling inflation, if inflation is due to cost-push factors. Monetary policy can only be helpful in controlling inflation due to demand-pull factors.

➤ **Demonetisation of Currency:**

However, one of the monetary measures is to demonetise currency of higher denominations. Such measures are usually adopted when there is abundance of black money in the country.

➤ **Issue of New Currency:**

The most extreme monetary measure is the issue of new currency in place of the old currency. Under this system, one new note is exchanged for a number of notes of the old currency. The value of bank deposits is also fixed accordingly. Such a measure is adopted when there is an excessive issue of notes and there is hyperinflation in the country. It is a very effective measure. But it is inequitable for its hurts small depositors the most.

**2. Fiscal Measures:**

➤ **Reduction in Unnecessary Expenditure:**

The government should reduce unnecessary expenditure on non-development activities in order to curb inflation. This will also put a check on private expenditure which is dependent upon government demand for goods and services. But it is not easy to cut government expenditure. Though this measure is always welcome but it becomes difficult to distinguish between essential and non-essential expenditure. Therefore, this measure should be supplemented by taxation.

➤ **Increase in Taxes:**

To cut personal consumption expenditure, the rates of personal, corporate and commodity taxes should be raised and even new taxes should be levied, but the rates of taxes should not be so high as to discourage saving, investment and production. Rather, the tax system should provide larger incentives to those who save, invest and produce more.

➤ **Increase in Savings:**

Another measure is to increase savings on the part of the people. This will tend to reduce disposable income with the people, and hence personal consumption expenditure. But due to the rising cost of living, people are not in a position to save much voluntarily.

### **3. Other Measures:**

➤ **To Increase Production:**

(i) One of the foremost measures to control inflation is to increase the production of essential consumer goods like food, clothing, kerosene oil, sugar, vegetable oils, etc.

(ii) If there is need, raw materials for such products may be imported on preferential basis to increase the production of essential commodities,

(iii) Efforts should also be made to increase productivity. For this purpose, industrial peace should be maintained through agreements with trade unions, binding them not to resort to strikes for some time,

(iv) The policy of rationalisation of industries should be adopted as a long-term measure. Rationalisation increases productivity and production of industries through the use of brain, brawn and bullion,

(v) All possible help in the form of latest technology, raw materials, financial help, subsidies, etc. should be provided to different consumer goods sectors to increase production.

➤ **Rational Wage Policy:**

Another important measure is to adopt a rational wage and income policy. Under hyperinflation, there is a wage-price spiral. To control this, the government should freeze wages, incomes, profits, dividends, bonus, etc.

But such a drastic measure can only be adopted for a short period as it is likely to antagonise both workers and industrialists. Therefore, the best course is to link increase in wages to increase in productivity. This will have a dual effect. It will control wages and at the same time increase productivity, and hence raise production of goods in the economy.

➤ **Price Control:**

Price control and rationing is another measure of direct control to check inflation. Price control means fixing an upper limit for the prices of essential consumer goods. They are the maximum prices fixed by law and anybody charging more than these prices is punished by law. But it is difficult to administer price control.

## Chapter 5, money and Banking

### ❖ What is Money?

Money is primarily a medium of exchange or means of exchange. It is a way for a person to trade what he has for what he wants. Ideal money has three critical characteristics: it acts as a medium of exchange; it is an economic good; and it is a means of economic calculation.

“A current medium of exchange in the form of coins and banknotes; coins and banknotes collectively”

### ❖ Function Of Money:

#### 1. A Medium of Exchange:

The only alter-native to using money is to go back to the barter system. However, as a system of ex-change the barter system would be highly impracticable today.

For example, if the baker who supplied the green-grocer with bread had to take payment in onions and carrots, he may either not like these foodstuffs or he may have sufficient stocks of them.

Money provides the most efficient means of satisfying wants. Each consumer has a different set of wants. Money enables him (her) to decide which wants to satisfy, rank the wants in order of urgency and capa-city (income) and act accordingly.

#### 2. A Measure of Value:

Under the barter system, it is very difficult to measure the value of goods. For example, a horse may be valued as worth five cows or 100 quintals of wheat, or a Maruti car may be equivalent to 10 two- wheelers. Thus one of the disadvantages of the barter system is that any commodity or service has a series of exchange values.

Money is the measuring rod of everything. By acting as a common denominator it permits everything to be priced, that is, valued in terms of money. Thus, people are enabled to com-pare different prices and thus see the relative values of different goods and services.

This serves two basic purposes:

- (1) Households (consumers) can plan their expenditure and
- (2) Business people can keep records of in-come and costs in order to work out their profit and loss figures.

#### 3. A Store of Value (Purchasing Power):

A major disadvantage of using commodities — such as wheat or salt or even animals like horses or cows — as money is that after a time they deteriorate and lose economic value. They are, thus, not at all satisfactory as a means of storing wealth. To realise the problems of saving in a barter economy let us consider a farmer. He wanted to save some wheat each week for future consumption. But this would be of no use to him in his old age because the ‘savings’ would have gone off.

Again, if a coal miner wanted to set aside a certain amount of coal each week for the same purpose, he would have problems of finding enough storage space for all his coal. By using money, such problems can be overcome and people are able to save for the future. Modern form of money (such as coins, notes and bank deposits) permits people to save their surplus income.

Thus money is used as a store of purchasing power. It can be held over a period of time and used to finance future payments. More-over, when people save money, they get the assurance that the money saved will have value when they wish to

spend it in the future. However, this statement holds only if there is no severe inflation (or deflation) in the country.

In other words, it is quite obvious that money can only act effectively as a store of value if its own value is stable. If, for example, most people feel that their savings would become worthless very soon, they would spend them at once and save nothing. For the last few years the value (or the purchasing power) of money has been falling in India. Yet in the short run—for day-to-day purposes—money has sufficient stability of value to serve quite well as a store of value.

**4. The Basis of Credit:**

Money facilitates loans. Borrowers can use money to obtain goods and services when they are needed most. A newly married couple, for example, would need a lot of money to completely furnish a house at once. They are not required to wait for, say ten years, so as to be able to save enough money to buy costly items like cars, refrigerators, T.V. sets, etc.

**5. A Unit of Account:**

An attribute of money is that it is used as a unit of account. The implication is that money is used to measure and record financial transactions as also the value of goods or services produced in a country over time. The money value of goods and services produced in an economy in an accounting year is called gross national product. According to J. R. Hicks, gross national product is a collection of goods and services reduced to a common basis by being measured in terms of money.

**6. A Standard of Postponed Payment:**

This is an extension of the first function. Here again money is used as a medium of exchange, but this time the payment is spread over a period of time. Thus, when goods are bought on hire-purchase, they are given to the buyer upon payment of a deposit, and he then pays the remaining amount in a number of instalments.

Under the barter system this type of transaction could involve problems. Imagine a farmer buying a video-recorder and agreeing to pay for it in terms of a fixed amount of wheat each week for a certain number of weeks. After a few weeks the seller of the video recorder might have more than enough wheat.

Yet he will have to receive more wheat in the coming weeks. If money had been used, the seller could then use it to buy whatever he wanted, whether it is wheat or something else—now or in future. In other words, the use of money permits postponement of spending from the present to some future occasion.

In a modern economy, most transactions (buying and selling) are made on the basis of credit. For example, it is possible to purchase consumer durables such as T.V. sets or washing machines on hire-purchase; houses may be purchased by means of L.I.C. or H.D.F.C. loan; most business dealings permit payment in the future for goods delivered now; and employees wait for a month or a week to receive their wages and salaries. Thus, the use of money permits the members of society to defer their spending from the present to some future date.

❖ **Types of Money:**

**1. Commodity Money:**

Commodity money is the simplest and most likely also the oldest type of money. It builds on scarce natural resources that act as a medium of exchange, store of value, and unit of account. Commodity money is closely related to (and originates from) a barter system, where goods and services are directly exchanged for other goods and services. Commodity money facilitates this process, because it acts as a generally accepted medium of exchange. The important thing to note about commodity money is that its value is defined by the intrinsic value of the commodity itself. In other words, the commodity itself becomes the money. Examples of commodity money include gold coins, beads, shells, spices, etc.

**2. Fiat Money:**

Fiat money gets its value from a government order (i.e. fiat). That means, the government declares fiat money to be legal tender, which requires all people and firms within the country to accept it as a means of payment. If they fail to do so, they may be fined or even put in prison. Unlike commodity money, fiat money is not backed by any physical commodity. By definition, its intrinsic value is significantly lower than its face value. Hence, the value of fiat money is derived from the relationship between supply and demand. In fact, most modern economies are based on a fiat money system. Examples of fiat money include coins and bills.

**3. Fiduciary Money:**

Fiduciary money depends for its value on the confidence that it will be generally accepted as a medium of exchange. Unlike fiat money, it is not declared legal tender by the government, which means people are not required by law to accept it as a means of payment. Instead, the issuer of fiduciary money promises to exchange it back for a commodity or fiat money if requested by the bearer. As long as people are confident that this promise will not be broken, they can use fiduciary money just like regular fiat or commodity money. Examples of fiduciary money include cheques, bank notes, or drafts.

**4. Commercial Bank Money:**

Commercial bank money can be described as claims against financial institutions that can be used to purchase goods or services. It represents the portion of a currency that is made of debt generated by commercial banks. More specifically, commercial bank money is created through what we call fractional reserve banking. Fractional reserve banking describes a process where commercial banks give out loans worth more than the value of the actual currency they hold. At this point just note that in essence, commercial bank money is debt generated by commercial banks that can be exchanged for “real” money or to buy goods and services.

## ❖ **Monetary Policy**

*"Monetary policy involves the influence on the level and composition of aggregate demand by the manipulation of interest rates and the availability of credit"-D.C. Aston.*

Monetary policy is the macroeconomic policy laid down by the central bank. It involves management of money supply and interest rate and is the demand side economic policy used by the government of a country to achieve macroeconomic objectives like inflation, consumption, growth and liquidity.

In India, monetary policy of the Reserve Bank of India is aimed at managing the quantity of money in order to meet the requirements of different sectors of the economy and to increase the pace of economic growth.

The RBI implements the monetary policy through open market operations, bank rate policy, reserve system, credit control policy, and moral persuasion and through many other instruments. Using any of these instruments will lead to changes in the interest rate, or the money supply in the economy. Monetary policy can be expansionary and contractionary in nature. Increasing money supply and reducing interest rates indicate an expansionary policy. The reverse of this is a contractionary monetary policy.

For instance, liquidity is important for an economy to spur growth. To maintain liquidity, the RBI is dependent on the monetary policy. By purchasing bonds through open market operations, the RBI introduces money in the system and reduces the interest rate.

## ❖ **Objectives of monetary Policy:**

### **1. Neutrality of Money:**

Economists like Wick steed, Hayek and Robertson are the chief exponents of neutral money. They hold the view that monetary authority should aim at neutrality of money in the economy. Any monetary change is the root cause of all economic fluctuations. According to neutralists, the monetary change causes distortion and disturbances in the proper operation of the economic system of the country.

### **2. Exchange Stability:**

Exchange stability was the traditional objective of monetary authority. This was the main objective under Gold Standard among different countries. When there was disequilibrium in the balance of payments of the country, it was automatically corrected by movements. It was popularly known, "Expand Currency and Credit when gold is coming in; contract currency and credit when gold is going out." This system will correct the disequilibrium in the balance of payments and exchange stability will be maintained.

### **3. Price Stability:**

The objective of price stability has been highlighted during the twenties and thirties of the present centuries. In fact, economists like Crustar Cassels and Keynes suggested price stabilization as a main objective of monetary policy. Price stability is considered the most genuine objective of monetary policy. Stable prices repose public confidence because cyclical fluctuations are totally eliminated.

### **4. Full Employment:**

During world depression, the problem of unemployment had increased rapidly. It was regarded as socially dangerous, economically wasteful and morally deplorable. Thus, full employment assumed as the main goal of monetary policy. In recent times, it is argued that the achievement of full employment automatically includes prices and exchange stability.

## **5. Economic Growth:**

In recent years, economic growth is the basic issue to be discussed among economists and statesmen throughout the world. Prof. Meier defined "Economic growth as the process whereby the real per capita income of a country increases over a long period of time." It implies an increase in the total physical or real output, production of goods for the satisfaction of human wants.

In other words, it means utilization of all the productive natural, human and capital resources in such a manner as to ensure a sustained increase in national and per capita income over time.

Therefore, monetary policy promotes sustained and continuous economic growth by maintaining equilibrium between the total demand for money and total production capacity and further creating favourable conditions for saving and investment. For bringing equality between demand and supply, flexible monetary policy is the best course.

In other words, monetary authority should follow an easy or tight monetary policy to suit the requirements of growth. Again, monetary policy in a growing economy has to satisfy the growing demand for money. Thus, it is the responsibility of the monetary authority to circulate the proper quantity and quality of money.

## **6. Equilibrium in the Balance of Payments:**

Equilibrium in the balance of payments is another objective of monetary policy which emerged significant in the post war years. This is simply due to the problem of international liquidity on account of the growth of world trade at a faster speed than the world liquidity.

It was felt that increasing of deficit in the balance of payments reduces the ability of an economy to achieve other objectives. As a result, many less developed countries have to curtail their imports which adversely affect development activities. Therefore, monetary authority makes efforts that equilibrium should be maintained in the balance of payments.

### **❖ Tools of Monetary Policy:**

#### **1. Bank Rate Policy:**

The bank rate is the minimum lending rate of the central bank at which it rediscounts first class bills of exchange and government securities held by the commercial banks. When the central bank finds that inflationary pressures have started emerging within the economy, it raises the bank rate. Borrowing from the central bank becomes costly and commercial banks borrow less from it.

The commercial banks, in turn, raise their lending rates to the business community and borrowers borrow less from the commercial banks. There is contraction of credit and prices are checked from rising further. On the contrary, when prices are depressed, the central bank lowers the bank rate.

It is cheap to borrow from the central bank on the part of commercial banks. The latter also lower their lending rates. Businessmen are encouraged to borrow more. Investment is encouraged. Output, employment, income and demand start rising and the downward movement of prices is checked.

#### **2. Open Market Operations:**

Open market operations refer to sale and purchase of securities in the money market by the central bank. When prices are rising and there is need to control them, the central bank sells securities. The reserves of commercial banks are reduced and they are not in a position to lend more to the business community.

Further investment is discouraged and the rise in prices is checked. Contrariwise, when recessionary forces start in the economy, the central bank buys securities. The reserves of commercial banks are raised. They lend more. Investment, output, employment, income and demand rise and fall in price is checked.

**3. Changes in Reserve Ratios:**

This weapon was suggested by Keynes in his Treatise on Money and the USA was the first to adopt it as a monetary device. Every bank is required by law to keep a certain percentage of its total deposits in the form of a reserve fund in its vaults and also a certain percentage with the central bank.

When prices are rising, the central bank raises the reserve ratio. Banks are required to keep more with the central bank. Their reserves are reduced and they lend less. The volume of investment, output and employment are adversely affected. In the opposite case, when the reserve ratio is lowered, the reserves of commercial banks are raised. They lend more and the economic activity is favourably affected.

**4. Selective Credit Controls:**

Selective credit controls are used to influence specific types of credit for particular purposes. They usually take the form of changing margin requirements to control speculative activities within the economy. When there is brisk speculative activity in the economy or in particular sectors in certain commodities and prices start rising, the central bank raises the margin requirement on them.

The result is that the borrowers are given less money in loans against specified securities. For instance, raising the margin requirement to 60% means that the pledger of securities of the value of Rs 10,000 will be given 40% of their value, i.e. Rs 4,000 as loan. In case of recession in a particular sector, the central bank encourages borrowing by lowering margin requirements.

❖ **Fiscal Policy**

Fiscal policy must be designed to be performed in two ways-by expanding investment in public and private enterprises and by diverting resources from socially less desirable to more desirable investment channels.

The objective of fiscal policy is to maintain the condition of full employment, economic stability and to stabilize the rate of growth.

For an under-developed economy, the main purpose of fiscal policy is to accelerate the rate of capital formation and investment.

*"Arthur Smithies, fiscal policy aims primarily at controlling aggregate demand and leaves private enterprise its traditional field- the allocation of resources among alternative uses."*

❖ **Objectives of Fiscal Policy:**

**1. Full Employment:**

The first and foremost objective of fiscal policy in a developing economy is to achieve and maintain full employment in an economy. In such countries, even if full employment is not achieved, the main motto is to avoid unemployment and to achieve a state of near full employment. Therefore, to reduce unemployment and under-employment, the state should spend sufficiently on social and economic overheads. These expenditures would help to create more employment opportunities and increase the productive efficiency of the economy.

**2. Price Stability:**

There is a general agreement that economic growth and stability are joint objectives for underdeveloped countries. In a developing country, economic instability is manifested in the form of inflation. Prof. Nurkse believed that "inflationary pressures are inherent in the process of investment but the way to stop them is not to stop investment. They can be controlled by various other ways of which the chief is the powerful method of fiscal policy."

**3. To Accelerate the Rate of Economic Growth:**

Primarily, fiscal policy in a developing economy, should aim at achieving an accelerated rate of economic growth. But a high rate of economic growth cannot be achieved and maintained without stability in the economy. Therefore, fiscal measures such as taxation, public borrowing and deficit financing etc. should be used properly so that production, consumption and distribution may not adversely affect. It should promote the economy as a whole which in turn helps to raise national income and per capita income.

**4. Optimum Allocation of Resources:**

Fiscal measures like taxation and public expenditure programmes, can greatly affect the allocation of resources in various occupations and sectors. As it is true, the national income and per capita income of underdeveloped countries is very low. In order to gear the economy, the government can push the growth of social infrastructure through fiscal measures. Public expenditure, subsidies and incentives can favourably influence the allocation of resources in the desired channels.

**5. Equitable Distribution of Income and Wealth:**

It is needless to emphasize the significance of equitable distribution of income and wealth in a growing economy. Generally, inequality in wealth persists in such countries as in the early stages of growth, it concentrates in few hands. It is also because private ownership dominates the entire structure of the economy. Besides, extreme inequalities create political and social discontentment which further generate economic instability. For this, suitable fiscal policy of the government can

be devised to bridge the gap between the incomes of the different sections of the society. To reduce inequalities and to do distributive justice, the government should invest in those productive channels which incur benefit to low income groups and are helpful in raising their productivity and technology. Therefore, redistributive expenditure should help economic development and economic development should help redistribution.

## **6. Economic Stability:**

Fiscal measures, to a larger extent, promote economic stability in the face of short-run international cyclical fluctuations. These fluctuations cause variations in terms of trade, making the most favourable to the developed and unfavourable to the developing economies. So, for the purpose of bringing economic stability, fiscal methods should incorporate built-in-flexibility in the budgetary system so that income and expenditure of the government may automatically provide compensatory effect on the rise or fall of the nation's income

## **7. Capital Formation and Growth:**

Capital assumes a central place in any development activity in a country and fiscal policy can be adopted as a crucial tool for the promotion of the highest possible rate of capital formation. A newly developing economy is encompassed by a 'vicious circle of poverty'. Therefore, a balanced growth is needed to breakdown the vicious circle which is only feasible with higher rate of capital formation. Once a country comes out of the clutches of backwardness, it stimulates investment and encourages capital formation.

### **❖ Tools of fiscal policy:**

#### **1. Revenue tools:**

Revenue tools refer to the taxes collected by the government in various forms. The taxes can be direct or indirect. Direct taxes are taxes levied on the income or wealth individuals and firms. This includes income tax, wealth tax, estate tax, corporate tax, capital gain tax, social security tax etc. Taxes help government in meeting their fiscal needs. By levying high indirect taxes, the government can also discourage use of items such as tobacco and alcohol.

#### **2. Spending tools:**

Spending tools refer to increasing or decreasing government spending/expenditure to influence the economy. Government spending can be in form of current spending, capital spending and transfer payments.

- Current spending includes expenditure on essential goods and services such as health, education, defence etc.
- Capital spending is the public investment in infrastructure such as roads, hospitals, schools, etc. the above two also include subsidy or direct provision of merit goods and public goods, which would otherwise be underprovided.
- Transfer payment is the redistribution of income from taxpayer to those requiring support, for example, unemployment benefits. It also includes interest payment on government debt.

## ❖ Banking

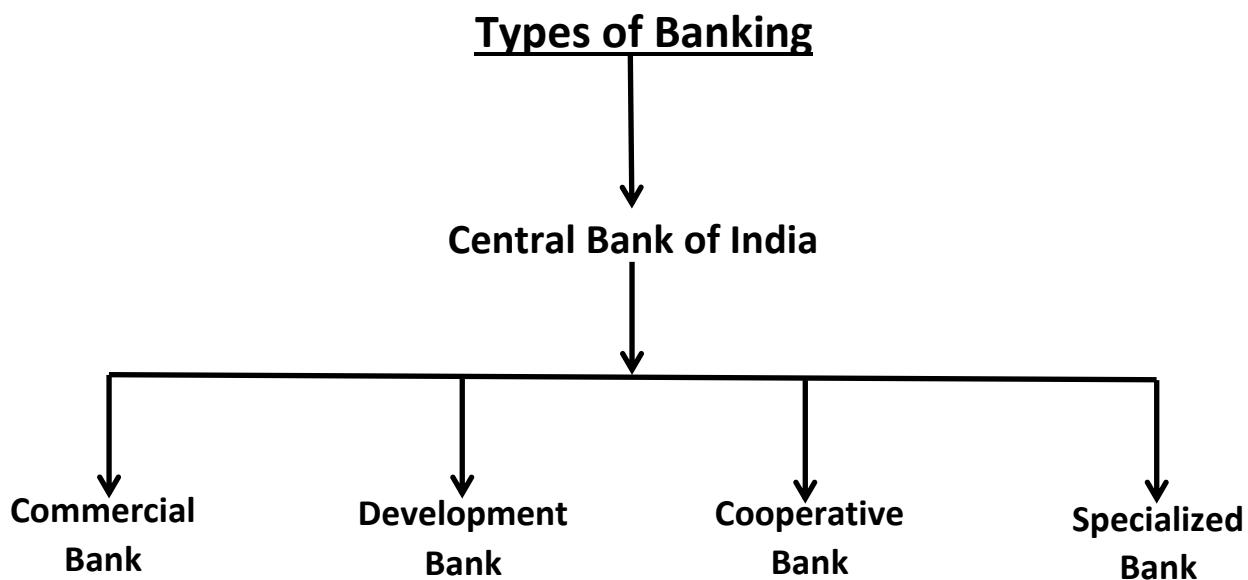
Banking is an industry that handles cash, credit, and other financial transactions. Banks provide a safe place to store extra cash and credit. They offer savings accounts, certificates of deposit and checking accounts. Banks use these deposits to make loans. These loans include home mortgages, business loans, and car loans.

Banking is one of the key drivers of the U.S. economy. Why? It provides the liquidity needed for families and businesses to invest for the future.

Bank loans and credit mean families don't have to save up before going to college or buying a house. Companies can start hiring immediately to build for future demand and expansion.

A bank is a financial institution that accepts deposits from the public and creates credit. Lending activities can be performed either directly or indirectly through capital markets. Due to their importance in the financial stability of a country, banks are highly regulated in most countries. Most nations have institutionalized a system known as fractional reserve banking under which banks hold liquid assets equal to only a portion of their current liabilities. In addition to other regulations intended to ensure liquidity, banks are generally subject to minimum capital requirements based on an international set of capital standards, known as the Basel Accords.

## ❖ Types of Banking/Bank:



### 1. Central Bank:

In each country there exists central bank which controls a country's money supply and monetary policy. It acts as a bank to other banks, and a lender of last resort. India Reserve Bank of India (RBI) is the Central Bank.

### 2. Commercial Bank:

Commercial Bank are banking institution that deal with the general public and accept deposited and grant short term loans and advances to them. In addition to giving short term loans, commercial banks also give medium term and long term loan to business enterprises as well as home loans to the retail consumers.

**a. Private sector bank:**

In case of private sector banks majority of share capital of the bank is held by private individuals. These banks are registered as companies with limited liability.

*Examples: Axis Bank, ICICI Bank, HDFC Bank.*

**b. Public Sector Bank:**

These are banks where majority stake is held by the government of India or RBI.

*Examples: State bank of India, Corporation Bank.*

**c. Foreign Bank:**

These banks are registered and have their headquarters in a foreign country but operate their branches in our country. Some of the foreign banks operating in our country are *Hong Kong and Shanghai Banking Corporation, Citi Bank, American Express Bank.*

**3. Development Banks:**

Business often requires medium and long term capital for purchase of machinery and equipment, for updating the existing technology or for expansion and modernisation. Such financial assistance is providing by development bank. They also undertake other development measures like subscribing to the shares and debenture issued by companies. In case of under subscription of issued by the public. *Industrial Finance Corporation of India and State Financial Corporation are the examples of development bank in India.*

**4. Co-operative Banks:**

People can join together for fulfilling their common interest often forms a cooperative society under the cooperative society act. When a cooperative society engaged itself in banking business it is called a cooperative Bank. The society has to obtain a license from the RBI before stating banking business. Any cooperative bank as a society is to function under the overall supervision of the register cooperative societies of the state. As regards banking business, the society must follow the guidelines set and issued by the RBI. Depending on the level of formation, three types of Cooperative bank are existing.

**5. Specialized Bank:**

There are some banks, which cater to the requirements and provide overall support for setting up business in specific area of activity. EXIM bank, SIDBI and NABARD are the examples of such banks. They engage themselves in some specific area or activity and thus, are called specialized banks.

Export Import Bank of India provides the support to the businessman who wants to do the business related to exporting or importing of the product.

*Small Industrial Development Bank of India.*

*National Bank for Agricultural and rural Development.*

❖ **Functions of Banking/ Function of Commercial Bank:**

**A. Primary Function:**

**1. Accepting Deposits:**

i. **Current Account Deposits or Demand Deposits:**

- Such deposits are generally maintained by businessmen with the intention of making transactions with such deposits.
- They can be drawn upon by a cheque without any restriction.
- Banks do not pay any interest on these accounts. Rather, banks impose service charges for running these accounts.

ii. **Fixed Deposits or Time Deposits:**

- Fixed deposits refer to those deposits, in which the amount is deposited with the bank for a fixed period of time.
- Such deposits do not enjoy cheque-able facility.
- These deposits carry a high rate of interest.

iii. **Saving Deposits:**

- These deposits combine features of both current account deposits and fixed deposits:
- The depositors are given cheque facility to withdraw money from their account. But, some restrictions are imposed on number and amount of withdrawals, in order to discourage frequent use of saving deposits.
- They carry a rate of interest which is less than interest rate on fixed deposits. It must be noted that Current Account deposits and saving deposits are chequable deposits, whereas, fixed deposit is a non-chequable deposit.

iv. **Recurring deposit:**

- This type account is operated by salaried person.
- Certain of money is periodically deposited in to bank.
- Withdrawal is permitted only after the expiry of certain period.

**2. Advancing of Loans:**

I. **Cash Credit:**

Cash credit refers to a loan given to the borrower against his current assets like shares, stocks, bonds, etc. A credit limit is sanctioned and the amount is credited in his account. The borrower may withdraw any amount within his credit limit and interest is charged on the amount actually withdrawn.

II. **Demand Loans:**

Demand loans refer to those loans which can be recalled on demand by the bank at any time. The entire sum of demand loan is credited to the account and interest is payable on the entire sum.

III. **Short-term Loans:**

They are given as personal loans against some collateral security. The money is credited to the account of borrower and the borrower can withdraw money from his account and interest is payable on the entire sum of loan granted.

**B. Secondary Function:**

**1. Overdraft Facility:**

It refers to a facility in which a customer is allowed to overdraw his current account up to an agreed limit. This facility is generally given to respectable and reliable customers for a short period. Customers have to pay interest to the bank on the amount overdrawn by them.

## **2. Discounting Bills of Exchange:**

It refers to a facility in which holder of a bill of exchange can get the bill discounted with bank before the maturity. After deducting the commission, bank pays the balance to the holder. On maturity, bank gets its payment from the party which had accepted the bill.

## **3. Agency Functions:**

### **i. Transfer of Funds:**

Banks provide the facility of economical and easy remittance of funds from place-to-place with the help of instruments like demand drafts, mail transfers, etc.

### **ii. Collection and Payment of Various Items:**

Commercial banks collect cheques, bills, interest, dividends, subscriptions, rents and other periodical receipts on behalf of their customers and also make payments of taxes, insurance premium, etc. on standing instructions of their clients.

### **iii. Purchase and Sale of Foreign Exchange:**

Some commercial banks are authorized by the central bank to deal in foreign exchange. They buy and sell foreign exchange on behalf of their customers and help in promoting international trade.

### **iv. Purchase and Sale of Securities:**

Commercial banks buy and sell stocks and shares of private companies as well as government securities on behalf of their customers.

### **v. Income Tax Consultancy:**

They also give advice to their customers on matters relating to income tax and even prepare their income tax returns.

### **vi. Trustee and Executor:**

Commercial banks preserve the wills of their customers as trustees and execute them after their death as executors.

### **vii. Letters of Reference:**

They give information about the economic position of their customers to traders and provide the similar information about other traders to their customers.

## **4. General Utility Functions:**

### **I. Locker Facility:**

Commercial banks provide facility of safety vaults or lockers to keep valuable articles of customers in safe custody.

### **II. Traveller's Cheques:**

Commercial banks issue traveller's cheques to their customers to avoid risk of taking cash during their journey.

### **III. Letter of Credit:**

They also issue letters of credit to their customers to certify their creditworthiness.

### **IV. Underwriting Securities:**

Commercial banks also undertake the task of underwriting securities. As public has full faith in the creditworthiness of banks, public do not hesitate in buying the securities underwritten by banks.

### **V. Collection of Statistics:**

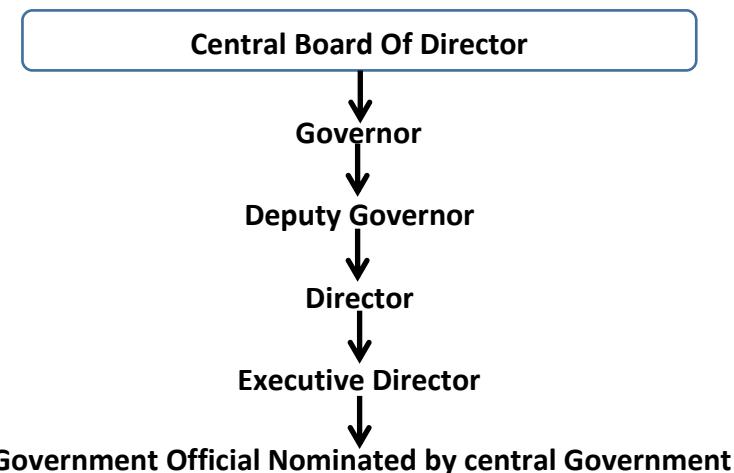
Banks collect and publish statistics relating to trade, commerce and industry. Hence, they advise customers on financial matters. Commercial banks receive deposits from the public and use these deposits to give loans. However, loans offered are many times more than the deposits received by banks. This function of banks is known as 'Money Creation'.

#### ❖ Reserve Bank Of India

The Reserve Bank of India was established on April 1, 1935 in accordance with the provisions of the Reserve Bank of India Act, 1934.

The Central Office of the Reserve Bank was initially established in Calcutta but was permanently moved to Mumbai in 1937. The Central Office is where the Governor sits and where policies are formulated.

Though originally privately owned, since nationalisation in 1949, the Reserve Bank is fully owned by the Government of India.



RBI is managed by the Central Board of Directors.

**Presently, there are 21 members:**

- Governor – for a period of 5 years
- Four Deputy Governors – for a period of 5 years
- Four Directors (Each nominated by four Local Boards)
- Ten Directors (Nominated by Government of India)
- Two government officers (Nominated by Government of India)

**RBI's fully owned subsidiaries are:**

- National Housing Bank (NHB)
- Deposit Insurance and Credit Guarantee Corporation (DICGC)
- Bhartiya Reserve Bank Note Mudran Private Limited (BRBNMPL)
- Majority stake in National Bank of Agriculture and Rural Development (NABARD)

#### ❖ Departments Of RBI

DEPARTMENTS	FUNCTIONS
Currency Management	Responsible for administration of currency issuance. (Core function of RBI, RBI Act, 1934)
Banking Operations and Development	Responsible for regulations of Commercial Bank under provisions of Banking Regulation Act, 1934 and RBI Act, 1934
Rural Planning and Credit	Formulates policies related to rural population (Rural credit and employment programmes)
Foreign Exchange	Facilitate external trade and payment and promote the development and maintain the foreign exchange market in India. (FEMA, 1999)
Inspection	Assign duties on behalf of top management and provide feedback to top management for efficient and effective working of organisation.

## ❖ Functions Of RBI

### 1. Monopoly of Note Issue:

Like any other central bank, the R.B.I, acts as the sole currency authority of the country. It issues notes of every denomination, except one-rupee notes and all types of coins through the Issue Department of the Bank.

One-rupee notes and all types of coins are issued by the Government of India. In truth, the R.B.I, also issues these coins on behalf of the Government of India. At present notes of denominations of rupees two, five, ten, twenty, fifty, one hundred, five hundred and one thousand are issued by the R.B.I.

### 2. Bankers' Bank:

As bankers' bank, the R.B.I, holds a part of the cash reserves of commercial banks and lends them funds for short periods. All banks are required to maintain a certain percentage (lying between 3% and 15%) of their total liabilities with the R.B.I. The main objectives of changing this cash reserve ratio by the R.B.I, is to control credit.

The R.B.I provides financial assistance to commercial banks and State co-operative banks through rediscounting of bills of exchange. As the R.B.I, meets the need of funds of commercial banks, the R.B.I, functions as the 'lender of the last resort'.

The R.B.I has been empowered by law to supervise, regulate and control the activities of commercial and cooperative banks. The R.B.I periodically inspects banks and asks them for returns and necessary information.

### 3. Banker to the Government:

The R.B.I acts as the banker to the Government of India and all State Governments (except Jammu and Kashmir). As such it transacts all banking business of these Governments.

These are:

(i) The R.B.I accepts and pays money on behalf of the Government.

(ii) It carries out exchange remittances and other banking operations.

As the Government's banker the R.B.I./provides short-term credit to the Government of India. This short-term credit is obtainable through the sale of treasury bills. Not only has this, the R.B.I, also provided ways and means of advances (repayable within 90 days) to State Governments. It may be noted that the Central Government is empowered to borrow any amount from the R.B.I.

### 4. Controller of Credit:

The R.B.I controls the total supply of money and bank credit to subserve the country's interest. The R.B.I, controls credit to ensure price and exchange rate stability. To achieve this R.B.I, uses both types of credit control instruments—quantitative and qualitative (selective). At present the R.B.I, relies greatly on the selective methods of credit control. (The credit control function is so important that it will be treated separately.)

### 5. Exchange Management and Control:

One of the essential central banking functions performed by the Bank is that of maintaining the external value of rupee. The external stability of the currency is closely related to its internal stability—the inherent economic strength of the country and the way it conducts its economic and monetary affairs. Domestic, fiscal, and monetary policies have, therefore, an important role in maintaining the external value of the currency. R.B.I has a very important role to play in this area.

## **6. Miscellaneous Functions:**

The R.B.I. collects, and publishes all monetary and banking data regularly in the R.B.I. Bulletin (monthly) and in the Report on Currency and Finance (annually).

## **7. Promotional and Developmental Functions:**

Apart from all the traditional functions, the R.B.I performs various activities of promotional and developmental nature. It attempts to mobilise savings for productive purposes. This is done in various ways. For instance, R.B.I, has helped a lot in building the country's huge financial infrastructure. This consists of such institutions as the Deposit Insurance Corporation (to safeguard the interests of depositors against bank failure), the National Bank for Agriculture and Rural Development (to meet the needs of farmers and rural people), IFCI, SFCs, IDBI, UTI (to meet the long and medium-term needs of industry), etc. In cooperative credit movement, the R.B.I.'s role is praise-worthy. The movement, initiated by the R.B.I., has resulted in curbing the activities of rural money-lenders to a considerable extent.

### **❖ Different Banking Rate:**

#### **1. Repo rate:**

Repo rate is the rate at which banks borrow money from the RBI to meet their deficiencies.

Banks do pledge their holdings of government bonds as collateral and in return of it, banks borrow from the Reserve Bank of India.

When the RBI decides to reduce the borrowing by the banks it increases the repo rate. This is done when the economy is overheated and needs to be cooled. Similarly, when the RBI wants to make it cheaper for banks to borrow the money, it reduces the repo rate. This is done when the economy is not doing too well.

*"In other words it can be said that reduction in Repo rate helps the commercial banks to get money at a cheaper rate while increase in Repo rate discourages the commercial banks to get money as the rate increases and becomes expensive"*

#### **2. Reverse Repo Rate:**

On the contrary of Repo Rate, the rate at which RBI borrows money from the banks is called as the reverse repo rate. Reverse Repo rate is the rate at which RBI borrows money from the commercial banks. The RBI uses this tool when there are more than enough money floating in the banking system. When the reverse repo rate is increased, RBI borrows money from the banks and offers them at a lucrative rate of interest. Hence, banks prefer to keep their money with the RBI which is absolutely risk free in comparison to lending anywhere else.

*"This rate encourages the banks to give money back to RBI and earn some interest on it. This happens when banks don't have enough consumers/ companies to lend the money to and money is lying idle with the banks"*

#### **3. Bank Rate:**

Bank rate is the rate of interest charged by the RBI against the funds lent to the banking system. This banking system incorporates commercial and co-operative banks, Industrial Development Bank of India, etc. Hike in Bank Rate increases the cost of borrowing by commercial banks which results in the reduction in credit volume to the banks and hence declines the supply of money. When RBI increases the bank rate, it means it's a symbol of tightening the monetary policy.

*"A change from low to high Bank rate means the economy needs cooling down. In other words, the RBI would like to reduce inflation. A change from high to low Bank rate means the economy needs a boost. In other words, the RBI would like to increase inflation"*

**4. Call Rate:**

Call rate is also known as the interest rate which is paid by the banks for lending and borrowing for daily fund requirement. Since banks need funds on a daily basis, they lend to and borrow from other banks to fulfil their daily requirements which are also known as short-term requirements on a regular basis.

**5. Cash Reserve Ratio (CRR):**

The part of deposits in cash that a bank has to keep/maintain with the RBI mandatorily is known as Cash Reserve Ratio. It is usually considered that such part of bank deposits is totally risk-free. It supports the RBI in controlling the liquidity in the banking system. Furthermore, it helps to curve the inflation as well.

It is actually a certain percentage of bank deposits which banks are bound to keep with RBI in the form of reserves. It is said that the higher the CRR with the RBI is, the lower the liquidity in the system would be.

**6. Statutory Liquidity Ratio (SLR):**

In addition to the CRR, banks are also bound to invest a portion of their deposits in government securities as a part of their statutory liquidity ratio (SLR) requirements. The purpose behind the SLR is to restrict the bank's leverage so that pumping more money into the economy can be ensured.

Every banking/ financial organisation has to maintain some certain quantity of liquid assets with themselves at any point of time during their total time and demand liabilities. These deposits can be kept in the form of Government securities, Gold, approved securities like bonds etc. The ratio of the liquid assets to time and demand assets is termed as the statutory liquidity ratio.

When banks don't have excess collateral which is basically the government bonds to borrow from the Reserve Bank of India to maintain their deposits as collateral in government securities is called the statutory liquidity ratio.

## **CHAPTER 6, AN INTRODUCTION TO MANAGEMENT**

### **❖ Definition of management**

“Management is an act getting things done through other”

“Managements means to use available resources very effectively and efficiently to achieve our predetermine goal”

“To done our work by using available people”

### **❖ Management v/s Administration**

<b>Basis for comparison</b>	<b>Management</b>	<b>Administration</b>
<b>Meaning</b>	An organized way of managing people and things of a business organization is called management.	The process administering an organization by a group of people is known as the administration.
<b>Authority</b>	Middle and lower level.	Top level.
<b>Role</b>	Executive.	Decisive.
<b>Area of operation</b>	It has full control over the activities of the organization.	It works under administration.
<b>Application to</b>	Profit making organizations, i.e. business organization.	Government offices, military, clubs, business enterprise, hospitals, religious and educational organization.
<b>Decides</b>	Who will do the work? And how will it done?	What should be done? And when is should be done?
<b>Work</b>	Putting plans and policies into action.	Formulating of plans framing policies and setting objectives.
<b>Focus on</b>	Managing work.	Making best possible allocation of limited resources.
<b>Key person</b>	Manager	Administration
<b>Represents</b>	Employees, who work for remuneration.	Owner, who get a return on the capital invested by them.

## ❖ **Role of manager in any organization given by mintzberg (FLL RSD REDN)**

### **A. Interpersonal role**

- I. Figurehead Role: perform ceremonial and symbolic duties such as greeting visitors signing legal documents.
- II. Leader role: direct and motivate subordinates, training, counseling and communicating with subordinator.
- III. Liaison role: maintain information links both inside and outside organization by using mail, phone calls, and meeting.

### **B. Informational role**

- I. Recipient role: seek and receive information, scan periodicals and reports, maintain personal contacts. Ex: councilors of departments
- II. Disseminator role: forward information to other organization members, send memos and report, make phone calls.
- III. Spokesperson: transmit information to outsider through speeches, report, memos.

### **C. Decisional role**

- I. Entrepreneur role: initiate improvement projects; identify new ideas, delegates' idea responsibility to other.
- II. Disturbance handler role: take corrective action during disputes or crises resolve conflicts among subordinates.
- III. Resource allocator role: decide who gets resource, scheduling, budgeting, and setting priorities.
- IV. Negotiator role: represent department during negotiation of union, budgets, sales, purchases, represent departmental interest.

## ❖ **Different skills of manager (HTC)**

### **1. Human skills:**

Every executive at any level of management has to deal with human being. Hence every executive must have an ability to deal with other people. This ability called human skills. Human skills means the ability of manager that how he get the work from other people. "Human skills are the executive ability to work effectively as group members and to build co operative effort within the team he leads. As technical skills is primarily concerned with working with people".

A person can create an atmosphere in which subordinates feel free to express themselves without fear of censure or ridicule. He can encourage them to participate in planning. He is responsive to the needs and motivations of others. He can judge the possible reaction of these subordinates to various courses of action he may undertake.

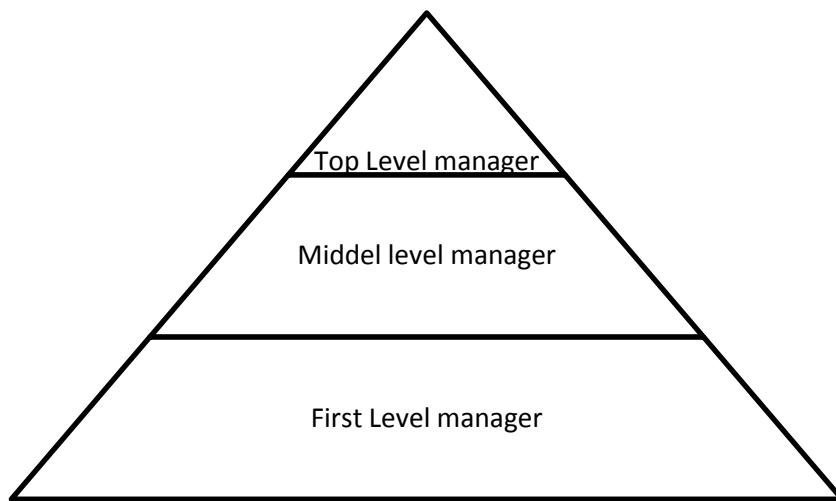
### **2. Technical skills:**

Technical skills refer to the ability of a person to carry out a specific activity. In order to do so, one needs to have knowledge of methods, processes and procedure, engineers, computer specialist, accountants and employees in manufacturing, department all have necessary technical skills for their specialized filed. Technical skills are essential for fist level mangers.

### **3. Conceptual skills:**

Conceptual skills refer to the ability of a person to think and conceptualize abstract situation. It is the ability to understand and coordinate the full range of corporate objectives and activities. These skills are most important at the top level management. the conceptual skills means to thing as a whole organization not individual because any departmental decision affect the whole organization.

### **❖ Level of management (types of managers)**



#### **1. Top Level Manager**

Ex: CEO, Managing Directors, Trustees, Principal.

Role:

- Develops and reviews long-range plans and strategies.
- Evaluates overall performance of various departments and ensures cooperation.
- Involved in selection of key personnel.
- Consults subordinate managers on subjects or problems of general scope.

#### **2. Middle Level Managers**

Ex: Departmental Managers, HOD, Subject Coordinators

Role:

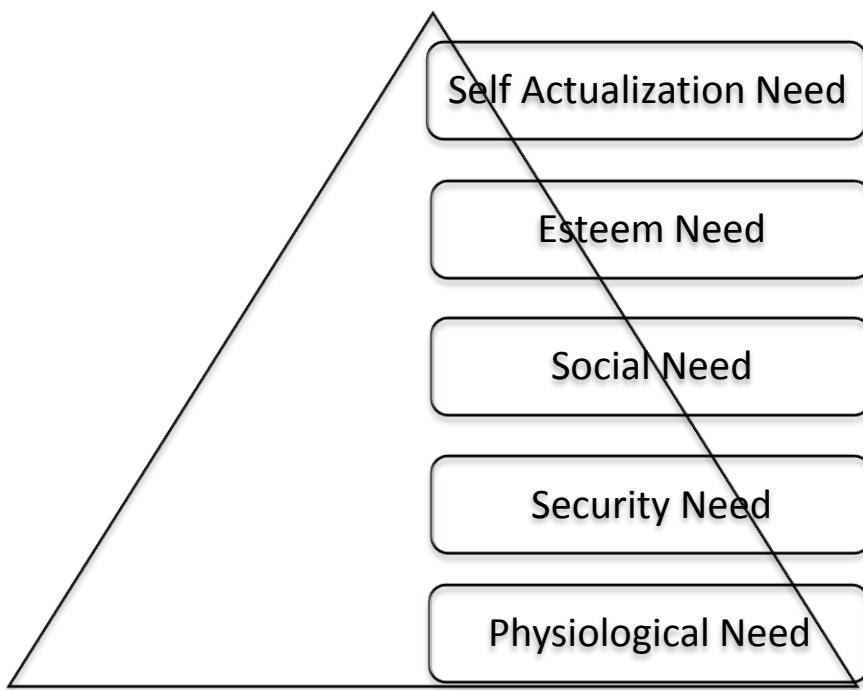
- Makes plans of interdepartmental and prepares long-range plan for review by top management.
- Analyzes managerial performance to determine capability and readiness for promotion.
- Establishes departmental policies.
- Reviews daily and weekly reports on production or sales. Counsels subordinates on production.

#### **3. First Level Managers**

Ex: Sr. Supervisor, executives, employees, subject Teacher

- Makes detailed, short-range operational plans.
- Reviews performance of subordinates.
- Supervises day-to-day operations.
- Makes specific task assignments.
- Maintains close contacts with employees involved in operations.

## ❖ Maslow's need of hierarchy



### 1. **Physiological Need:**

These includes the most basic needs that are vital to survival, Maslow believed that needs are the most basic and natural needs in the hierarchy because all needs become secondary until these physiological needs are met.

Ex: water, air, food, sleep and shelter are the basic needs

### 2. **Security Need:**

These include needs for safety and security. Security needs are important for survival, but they are not as demanding as the physiological needs.

Ex: Steady Employment (Job Security), health insurance, family security.

### 3. **Social Need:**

These include needs for belonging, love and affection. Maslow considered these needs to be less basic than physiological and security needs. Relationship such friendship, romantic attachment and families help fulfill this need for companionship and acceptance, as does involvement in social, community or religious groups.

Ex: respect from office members, respect from managers and boss.

### 4. **Esteem Need:**

After the first three needs have been satisfied esteem needs becomes increasingly important. These include the need for things that reflect on self esteem, personal worth, social reorganization and accomplishment.

Ex: any cricketer wants to become like Sachin.

### 5. **Self actualization need:**

This is the highest level of Maslow's hierarchy of needs. Self actualizing people are self aware concerned with personal growth; less concerned with the opinion of others and interested in fulfilling their potential.

Ex: any person wants to become famous in society at any way.

## ❖ 14 principles of management given by Henary Fayol

### 1. Division of work:

To divide the total work in organization among all employees

### 2. Authority and Responsibility:

To give authority to employees to done their given work properly because without authority employees can not done their work.

### 3. Discipline:

Respecting rules and agreement that rules organization. Discipline results from good leadership at all level of the organization.

### 4. Unity of command:

Unity command means the commanding person should be only one who gives the command to people of organization.

### 5. Unity of direction:

Individual's goals, departmental goal and organizational goals should be intermeshed.

### 6. Subordination of individual:

Interest to the common goal. The interests of employees should not take importance over the interest of the organization as a whole

### 7. Remuneration:

The compassion paid to employees should be fair and based on factors like business condition, cost of living, productivity of employees and the ability of the firm to pay.

### 8. Centralization:

Managers should retain final responsibility, but should give subordinate enough authority to do their jobs properly. Managers should find the proper degree of centralization in each case.

### 9. Scalar chain:

The hierarchy of authority from top management to the lowest management level of the organization seen today in the centralization chart.

### 10. Order:

Everybody and everything should be in the right place at the right time. People should be in the job or positions they are most suited to.

### 11. Equity:

Equality of fair treatments. Managers should be Fridley and fair to their subordinates.

### 12. Stability of tenure of personnel:

Job security is necessary to motivate employees.

### 13. Initiative:

Freedom of conceive and executive a plan by subordinates.

### 14. Esperit de corps:

This means " sense of union" Management must includes a team spirit in its employees.

## **CHAPTER 7, FUNCTION OF MANAGEMENT**

### **❖ Function of management**

#### **1. Planning:**

- The first management function in scope of management function that manager must perform is planning.
- In this function plan is created to accomplish the mission and vision of the business.
- The plan must define the time component and to plan necessary resource to fulfill the plan.
- To decide the long term goal of the company.
- To find out different way to achieve that goal and select most effective and efficient way for achieving that goal.
- To benchmark of the product standard of final product.

#### **2. Organizing:**

- Organizing is the second function manager, where he had previously plan, establish an appropriate organizational structure in business organization.
- To decide the authority and responsibility of all level in organization.
- Identification of activities.
- Classification of grouping of activities.
- Assignment of duties.
- Delegation of authority and creation of responsibility.
- Coordinating authority and responsibility relationships.

#### **3. Staffing:**

- Staffing as the next function of management, consist of a selection of appropriate staff for the organization to reach a goal easier and more efficient.
- To give them training for their work and for handling different activities in organization.
- Manpower Planning (estimating man power in terms of searching, choose the person and giving the right place).
- Recruitment, Selection & Placement.
- Training & Development.
- Remuneration.
- Performance Appraisal.
- Promotions & Transfer.

#### **4. Directing :**

- Direction is an important function through which management initiate action in the organization.
- Supervision.
- Motivation.
- Leadership.
- Communication.
- It also labeled as activating.
- It is important managerial function on. Through direction management initiates actions in the organization.
- It is performed at every level of management.

#### **5. Controlling:**

- Controlling is the process through which managers assure that actual activities conform to the planned activities.
- It is employed to do the activities according to the plans and programs.
- Establishment of standard performance.
- Measurement of actual performance.
- Comparison of actual performance with the standards and finding out deviation if any.
- Corrective action.
- Controlling is the continue process.

### **❖ Types organizational structure**

There are three main organizational structures

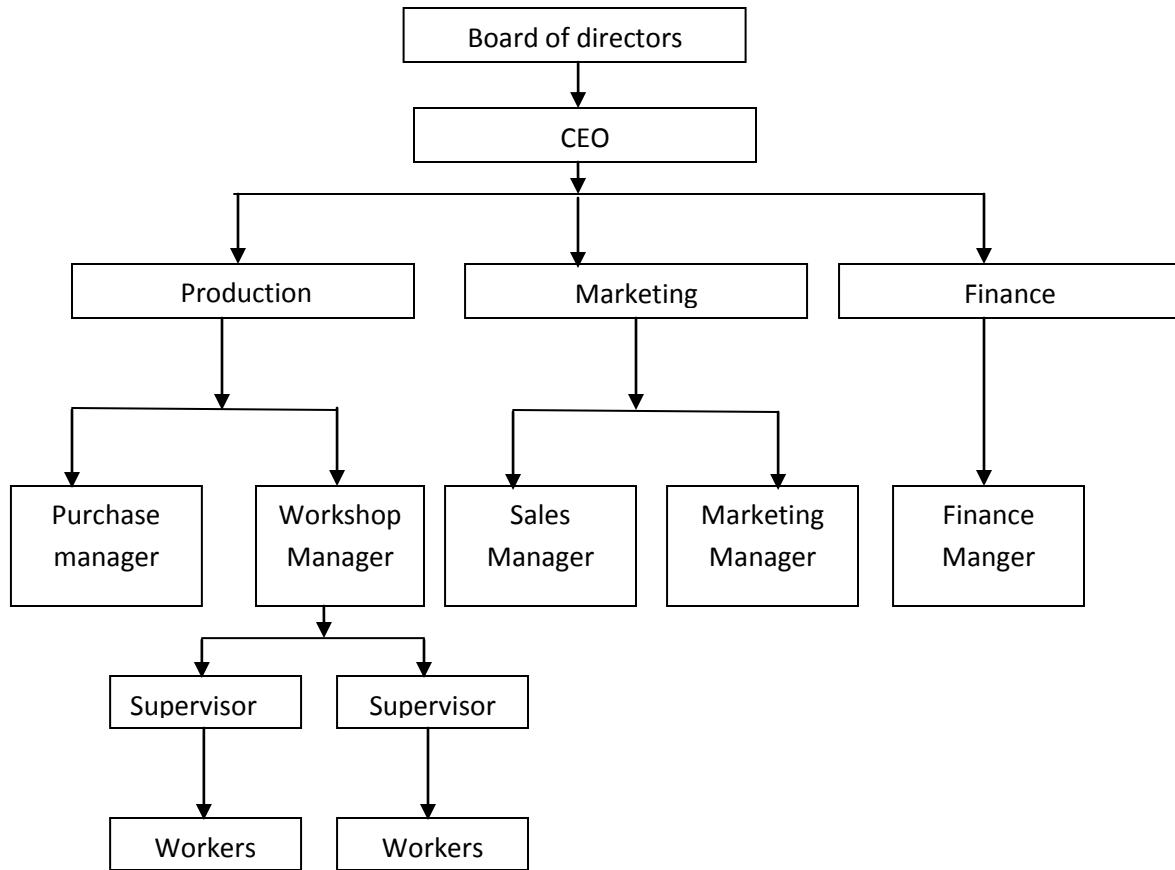
- 1. Line organization.**
- 2. Functional organization and staff organization.**
- 3. Line and staff organization.**

Let's see detail on these organizations

#### **1. Line Organization:**

- Line organization is the simplest and the oldest type of organization. It is also known as scalar organization or military type of organization.
- An important characteristic of such type of organization is superior-subordinate relationship.
- This organization created basis on the basis authority.

- Superior delegates authority to another subordinate and so on, forming a line from the very top to the bottom of the organization structure.
- The line of authority so established is referred as “line authority.” Under this type of organization authority flows downwards, responsibility moves upwards in a straight line.



➤ **Advantages:**

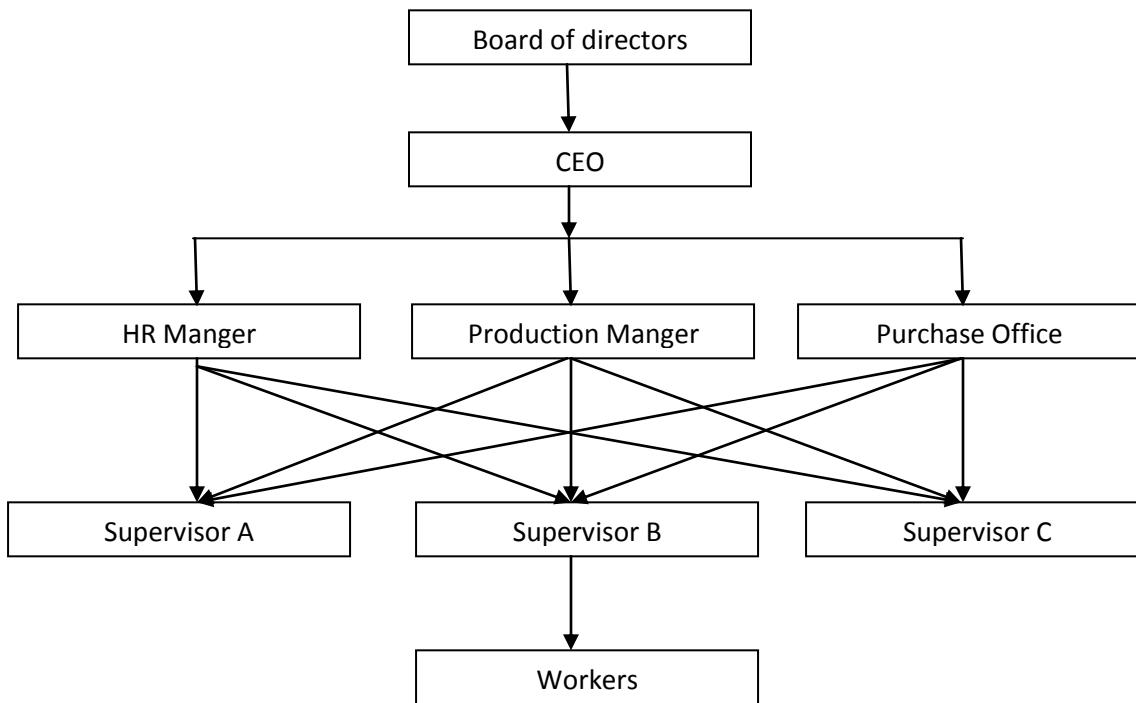
- Simplicity
- Fixed responsibility
- More Discipline
- Direct communication
- Unity of command
- Quick decisions

➤ **Disadvantages:**

- Overloading
- Lack of specialization
- Scope for favoritisms
- Lack of co-ordination
- Lack of initiative

## 2. Functional Organization / Staff Organization

- It is the most widely used in the medium and large organization having limited number of product.
- It is created on the basis of function of organization.
- It also called as staff organization.
- For grouping the activities, all needed functions are classified into basic, secondary and supporting function.



### ➤ Advantages:

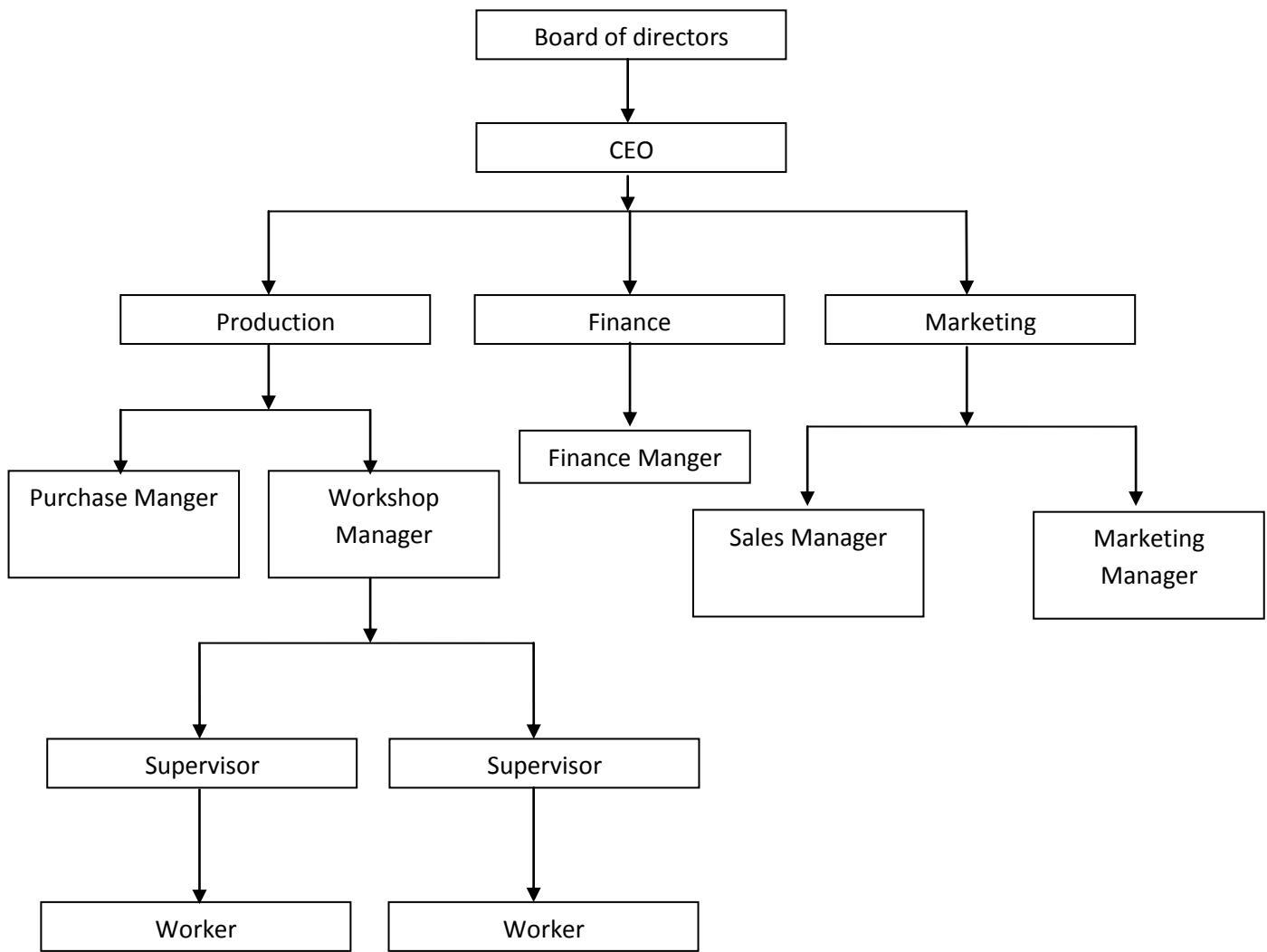
- Specialization we can use
- Large scale Production
- Flexibility
- Decentralization of Authority
- Excess Of Clerical
- Growth Of Unit

### ➤ Disadvantages:

- Expensive
- Violation of the Unity Of Command
- Lack of Discipline and Control
- Absence of Authority
- Difficulty of Co ordination

### 3. Functional And Staff Organization

- Line and staff organization refers to a pattern in which staff specialist advice line managers to perform their duties.
- The staff position are of purely advisory nature
- They have the right to recommend their preferences on other department
- The position and departments in rectangle are staff and other are line
- The staff specialist may provide service to a particular position, department or organization as a whole



➤ **Advantages:**

- Simplicity
- Co ordination
- Balance
- Flexibility
- Relief to the line Authority
- Blending Of abilities of Line and Staff
- Prompt Decision

➤ **Disadvantages:**

- Conflict Among Officials
- Expensive
- Evading Responsibilities
- Neglect Of Line Authority Suggestion
- Conflict Between old and New
- Carelessness among the Line

❖ **Matrix Organizational structure**

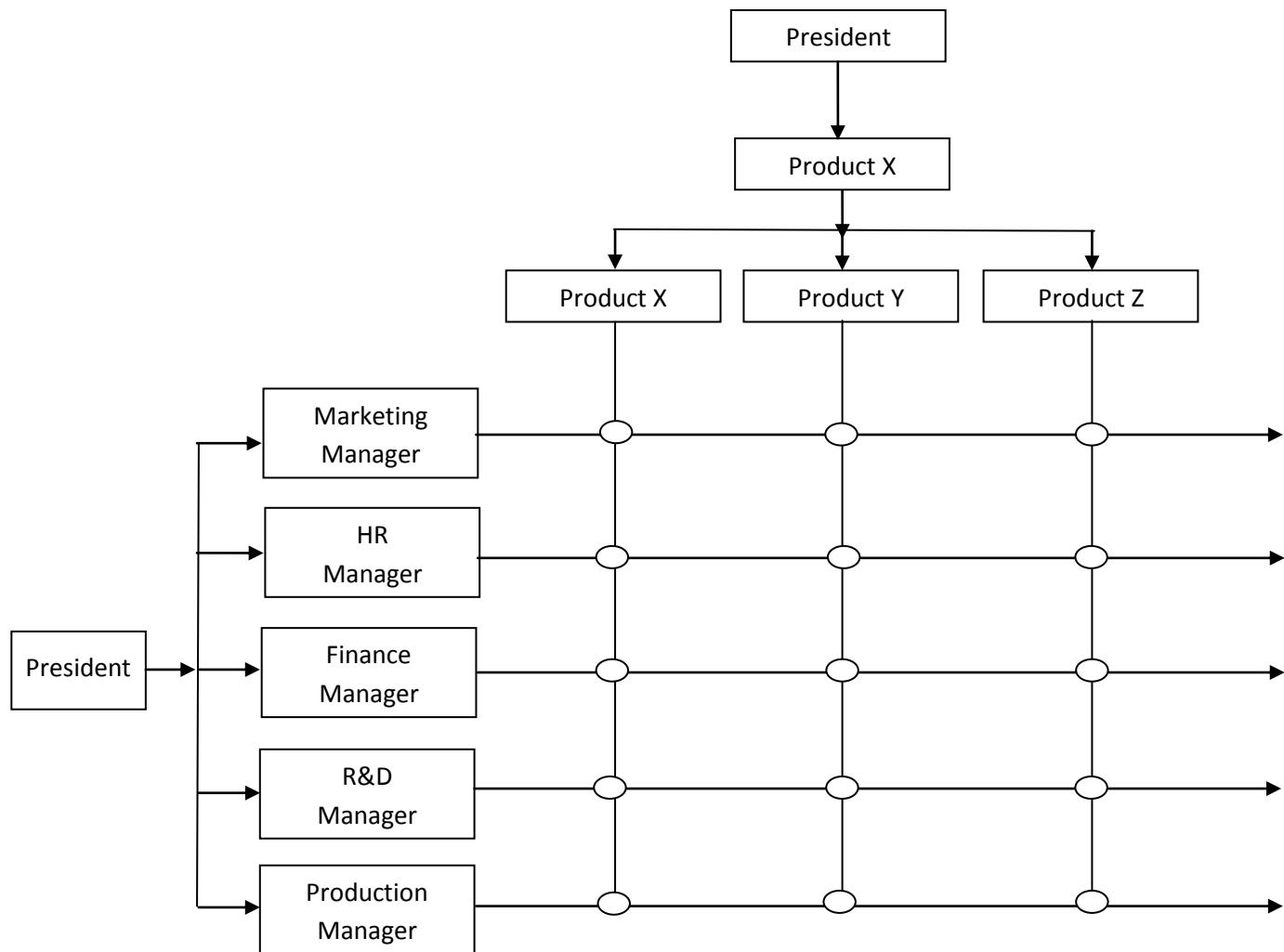
- A matrix structure is types of departmentalization that superimpose a horizontal set of divisional reporting relationship onto a hierarchical functional structure.
- Matrix organization is also referred to as a grid organization or project or product management organization.
- The main feature of this organization is functional and project pattern of departmentation are combined in same structure.

❖ **Advantages:**

- Dual benefit
- Better planning and control
- Environmental Adaptability
- Flexibility
- Better Motivation
- Development of Personnel

❖ **Disadvantage:**

- Complex Relationship
- Power Struggle
- Heterogeneity
- More costly



**(Matrix Organizational Structure)**

❖ **Formal V/S Informal Organization**

<b>Formal Organization</b>	<b>Informal Organization</b>
<ul style="list-style-type: none"> <li>1. It is created intentionally.</li> <li>2. Authority flows from top to bottom.</li> <li>3. It arises from man's quest for social satisfaction.</li> <li>4. There is no such permanent nature and stability.</li> <li>5. It gives importance to people and their relationship.</li> <li>6. It arises due to social interaction of authority.</li> <li>7. No such written rules and duties.</li> <li>8. Informal organization tends to remain smaller.</li> </ul>	<ul style="list-style-type: none"> <li>1. It is natural.</li> <li>2. Informal authority flow from top to bottom or horizontally.</li> <li>3. It is created for technological purpose.</li> <li>4. It is permanent and stable.</li> <li>5. It gives importance to terms of authority and function.</li> <li>6. It arises due to delegation of people.</li> <li>7. Duties and Responsibilities of workers.</li> <li>8. Formal organization may grow to maximum size.</li> </ul>

# Chapter 8, Introduction to Marketing Management and Finance Management

## ❖ Definition of Marketing :

- “*Marketing the action or business of promoting and selling products or services, including market research and advertising.*”
- “*The management process through which goods and services move from concept to the customer.*”
- “*Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.*”

## ❖ Four P's Of Marketing or Marketing Mix.

The 4Ps of marketing is a model for enhancing the components of your ‘marketing mix’ – the way in which you take a new product or service to market. It helps you to define your marketing options in terms of price, product, promotion, and place so that your offering meets a specific customer need or demand.

The marketing mix is a good place to start when you are thinking through your plans for a product or service, and it helps you to avoid these kinds of mistakes. In this article and in the video, below, we'll discover more about the marketing mix and the 4Ps, and how you can use them to develop a successful marketing strategy.

The 4Ps are:

- *Product (or Service).*
- *Place.*
- *Price.*
- *Promotion.*

A good way to understand the 4Ps is by the questions that you need to ask to define your marketing mix. Here are some questions that will help you understand and define each of the four elements:

### 1. Product/Services:

The product can either be tangible, which have independent physical existence. Some, intangible like services. Launching the right kind of product with appropriate No. of variants is one of the critical decision for marketing manager.

- Varieties
- Quality
- Design
- Feature
- Brand Name
- Packaging
- Basic needs of customer
- Extra feature
- Aesthetics looks

All these are the point's focuses for product or services marketing.

### 2. Price:

*"Price amount of money or other consideration that is, something value given in exchange for a product is termed as price"*

The price of a product determines the offering which the customer is willing to give to buy that product. The price of product getting loss and not be high that customer cannot afford it. The price of a product or services depends on demand.

Product should follow some factor like:

- Discount
- Offer price
- Credit policy
- Payment period

Some product demand not so much affected by the price and some product demand directly affected by price.

### **3. Place:**

*"The market where the product is sold is known as place"*

The market should be convenient for consumer to access. Distribution network for a product determine its availability in shop/outlets.it includes:

- Channel
- Coverage of Market
- Differentiation from other
- Location
- Inventory
- Transportation

### **4. Promotion:**

*"The Method of Communication by which the markets provide information about the product is known as promotion "*

It includes advertisement, Personal selling, word of mouth publicity etc.

- Advertisement
- Personal selling
- Sales promotion
- Public relation

## **❖ Basic Concept of Marketing.**

1. Product Concept
2. Production concept
3. Selling Concept
4. Marketing Concept
5. Social Concept
6. Holistic Concept

### **1. Production Concept:**

- Those companies who believe in this philosophy think that if the goods/services are cheap and they can be made available at many places, there cannot be any problem regarding sale.
- Keeping in mind the same philosophy these companies put in all their marketing efforts in reducing the cost of production and strengthening their distribution system. In order to reduce the cost of production and to bring it down to the minimum level, these companies indulge in large scale production.

- This helps them in effecting the economics of the large scale production. Consequently, the cost of production per unit is reduced.
- The utility of this philosophy is apparent only when demand exceeds supply. Its greatest drawback is that it is not always necessary that the customer every time purchases the cheap and easily available goods or services.

## **2. Product Concept:**

- Those companies who believe in this philosophy are of the opinion that if the quality of goods or services is of good standard, the customers can be easily attracted. The basis of this thinking is that the customers get attracted towards the products of good quality. On the basis of this philosophy or idea these companies direct their marketing efforts to increasing the quality of their product.
- It is a firm belief of the followers of the product concept that the customers get attracted to the products of good quality. This is not the absolute truth because it is not the only basis of buying goods.
- The customers do take care of the price of the products, its availability, etc. A good quality product and high price can upset the budget of a customer. Therefore, it can be said that only the quality of the product is not the only way to the success of marketing.

## **3. Selling Concept:**

- Those companies who believe in this concept think that leaving alone the customers will not help. Instead there is a need to attract the customers towards them. They think that goods are not bought but they have to be sold.
- The basis of this thinking is that the customers can be attracted. Keeping in view this concept these companies concentrate their marketing efforts towards educating and attracting the customers. In such a case their main thinking is 'selling what you have'.
- This concept offers the idea that by repeated efforts one can sell-anything to the customers. This may be right for some time, but you cannot do it for a long-time. If you succeed in enticing the customer once, he cannot be won over every time.
- On the contrary, he will work for damaging your reputation. Therefore, it can be asserted that this philosophy offers only a short-term advantage and is not for long-term gains.

## **4. Marketing Concept:**

- Those companies who believe in this concept are of the opinion that success can be achieved only through consumer satisfaction. The basis of this thinking is that only those goods/service should be made available which the consumers want or desire and not the things which you can do.
- In other words, they do not sell what they can make but they make what they can sell. Keeping in mind this idea, these companies direct their marketing efforts to achieve consumer satisfaction.
- In short, it can be said that it is a modern concept and by adopting it profit can be earned on a long-term basis. The drawback of this concept is that no attention is paid to social welfare.

## **5. Societal Marketing Concept:**

- This concept stresses not only the customer satisfaction but also gives importance to Consumer Welfare/Societal Welfare. This concept is almost a step

further than the marketing concept. Under this concept, it is believed that mere satisfaction of the consumers would not help and the welfare of the whole society has to be kept in mind.

- For example, if a company produces a vehicle which consumes less petrol but spreads pollution, it will result in only consumer satisfaction and not the social welfare.
- Primarily two elements are included under social welfare-high-level of human life and pollution free atmosphere. Therefore, the companies believing in this concept direct all their marketing efforts towards the achievement of consumer satisfaction and social welfare.
- In short, it can be said that this is the latest concept of marketing. The companies adopting this concept can achieve long-term profit.

## 6. Holistic Concept:

- “Complete and Cohesive Integration of all department is very essential”
- Relation Marketing
- Integrated Marketing
- Internal Marketing
- Performance Marketing

### ❖ Demand Forecast.

*“Demand forecasting is predicting future demand for the product. In other words, it refers to the prediction of a future demand for a product or a service on the basis of the past events and prevailing trends in the present.”*

- Forecasts are becoming the lifetime of business in a world, where the tidal waves of change are sweeping the most established of structures, inherited by human society. Commerce just happens to be one of the first casualties. Survival in this age of economic predators requires the tact, talent and technique of predicting the future.
- Forecast is becoming the sign of survival and the language of business. All requirements of the business sector need the technique of accurate and practical reading into the future. Forecasts are, therefore, very essential requirement for the survival of business. Management requires forecasting information when making a wide range of decisions.
- The sales forecast is particularly important as it is the foundation upon which all company plans are built in terms of markets and revenue. Management would be a simple matter if business was not in a continual state of change, the pace of which has quickened in recent years.
- It is becoming increasingly important and necessary for business to predict their future prospects in terms of sales, cost and profits. The value of future sales is crucial as it affects costs profits, so the prediction of future sales is the logical starting point of all business planning.
- A forecast is a prediction or estimation of future situation. It is an objective assessment of future course of action. Since future is uncertain, no forecast can be presented correct. Forecasts can be both physical as well as financial in nature. The more realistic the forecasts, the more effective decisions can be taken for tomorrow.
- In the words of Cundiff and Still, “Demand forecasting is an estimate of sales during a specified future period which is tied to a proposed marketing plan and which assumes a particular set of uncontrollable and competitive

forces". Therefore, demand forecasting is a projection of firm's expected level of sales based on a chosen marketing plan and environment.

### ❖ **Method Demand forecasting:**

#### A. Qualitative Method

##### → **Jury Method:**

In the Jury of executive opinion method of Sales Forecasting, appropriate managers within the organization assemble to discuss their opinions on what will happen to sales in the future.

Since these discussion sessions usually resolve around hunches or experienced guesses, the resulting forecast is a blend of informed opinions.

A similar, forecasting method, which has been developed recently, is called the DELPHI Method. Delphi Method also gathers, evaluates, and summarizes expert opinions as the basis for a forecast, but the procedure is more formal than that for the jury of executive opinion method.

The Delphi Method has the following steps:

**STEPS 1** – Various Experts are asked to answer, independently and in writing, a series of questions about the future of sales or whatever other area is being forecasted.

**STEP 2** – A summary of all the answers is then prepared. No expert knows, how any other expert answered the questions.

**STEP 3** – Copies of summary are given to the individual experts with the request that they modify their original answers if they think it necessary.

**STEP 4** – Another summary is made of these modifications, and copies again are distributed to the experts. This time, however, expert opinions that deviate significantly from the norm must be justified in writing.

**STEP 5** – A third summary is made of the opinions and justifications, and copies are once again distributed to the experts. Justification in writing for all answers is now required.

**STEP 6** – The forecast is generated from all of the opinions and justifications that arise from step 5.

##### → **Market Survey Method:**

Survey method is one of the most common and direct methods of forecasting demand in the short term. This method encompasses the future purchase plans of consumers and their intentions. In this method, an organization conducts surveys with consumers to determine the demand for their existing products and services and anticipate the future demand accordingly.

##### → **Sales force Survey Method/Sales force Composite:**

The Sale Force Composite Method is a sales forecasting method wherein the sales agents forecast the sales in their respective territories, which is then consolidated at branch/region/area level, after which the aggregate of all these factors is consolidated to develop an overall company sales forecast.

The sales force composite method is the bottom-up approach where the sales force gives their opinion on sales trend to the top management. Since, the salesmen are the people, who are very close to the market, can give a more accurate sales prediction on the basis of their experience with the direct customers.

There are several advantages of sales force composite forecast method.

- The intimate knowledge and experience of the sales force in their respective territories can be used efficiently.
- The responsibility to forecast sales rests on the shoulders of the sales agent and thus could be held accountable if anything goes wrong.
- Since the sales agents forecast the sales by themselves, put more efforts to achieve them.
- This method is more reliable because of a large population sample and moreover, it can be readily broken down into product-wise, month-wise, area-wise forecast.

The sales force composite method is not free from the limitations too.

- Since the sales agents are not the experts in forecasting, they cannot employ the sophisticated forecasting techniques properly and neither have they had complete data to have a fact-based forecasting.
- Also, the salesman often gets heavily influenced by the conditions existing in his territory, due to which he either becomes more optimistic or more pessimistic about the future sales.
- The sales agent might be well informed about all the conditions prevailing in his territory, but may not be well equipped with the complete information about the economic environment and the industry as a whole.
- Sometimes, the sales agent intentionally gives fewer sales forecast, so that they can fetch more incentives or bonus from the management on exceeding the sales targets.

## B. Quantitative Method

### → Trend Analysis

Trend projection or least square method is the classical method of business forecasting. In this method, a large amount of reliable data is required for forecasting demand. In addition, this method assumes that the factors, such as sales and demand, responsible for past trends would remain the same in future.

In this method, sales forecasts are made through analysis of past data taken from previous year's books of accounts. In case of new organizations, sales data is taken from organizations already existing in the same industry. This method uses time-series data on sales for forecasting the demand of a product.

### → Moving Average

One of the easiest, most common time series forecasting techniques is that of the moving average. Moving average methods come in handy if all you have is several consecutive periods of the variable (e.g., sales, new savings accounts opened, workshop attendees, etc.) you're forecasting, and no other data to predict what the

next period's value will be. Often, using the past few months of sales to predict the coming month's sales is preferable to unaided estimates. However, moving average methods can have serious forecasting errors if applied carelessly.

### Moving Averages: The Method

Essentially, moving averages try to estimate the next period's value by averaging the value of the last couple of periods immediately prior. Let's say that you have been in business for three months, January through March, and wanted to forecast April's sales. Your sales for the last three months look like this:

Month	Sales (\$000)
January	129
February	134
March	122

The simplest approach would be to take the average of January through March and use that to estimate April's sales:

$$(129 + 134 + 122)/3 = \$128.333$$

Hence, based on the sales of January through March, you predict that sales in April will be \$128,333. Once April's actual sales come in, you would then compute the forecast for May, this time using February through April. You must be consistent with the number of periods you use for moving average forecasting.

The numbers of periods you use in your moving average forecasts are arbitrary; you may use only two-periods, or five or six periods – whatever you desire – to generate your forecasts.

The approach above is a simple moving average. Sometimes, more recent months' sales may be stronger influencers of the coming month's sales, so you want to give those nearer months more weight in your forecast model. This is a weighted moving average. And just like the number of periods, the weights you assign are purely arbitrary. Let's say you wanted to give March's sales 50% weight, February's 30% weight, and January's 20%. Then your forecast for April will be \$127,000 [(122\*.50) + (134\*.30) + (129\*.20) = 127]

- Exponential Smoothing method
- Least Square Method

### ❖ Finance Management

*"It is Concerned with the efficient use of an important economics resources namely, capital fund"*

*"Financial Management deals with procurement of funds and their effective utilization in the business"*

*"Financial management means to handle all the financial affairs of the business"*

### ❖ Scope of Financial Management

### **1. Investment Decision:**

The investment decision involves the evaluation of risk, measurement of cost of capital and estimation of expected benefits from a project. Capital budgeting and liquidity are the two major components of investment decision. Capital budgeting is concerned with the allocation of capital and commitment of funds in permanent assets which would yield earnings in future.

Capital budgeting also involves decisions with respect to replacement and renovation of old assets. The finance manager must maintain an appropriate balance between fixed and current assets in order to maximise profitability and to maintain desired liquidity in the firm.

Capital budgeting is a very important decision as it affects the long-term success and growth of a firm. At the same time it is a very difficult decision because it involves the estimation of costs and benefits which are uncertain and unknown.

### **2. Financing Decision:**

While the investment decision involves decision with respect to composition or mix of assets, financing decision is concerned with the financing mix or financial structure of the firm. The raising of funds requires decisions regarding the methods and sources of finance, relative proportion and choice between alternative sources, time of floatation of securities, etc. In order to meet its investment needs, a firm can raise funds from various sources.

The finance manager must develop the best finance mix or optimum capital structure for the enterprise so as to maximise the long-term market price of the company's shares. A proper balance between debt and equity is required so that the return to equity shareholders is high and their risk is low.

Use of debt or financial leverage affects both the return and risk to the equity shareholders. The market value per share is maximised when risk and return are properly matched. The finance department has also to decide the appropriate time to raise the funds and the method of issuing securities.

### **3. Dividend Decision:**

In order to achieve the wealth maximisation objective, an appropriate dividend policy must be developed. One aspect of dividend policy is to decide whether to distribute all the profits in the form of dividends or to distribute a part of the profits and retain the balance. While deciding the optimum dividend pay-out ratio (proportion of net profits to be paid out to shareholders)

The finance manager should consider the investment opportunities available to the firm, plans for expansion and growth, etc. Decisions must also be made with respect to dividend stability, form of dividends, i.e., cash dividends or stock dividends, etc.

## **❖ Function of Finance Management**

### **1. Estimating the Amount of Capital Required:**

This is the foremost function of the financial manager. Business firms require capital for:

- (I) purchase of fixed assets,
- (II) Meeting working capital requirements, and
- (III) Modernisation and expansion of business.

The financial manager makes estimates of funds required for both short-term and long-term.

### **2. Determining Capital Structure:**

Once the requirement of capital funds has been determined, a decision regarding the kind and proportion of various sources of funds has to be taken. For this, financial manager has to determine the proper mix of equity and debt and short-term and long-term debt ratio. This is done to achieve minimum cost of capital and maximise shareholders wealth.

**3. Choice of Sources of Funds:**

Before the actual procurement of funds, the finance manager has to decide the sources from which the funds are to be raised. The management can raise finance from various sources like equity shareholders, preference shareholders, debenture-holders, and banks and other financial institutions, public deposits, etc.

**4. Procurement of Funds:**

The financial manager takes steps to procure the funds required for the business. It might require negotiation with creditors and financial institutions, issue of prospectus, etc. The procurement of funds is dependent not only upon cost of raising funds but also on other factors like general market conditions, choice of investors, government policy, etc.

**5. Utilisation of Funds:**

The funds procured by the financial manager are to be prudently invested in various assets so as to maximise the return on investment: While taking investment decisions, management should be guided by three important principles, viz., safety, profitability, and liquidity.

**6. Disposal of Profits or Surplus:**

The financial manager has to decide how much to retain for ploughing back and how much to distribute as dividend to shareholders out of the profits of the company. The factors which influence these decisions include the trend of earnings of the company, the trend of the market price of its shares, the requirements of funds for self-financing the future programmes and so on.

**7. Management of Cash:**

Management of cash and other current assets is an important task of financial manager. It involves forecasting the cash inflows and outflows to ensure that there is neither shortage nor surplus of cash with the firm. Sufficient funds must be available for purchase of materials, payment of wages and meeting day-to-day expenses.

**8. Financial Control:**

Evaluation of financial performance is also an important function of financial manager. The overall measure of evaluation is Return on Investment (ROI). The other techniques of financial control and evaluation include budgetary control, cost control, internal audit, break-even analysis and ratio analysis. The financial manager must lay emphasis on financial planning as well.

**❖ Objective of finance management**

There are mainly three objective of finance management:

1. Profit Maximization
2. Return Maximization
3. Wealth Maximization

Let's discuss in detail

**1. Profit Maximization :**

The main objective of financial management is profit maximization. The finance manager tries to earn maximum profits for the company in the short-term and the long-term. He cannot guarantee profits in the long term because of business uncertainties. However, a company can earn maximum profits even in the long-term, if:-

- The Finance manager takes proper financial decisions.
- He uses the finance of the company properly.

## 2. **Return Maximization :**

The second goal of financial management is to safeguard the economic interest of the person who is directly or indirectly connected with the company like shareholder, debenture, employee etc. Finance managers are the agents of shareholders and their job is to look after the interest of the shareholders. The objective of any shareholder or investor would be a good return on their capital and safety of their capital.

## 3. **Wealth maximization :**

Wealth maximization (shareholders' value maximization) is also a main objective of financial management. Wealth maximization means to earn maximum wealth for the shareholders. So, the finance manager tries to give a maximum dividend to the shareholders. He also tries to increase the market value of the shares. The market value of the shares is directly related to the performance of the company. Better the performance, higher is the market value of shares and vice-versa. So, the finance manager must try to maximise shareholder's value.

## ❖ **Source of Finance**

Some sources of finance are short term and must be paid back within a year. Other sources of finance are long term and can be paid back over many years.

Internal sources of finance are funds found inside the business. For example, profits can be kept back to finance expansion. Alternatively the business can sell assets (items it owns) that are no longer really needed to free up cash.

External sources of finance are found outside the business, e.g. from creditors or banks.

### 1. **Share Capital:**

#### → **Authorized share capital:**

Authorized share capital refers to the total capital that a company is authorized to accept from investors by issuing shares. In simple terms, a company cannot raise capital more than its authorized capital. It represents the capital with which a company is registered that's why it is also known as 'registered capital'.

#### → **Issued share capital:**

It represents that part of total authorized share capital which has been issued by a company for subscription by investors. Usually, companies do not issue all of their shares for control purpose. Thus, the part which is issued represents the issued share capital.

#### → **Subscribed share capital:**

It refers to that part of issued share capital, which has been subscribed by investors. It means when a company issues shares to raise capital, it may or may not receive subscriptions for all of its shares. The part of issued share capital for which subscription has been received is known as subscribed share capital. So subscribed share capital can be equal to subscribed share capital but not more than that.

#### → **Called up share capital:**

A company collects the full amount of share price in more than one lot. The part of subscribed share capital which has been asked for payment represents called up share capital.

→ **Paid up share capital:**

It represents that part of called up share capital which has been paid by investors.

Paid up capital = Called up capital – Call in arrears.

**2. Debenture:**

A debenture is one of the capital market instruments which is used to raise medium or long term funds from public. A debenture is essentially a debt instrument that acknowledges a loan to the company and is executed under the common seal of the company. The debenture document, called Debenture deed contains provisions as to Payment, of interest and the repayment of principal amount and giving a charge on the assets of a such a company, which may give security for the payment over the some or all the assets of the company. Issue of Debentures is one of the most common methods of raising the funds available to the company. It is an important source of finance

**3. Long Term Loan:**

Long-term loans are the most popular form of credit in the financial industry. With the advent of technology and easy banking, home loans and auto loans have become a prevalent form of loan. These loans generally offer a hefty loan amount and are thus spread over a considerable period of repayment tenure. Features of long-term loans can vary considerably depending upon the cause for which these loans are being taken. Long-term loans almost always offer pre-payment option to customers so that people who want to pay-off their loan earlier than the stipulated timeframe do not have to pay continuously for long tenures.

Long-term loans are sanctioned based on the regular income of an applicant and generally require a continuous source of income as well as collateral to be submitted with the lending bank.

**4. Bank Borrowing:**

The act of taking money from a bank and paying it back over a period of time. The Company will no longer be so dependent on bank borrowing to finance expansion. The amount of money that is borrowed from a bank.

**5. Bank Credit:**

Bank credit is an agreement between banks and borrowers where banks trust a borrower to repay funds plus interest for a loan, credit card or line of credit at a later date. It is money banks lend or have already lent to customers. Bank credit is the total borrowing capacity banks provide to borrowers. Bank credit is an amount of funds that a person or business can borrow from a bank.

**6. Bonds:**

A bond is a debt investment in which an investor loans money to an entity (typically corporate or governmental) which borrows the funds for a defined period of time at a variable or fixed interest rate. Bond Analysis is used by companies, municipalities, states and sovereign governments to raise money and finance a variety of projects and activities. Owners of bonds are debt-holders, or creditors, of the issuer. The bond is a debt security, under which the issuer owes the holders a debt and (depending on the terms of the bond) is obliged to pay them interest (the coupon) or to repay the principal at a later date, termed the maturity date. Interest is usually payable at fixed intervals (semi-annual, annual, sometimes monthly). Very often the

bond is negotiable, that is, the ownership of the instrument can be transferred in the secondary market. This means that once the transfer agents at the bank medallion stamp the bond, it is highly liquid on the secondary market.

## **7. Retained Earnings:**

Profits generated by a company that are not distributed to stockholders (shareholders) as dividends but are either reinvested in the business or kept as a reserve for specific objectives (such as to pay off a debt or purchase a capital asset). A balance sheet figure shown under the heading retained earnings is the sum of all profits retained since the company's inception. Retained earnings are reduced by losses, and are also called accumulated earnings, accumulated profit, accumulated income, accumulated surplus, earned surplus, undistributed earnings, or undivided profits. See also retention ratio.

## **8. Overdraft:**

Loan arrangement under which a bank extends credit up to a maximum amount (called overdraft limit) against which a current (checking) account customer can write checks or make withdrawals. The most common form of business borrowing, an overdraft is a type of revolving loan where deposits (credits) are available for re-borrowing, and interest is charged only on the daily overdraft (debit) balance. It is, however, also a demand loan: the facility can be cancelled (and entire outstanding amount 'called') at any time by the lender at its discretion, without any warning notice or explanation. If the overdraft is secured by an asset or property, the lender has the right to foreclose on the collateral in case the account holder does not pay.

## **9. Public deposits:**

Public deposits are those deposits which are taken from the members or directors of the company or from the general public at a specified rate of interest for a specified period. This method of raising fund is becoming popular at present since the bank credit is becoming costlier. According to the existing provisions, a company cannot accept any public deposit for a period of less than 6 months and more than 36 months.

## **10. Surplus:**

A surplus is the amount of an asset or resource that exceeds the portion that is utilized. A surplus is used to describe many excess assets including income, profits, capital, and goods. A surplus often occurs in a budget, when expenses are less than the income taken in or in inventory when fewer supplies are used than were retained. Economic surplus is related to supply and demand. Surplus it is the wealth of a company related with profit.

## **11. Franchise:**

Franchising is simply a method for expanding a business and distributing goods and services through a licensing relationship. In franchising, franchisors (a person or company that grants the license to a third party for the conducting of a business under their marks) not only specify the products and services that will be offered by the franchisees (a person or company who is granted the license to do business under the trademark and trade name by the franchisor), but also provide them with an operating system, brand and support.

## **12. Hire Purchase:**

A hire purchase is a method of buying goods through making installment payments over time. The term "hire purchase" originated in the United Kingdom and is similar to rent-to-own arrangements in the United States. Under a hire purchase contract,

the buyer is leasing the goods and does not obtain ownership until the full amount of the contract is paid.

Example: Rahul buys a bike from HDFC Bank on instalment.

### **13.Lease:**

Lease is a contract outlining the terms under which one party agrees to rent property owned by another party. It guarantees the lessee, also known as the tenant, use of an asset and guarantees the lessor, the property owner or landlord, regular payments from the lessee for a specified number of months or years. Both the lessee and the lessor face consequences if they fail to uphold the terms of the contract. *Suppose Laxman want a building for 10 year so he paid 50, 00,000 Rs. to owner of a building. After 10 year laxman has to give back that building to owner of it. In village of Gujarat the farmer take land on lease which called as "GIRO".*

# Chapter 9, Production Management and HRM

## Production Management

### ❖ Introduction of Production Management

Production management means planning, organising, directing and controlling of production activities. Production management deals with converting raw materials into finished goods or products. It brings together the 6M's i.e. men, money, machines, materials, methods and markets to satisfy the wants of the people.

*"Production management deals with decision-making related to production processes so that the resulting goods or service is produced according to specification, in the amount and by the schedule demanded and at minimum cost."*

### ❖ Importance of Production Management

1. **Accomplishment of firm's objectives:** Production management helps the business firm to achieve all its objectives. It produces products, which satisfy the customers' needs and wants. So, the firm will increase its sales. This will help it to achieve its objectives.
2. **Reputation, Goodwill and Image:** Production management helps the firm to satisfy its customers. This increases the firm's reputation, goodwill and image. A good image helps the firm to expand and grow.
3. **Helps to introduce new products:** Production management helps to introduce new products in the market. It conducts Research and development (R&D). This helps the firm to develop newer and better quality products. These products are successful in the market because they give full satisfaction to the customers.
4. **Supports other functional areas:** Production management supports other functional areas in an organisation, such as marketing, finance, and personnel. The marketing department will find it easier to sell good-quality products, and the finance department will get more funds due to increase in sales. It will also get more loans and share capital for expansion and modernisation. The personnel department will be able to manage the human resources effectively due to the better performance of the production department.
5. **Helps to face competition:** Production management helps the firm to face competition in the market. This is because production management produces products of right quantity, right quality, and right price and at the right time. These products are delivered to the customers as per their requirements.
6. **Optimum utilisation of resources:** Production management facilitates optimum utilisation of resources such as manpower, machines, etc. So, the firm can meet its capacity utilisation objective. This will bring higher returns to the organisation.
7. **Minimises cost of production:** Production management helps to minimise the cost of production. It tries to maximise the output and minimise the inputs. This helps the firm to achieve its cost reduction and efficiency objective.
8. **Expansion of the firm:** The Production management helps the firm to expand and grow. This is because it tries to improve quality and reduce costs. This helps the firm to earn higher profits. These profits help the firm to expand and grow.
9. **Higher standard of living:** Production management conducts continuous research and development (R&D). So they produce new and better varieties of products. People use these products and enjoy a higher standard of living.
10. **Generates employment:** Production activities create many different job opportunities in the country, either directly or indirectly. Direct employment is generated in the production area, and indirect employment is generated in the supporting areas such as marketing, finance, customer support, etc.
11. **Improves quality and reduces cost:** Production management improves the quality of the products because of research and development. Because of large-scale production, there are economies of large scale. This brings down the cost of production. So, consumer prices also reduce.
12. **Spread effect:** Because of production, other sectors also expand. Companies making spare parts will expand. The service sector such as banking, transport, communication, insurance, BPO, etc. also expand. This spread effect offers more job opportunities and boosts economy.

- 13. Creates utility:** Production creates Form Utility. Consumers can get form utility in the shape, size and designs of the product. Production also creates time utility, because goods are available whenever consumers need it.
- 14. Boosts economy:** Production management ensures optimum utilisation of resources and effective production of goods and services. This leads to speedy economic growth and well-being of the nation.

## ❖ **What is Plant Location?**

Plant location or the facilities location problem is an important strategic level decision making for an organization. One of the key features of a conversion process (manufacturing system) is the efficiency with which the products (services) are transferred to the customers. This fact will include the determination of where to place the plant or facility.

The selection of location is a key-decision as large investment is made in building plant and machinery. It is not advisable or not possible to change the location very often. So an improper location of plant may lead to waste of all the investments made in building and machinery, equipment.

Before a location for a plant is selected, long range forecasts should be made anticipating future needs of the company. The plant location should be based on the company's expansion plan and policy, diversification plan for the products, changing market conditions, the changing sources of raw materials and many other factors that influence the choice of the location decision. The purpose of the location study is to find an optimum location one that will result in the greatest advantage to the organization.

### ❖ **Factor Affecting Plant Location:**

#### **1. Availability of Raw Materials:**

Proximity of sources of raw materials is the obvious explanation of the location of majority of sugar mills in Uttar Pradesh. This means that the raw material should be available within the economical distance. Easy availability of supplies required for maintenance and operation of the plant should also be considered.

#### **2. Transport Facilities:**

Since freight charges of raw materials and finished goods enter into the cost of production, therefore transportation facilities are becoming the governing factor in economic location of the plant. Depending upon the volume of the raw materials and finished products, a suitable method of transportation like rail, road, water transportation (through river, canals or sea) and air transport is selected and accordingly plant location is decided. Important consideration should be that the cost of transportation should remain fairly small in comparison to the total cost of production.

#### **3. Availability of Power, Fuel or Gas:**

Because of the wide spread use of electrical power the availability of fuel or gas has not remained a deciding factor in most of the cases for plant location. The location of thermal power plants and steel plants near coal fields are for cutting down cost of the fuel transportation. The reliability of continuous supply of these facilities is an important factor.

#### **4. Water Supply:**

Water is required for processing as in chemical, sugar and paper industries and is also used for drinking and sanitary purposes. Investigation for quality and probable source of supply is important, since the cost of treating water is substantial so the chemical properties like hardness, alkalinity and acidity. Presence of dissolved gases and organic material etc. should be thoroughly investigated. In case of water supply from an external source such as municipality, dependability of the source, pumping and storage capacity for present and future demands should be found out.

## **5. Disposal Facility for Waste Products:**

Thorough study should be made regarding disposal of water like effluents, solids, chemicals and other waste products likely to be produced during the production process.

## **6. Climatic and Atmospheric Conditions:**

The climate of the region/ area where the plant is to be located has an important bearing on both the capital and operational costs.

- (a) Rain fall or snow fall in the area concerned
- (b) Ambient temperatures
- (c) Humidity
- (d) Wind velocities and direction
- (e) Incidence of cyclones, storms etc.

## **7. Availability of Labour:**

Potential supply of requisite type of labour governs plant location to major extent. Some industries need highly skilled labour while other need unskilled and intelligent labour. But the former type is difficult in rural areas in comparison with industrially developed location.

## **8. Momentum of an Established Industry:**

Already established industry in a certain area will produce skilled labour in that trade. Thus future industries in that area will have no difficulty with respect to the skilled labour e.g. Ludhiana is famous for cycle industries and Faridabad for engineering industries.

## **9. Preference of Outstanding Businessmen and Government Subsidies:**

Some of the factory locations do not consider the above factors but locate industries in a particular district or area just to develop that area. It may be due to State Government policies regarding workers, pollution and smoke control requirements, waste disposal rules for industries etc.

## **❖ What is Plant Layout?**

Plant layout is the most effective physical arrangement, either existing or in plans of industrial facilities i.e. arrangement of machines, processing equipment and service departments to achieve greatest co-ordination and efficiency of 4 M's (Men, Materials, Machines and Methods) in a plant. Layout problems are fundamental to every type of organization/enterprise and are experienced in all kinds of concerns/undertakings. The adequacy of layout affects the efficiency of subsequent operations.

According to James Lundy, "Layout identically involves the allocation of space and the arrangement of equipment in such a manner that overall operating costs are minimized". In the words of Mallick and Gandreau, "Plant layout is a floor plan for determining and arranging the designed machinery and equipment of a plant, whether established or contemplated, in the best place, to permit the quickest flow of material, at the lowest cost and with the minimum handling in processing the product, from the receipt of raw material to the shipment of finished product".

## ❖ Factor Affecting Plant Layout

### 1. Policies of management:

It is important to keep in mind various managerial policies and plans before deciding plant layout. Various managerial policies relate to future volume of production and expansion, size of the plant, integration of production processes; facilities to employees, sales and marketing policies and purchasing policies etc. These policies and plans have positive impact in deciding plant layout.

### 2. Plant Location

Location of a plant greatly influences the layout of the plant. Topography, shape, climate conditions, and size of the site selected will influence the general arrangement of the layout and the flow of work in and out of the building.

### 3. Nature of the product:

Nature of the commodity or article to be produced greatly affects the type of layout to be adopted. In case of process industries, where the production is carried in a sequence, product layout is suitable. For example, soap manufacturing, sugar producing units and breweries apply product type of layout. On the other hand in case of intermittent or assembly industries, process type of layout best suited. For example, in case of industries manufacturing cycles, typewriters, sewing machines and refrigerators etc., process layout method is best suited.

Production of heavy and bulky items need different layout as compared to small and light items. Similarly products with complex and dangerous operations would require isolation instead of integration of processes.

### 4. Volume of production:

Plant layout is generally determined by taking into consideration the quantum of production to be produced.

### 5. Availability of floor space:

Availability of floor space can be other decisive factor in adopting a particular mode of layout. If there is a scarcity of space, product layout may be undertaken. On the other hand more space may lead to the adoption of process layout.

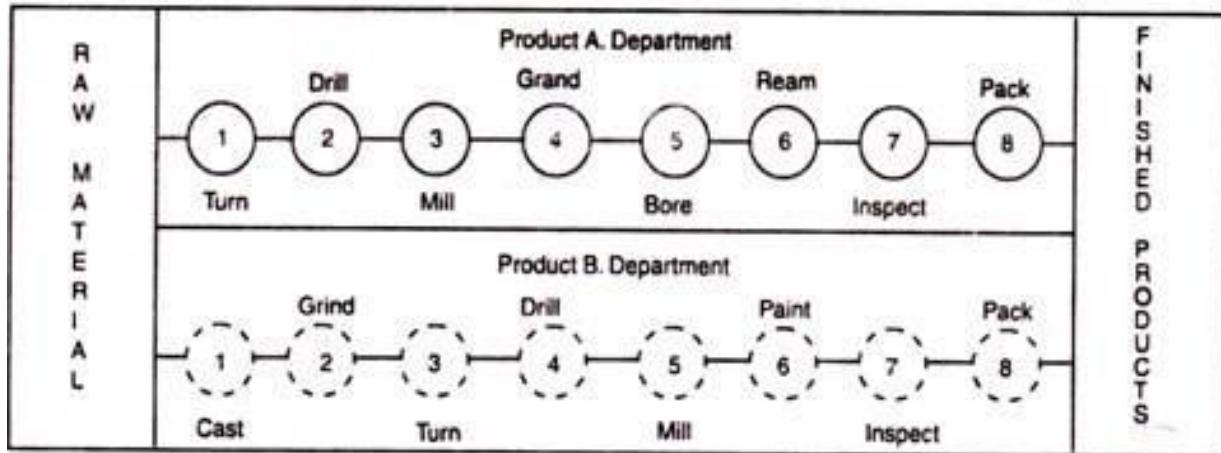
## ❖ Types of Plant Layout:

1. Product Layout
2. Process Layout
3. Fixed layout
4. Combine Layout

### 1. Product or Line Layout:

If all the processing equipment and machines are arranged according to the sequence of operations of the product, the layout is called product type of layout. In this type of layout, only one product of one type of products is produced in an operating area. This product must be standardized and produced in large quantities in order to justify the product layout.

The raw material is supplied at one end of the line and goes from one operation to the next quite rapidly with a minimum work in process, storage and material handling. Fig. Show product layout for two types of products A and B.



#### **Advantages offered by Product Layout:**

- (i) Lowers total material handling cost.
- (ii) There is less work in processes.
- (iii) Better utilization of men and machines,
- (iv) Less floor area is occupied by material in transit and for temporary storages.
- (v) Greater simplicity of production control.
- (vi) Total production time is also minimized.

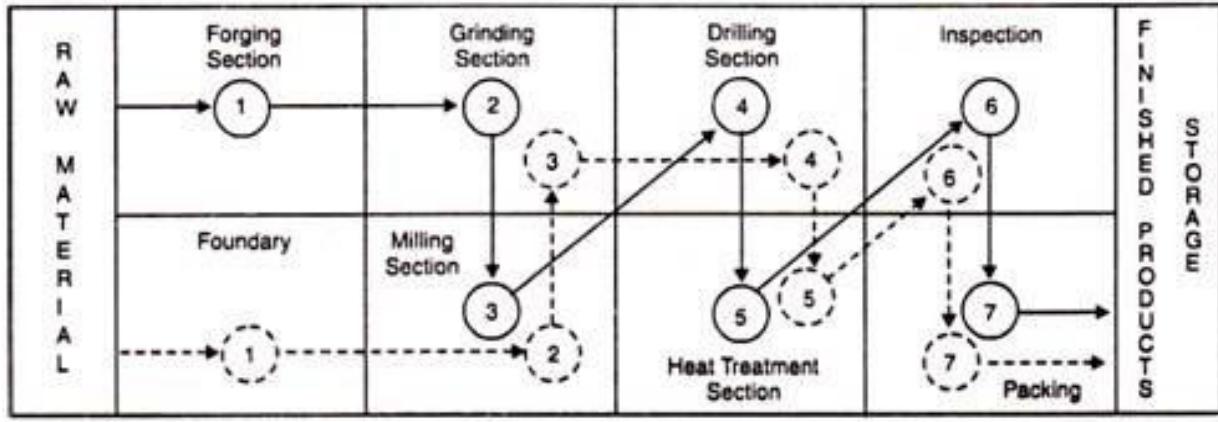
#### **Limitations of Product Layout:**

- (i) No flexibility which is generally required is obtained in this layout.
- (ii) The manufacturing cost increases with a fall in volume of production.
- (iii) If one or two lines are running light, there is considerable machine idleness.
- (iv) A single machine break down may shut down the whole production line.
- (v) Specialized and strict supervision is essential.

## **2. Process or Functional Layout:**

The process layout is particularly useful where low volume of production is needed. If the products are not standardized, the process layout is lower desirable, because it has creator process flexibility than other. In this type of layout, the machines and not arranged according to the sequence of operations but are arranged according to the nature or type of the operations. This layout is commonly suitable for non-repetitive jobs.

Same type of operation facilities are grouped together such as lathes will be placed at one place; all the drill machines are at another place and so on. See Fig. For process layout. Therefore, the process carried out in that area is according to the machine available in that area.



### **Advantages of Process Layout:**

- (i) There will be less duplication of machines. Thus, total investment in equipment purchase will be reduced.
- (ii) It offers better and more efficient supervision through specialization at various levels.
- (iii) There is a greater flexibility in equipment and man power thus load distribution is easily controlled.
- (iv) Better utilization of equipment available is possible.
- (v) Break down of equipment can be easily handled by transferring work to another machine/work station.
- (vi) There will be better control of complicated or precision processes, especially where much inspection is required.

### **Limitations of Process Layout:**

- (i) There are long material flow lines and hence the expensive handling is required.
- (ii) Total production cycle time is more owing to long distances and waiting at various points.
- (iii) Since more work is in queue and waiting for further operation hence bottle necks occur.
- (iv) Generally, more floor area is required.
- (v) Since work does not flow through definite lines, counting and scheduling is more tedious.
- (vi) Specialization creates monotony and there will be difficult for the laid workers to find job in other industries.

### **3. Fixed Position Layout:**

This type of layout is the least important for today's manufacturing industries. In this type of layout the major component remain in a fixed location, other materials, parts, tools, machinery, man power and other supporting equipment's are brought to this location.

The major component or body of the product remain in a fixed position because it is too heavy or too big and as such it is economical and convenient to bring the necessary tools and equipment's to work place along with the man power. This type of layout is used in the manufacture of boilers, hydraulic and steam turbines and ships etc.

### **Advantages Offered by Fixed Position Layout:**

- (i) Material movement is reduced
- (ii) Capital investment is minimized.
- (iii) The task is usually done by gang of operators, hence continuity of operations is ensured

(iv) Production centres are independent of each other. Hence, effective planning and loading can be made. Thus total production cost will be reduced.

(v) It offers greater flexibility and allows change in product design, product mix and production volume.

#### **Limitations of Fixed Position Layout:**

(i) Highly skilled man power is required.

(ii) Movement of machines equipment's to production centre may be time consuming.

(iii) Complicated fixtures may be required for positioning of jobs and tools. This may increase the cost of production.

#### **4. Combination Type of Layout:**

Now days in pure state any one form of layouts discussed above is rarely found. Therefore, generally the layouts used in industries are the compromise of the above mentioned layouts. Every layout has got certain advantages and limitations. Therefore, industries would like to use any type of layout as such.

Flexibility is a very important factor, so layout should be such which can be modified according to the requirements of industry, without much investment. If the good features of all types of layouts are connected, a compromise solution can be obtained which will be more economical and flexible.

# **Human Resource Management**

Human Resource Management is the process of recruitment and selecting employee, providing orientation and induction, training and development, assessment of employee (performance of appraisal), providing compensation and benefits, motivating, maintaining proper relations with employees and with trade unions, maintaining employees safety, welfare and health measures in compliance with labour laws of the land.

*Edwin Flippo defines- HRM as “planning, organizing, directing, controlling of procurement, development, compensation, integration, maintenance and separation of human resources to the end that individual, organizational and social objectives are achieved.”*

*According to Decenzo and Robbins, “HRM is concerned with the people dimension” in management. Since every organization is made up of people, acquiring their services, developing their skills, motivating them to higher levels of performance and ensuring that they continue to maintain their commitment to the organization is essential to achieve organisational objectives. This is true, regardless of the type of organization – government, business, education, health or social action”.*

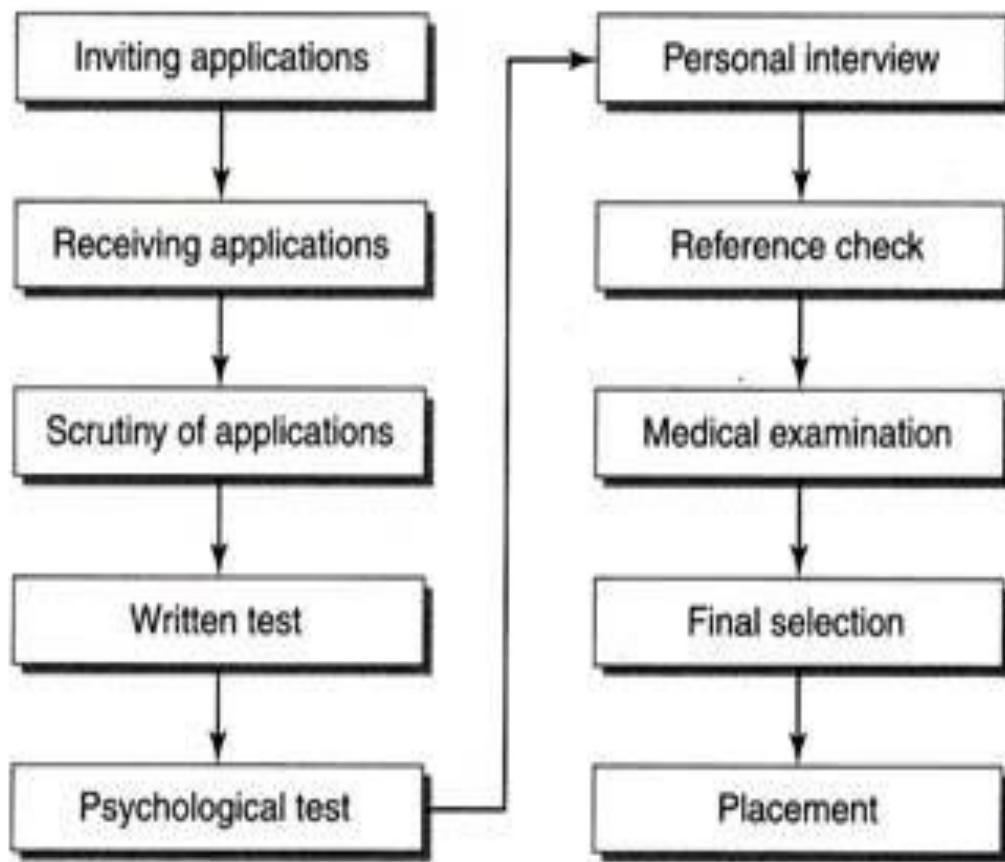
## **❖ Selection Process**

### **1. Inviting applications**

The prospective candidates from within the organization or outside the organization are called for applying for the post. Detailed job description and job specification are provided in the advertisement for the job. It attracts a large number of candidates from various areas.

### **2. Receiving applications:**

Detailed applications are collected from the candidates which provide the necessary information about personal and professional details of a person. These applications facilitate analysis and comparison of the candidates.



### **3. Scrutiny of applications:**

As the limit of the period within which the company is supposed to receive applications ends, the applications are sorted out. Incomplete applications get rejected; applicants with un-matching job specifications are also rejected.

### **4. Written tests:**

As the final list of candidates becomes ready after the scrutiny of applications, the written test is conducted. This test is conducted for understanding the technical knowledge, attitude and interest of the candidates. This process is useful when the number of applicants is large.

Many times, a second chance is given to candidates to prove themselves by conducting another written test.

### **5. Psychological tests:**

These tests are conducted individually and they help for finding out the individual quality and skill of a person. The types of psychological tests are aptitude test, intelligence test, synthetic test and personality test.

### **6. Personal interview:**

Candidates proving them successful through tests are interviewed personally. The interviewers may be individual or a panel. It generally involves officers from the top management.

The candidates are asked several questions about their experience on another job, their family background, their interests, etc. They are supposed to describe their expectations from the said job. Their strengths and weaknesses are identified and noted by the interviewers which help them to take the final decision of selection.

## **7. Reference check**

Generally, at least two references are asked for by the company from the candidate. Reference check is a type of crosscheck for the information provided by the candidate through their application form and during the interviews.

## **8. Medical examination:**

Physical strength and fitness of a candidate is must before they takes up the job. In-spite of good performance in tests and interviews, candidates can be rejected on the basis of their ill health.

## **9. Final selection:**

At this step, the candidate is given the appointment letter to join the organization on a particular date. The appointment letter specifies the post, title, salary and terms of employment. Generally, initial appointment is on probation and after specific time period it becomes permanent.

## **10. Placement:**

This is a final step. A suitable job is allocated to the appointed candidate so that they can get the whole idea about the nature of the job. They can get adjusted to the job and perform well in future with all capacities and strengths.

# **❖ Source of Recruitment**

## **(A) Internal Sources:**

Best employees can be found within the organisation... When a vacancy arises in the organisation, it may be given to an employee who is already on the pay-roll. Internal sources include promotion, transfer and in certain cases demotion. When a higher post is given to a deserving employee, it motivates all other employees of the organisation to work hard. The employees can be informed of such a vacancy by internal advertisement.

The Internal Sources Are Given Below:

### **1. Transfers:**

Transfer involves shifting of persons from present jobs to other similar jobs. These do not involve any change in rank, responsibility or prestige. The numbers of persons do not increase with transfers.

### **2. Promotions:**

Promotions refer to shifting of persons to positions carrying better prestige, higher responsibilities and more pay. The higher positions falling vacant may be filled up from within the organisation. A promotion does not increase the number of persons in the organisation.

A person going to get a higher position will vacate his present position. Promotion will motivate employees to improve their performance so that they can also get promotion.

### **3. Present Employees:**

The present employees of a concern are informed about likely vacant positions. The employees recommend their relations or persons intimately known to them. Management is relieved of looking out prospective candidates. The persons recommended by the employees may be generally suitable for the jobs because they know the requirements of various positions. The existing employees take full responsibility of those recommended by them and also ensure of their proper behaviour and performance.

## **(B) External Sources:**

All organisations have to use external sources for recruitment to higher positions when existing employees are not suitable. More persons are needed when expansions are undertaken.

The external sources are discussed below:

Methods of External Sources:

## **1. Advertisement:**

It is a method of recruitment frequently used for skilled workers, clerical and higher staff. Advertisement can be given in newspapers and professional journals. These advertisements attract applicants in large number of highly variable quality.

Preparing good advertisement is a specialised task. If a company wants to conceal its name, a 'blind advertisement' may be given asking the applicants to apply to Post Bag or Box Number or to some advertising agency.

## **2. Employment Exchanges:**

Employment exchanges in India are run by the Government. For unskilled, semi-skilled, skilled, clerical posts etc., it is often used as a source of recruitment. In certain cases it has been made obligatory for the business concerns to notify their vacancies to the employment exchange. In the past, employers used to turn to these agencies only as a last resort. The job-seekers and job-givers are brought into contact by the employment exchanges.

## **3. Schools, Colleges and Universities:**

Direct recruitment from educational institutions for certain jobs (i.e. placement) which require technical or professional qualification has become a common practice. A close liaison between the company and educational institutions helps in getting suitable candidates. The students are spotted during the course of their studies. Junior level executives or managerial trainees may be recruited in this way.

## **4. Recommendation of Existing Employees:**

The present employees know both the company and the candidate being recommended. Hence some companies encourage their existing employees to assist them in getting applications from persons who are known to them.

In certain cases rewards may also be given if candidates recommended by them are actually selected by the company. If recommendation leads to favouritism, it will impair the morale of employees.

## **5. Factory Gates:**

Certain workers present themselves at the factory gate every day for employment. This method of recruitment is very popular in India for unskilled or semi-skilled labour. The desirable candidates are selected by the first line supervisors. The major disadvantage of this system is that the person selected may not be suitable for the vacancy.

## **6. Casual Callers:**

Those personnel who casually come to the company for employment may also be considered for the vacant post. It is most economical method of recruitment. In the advanced countries, this method of recruitment is very popular

## **7. Central Application File:**

A file of past applicants who were not selected earlier may be maintained. In order to keep the file alive, applications in the files must be checked at periodical intervals.

## **8. Labour Unions:**

In certain occupations like construction, hotels, maritime industry etc., (i.e., industries where there is instability of employment) all recruits usually come from unions. It is advantageous from the management point of view because it saves expenses of recruitment. However, in other industries, unions may be asked to recommend candidates either as a goodwill gesture or as a courtesy towards the union.

**9. Labour Contractors:**

This method of recruitment is still prevalent in India for hiring unskilled and semi-skilled workers in brick kiln industry. The contractors keep themselves in touch with the labour and bring the workers at the places where they are required. They get commission for the number of persons supplied by them.

**10. Former Employees:**

In case employees have been laid off or have left the factory at their own, they may be taken back if they are interested in joining the concern (provided their record is good).

EEM KALPESH SPCE

## **Chapter 10, Corporate Social Responsibility and Ethics**

### **❖ Concept of Corporate Social Responsibility**

The emerging concept of Corporate Social Responsibility (CSR) goes beyond charity and requires the company to act beyond its legal obligations and to integrate social, environmental and ethical concerns into company's business process.

Business has today, emerged as one of the most powerful institutions on the earth. Some of the biggest companies in the world are in fact, bigger in size than some of the developing countries of the world. Globalization makes the world smaller, and business, worldwide, is expanding like never before. Companies are expanding their operations and crossing geographical boundaries.

Indian companies too have made their way into the business boom and are today globally acknowledged as major players. India is currently amongst the fastest growing countries in the world. The globalization and liberalization of the Indian economy has helped in stepping up growth rates. Integration of the Indian with the global economy has also resulted in Indian businesses opening up to international competition and thereby increasing their operations.

In the current scheme of things, business enterprises are no longer expected to play their traditional role of mere profit making enterprises. The ever-increasing role of civil society has started to put pressure on companies to act in an economically, socially and environmentally sustainable way.

The companies are facing increased pressure for transparency and accountability, being placed on them by their employees, customers, shareholders, media and civil society.

Business does not operate in isolation and there is today, an increased realization that not only can companies affect society at large, but they are also in a unique position to influence society and make positive impact.

Milton Friedman, Nobel Laureate in Economics and author of several books wrote in 1970 in the New York Times Magazine that "the social responsibility of business is to increase its profits" and "the business of business is business". This represented an extreme view that the only social responsibility a law-abiding business has is to maximize profits for the shareholders, which were considered the only stakeholders for the company. However, time has given the term 'stakeholder' wider connotations.

Edward Freeman defines, 'a stakeholder in an organization is any group or individual who can affect or is affected by the achievement of the organization's objectives.' Thus, the term stakeholder includes (apart from shareholders), but not limited to, customers, employees, suppliers, community, environment and society at large.

These and a host of other such ideas have given rise to the concept of Corporate Social Responsibility (CSR). The concept of CSR goes beyond charity or philanthropy and requires the company to act beyond its legal obligations and to integrate social, environmental and ethical concerns into its business process. Business for Social Responsibility defines CSR as "achieving commercial success in ways that honour ethical values and respect people, communities, and the environment."

It means addressing the legal, ethical, commercial and other expectations that society has for business and making decisions that fairly balance the claims of all key stakeholders. In its simplest terms it is: "what you do, how you do it, and when and what you say." A widely quoted definition by the World Business Council for Sustainable Development states that "Corporate social responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large".

Though, there is no universal definition of CSR but the common understanding amongst most of these definitions concern with how the profits are made and how they are used, keeping in mind the interests of all stakeholders. The concept of Corporate Social Responsibility is constantly evolving.

The emerging concept of CSR goes beyond charity and requires the company to act beyond its legal obligations and to integrate social, environmental and ethical concerns into company's business process. What is generally understood by CSR is that the business has a responsibility – towards its stakeholders and society at large – that extends beyond its legal and enforceable obligations.

The triple bottom line approach to CSR emphasizes a company's commitment to operating in an economically, socially and environmentally sustainable manner. The emerging concept of CSR advocates moving away from a 'shareholder alone' focus to a 'multi-stakeholder' focus. This would include investors, employees, business partners, customers, regulators, supply chain, local communities, the environment and society at large.

**The key components of CSR would therefore include the following:**

**1. Corporate**

Governance: Within the ambit of corporate governance, major issues are the accountability, transparency and conduct in conformity with the laws. Good corporate governance policy would enable the company to realize its corporate objectives, protect shareholder rights, meet legal requirements and create transparency for all stakeholders.

**2. Business Ethics:**

Relates to value-based and ethical business practice. 'Business ethics defines how a company integrates core values – such as honesty, trust, respect, and fairness – into its policies, practices, and decision making. Business ethics also involves a company's compliance with legal standards and adherence to internal rules and regulations.'

**3. Workplace and labour relations:**

Human resources are most important and critical to a company. Good CSR practices relating to workplace and labour relations can help in improving the workplace in terms of health and safety, employee relations as well as result in a healthy balance between work and non-work aspects of employees' life. It can also make it easier to recruit employees and make them stay longer, thereby reducing the costs and disruption of recruitment and retraining.

**4. Affirmative action/good practices:**

Equal opportunity employer, diversity of workforce that includes people with disability, people from the local community etc., gender policy, code of conduct/guidelines on prevention of sexual harassment at workplace, prevention of HIV/AIDS at workplace, employee volunteering etc. are some of the good practices which reflect CSR practices of the company.

**5. Supply Chain:**

The business process of the company is not just limited to the operations internal to the company but to the entire supply chain involved in goods and services. If anyone from the supply chain neglects social, environmental, human rights or other aspects, it may reflect badly on the company and may ultimately affect business heavily. Thus, company should use its strategic position to influence the entire supply chain to positively impact the stakeholders.

**6. Customers:**

The products and services of a company are ultimately aimed at the customers. The cost and quality of products may be of greatest concern to the customers but these are not the only aspects that the customers are concerned with. With increased awareness and means of communication, customer satisfaction and loyalty would depend on how the company has produced the goods and services, considering the social, environmental, supply-chain and other such aspects.

**7. Environment:**

Merely meeting legal requirements in itself does not comprise CSR but it requires company to engage in such a way that goes beyond mandatory requirements and delivers environmental benefits. It would include, but not limited to, finding sustainable solutions for natural resources, reducing adverse

impacts on environment, reducing environment-risky pollutants/emissions as well as producing environment-friendly goods.

## **8. Community:**

A major stakeholder to the business is the community in which the company operates. The involvement of a company with the community would depend upon its direct interaction with the community and assessment of issues/risks faced by those living in the company surrounding areas. This helps in delivering a community-focused CSR strategy – making positive changes to the lives of the people and improving the brand-image of the company. Involvement with the community could be both direct & indirect – through funding and other support for community projects implemented by local agencies.

### **❖ The Main nine principles of CSR**

- Principles 1:** Businesses should support and respect the protection of internationally proclaimed human rights
- Principles 2:** Businesses should make sure they are not complicit in human rights abuses
- Principles 3:** Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining
- Principles 4:** Businesses should uphold the elimination of all forms of forced and compulsory labour.
- Principles 5:** Businesses should uphold the effective abolition of child labour
- Principles 6:** Businesses should uphold the elimination of discrimination in respect of employment and occupation
- Principles 7:** Businesses should support a precautionary approach to environmental challenges.
- Principles 8:** Businesses should undertake initiatives to promote greater environmental responsibility
- Principles 9:** Businesses should encourage the development and diffusion of environmentally friendly technologies.
- Principles 10:** Businesses should work against corruption in all its forms, including extortion and bribery.

### **❖ Importance of corporate social responsibility to societies**

- Increased employee loyalty and retention.
- Gaining legitimacy and access to markets.
- Less litigation.
- Increased quality of products and services.
- Bolstering public image and reputation and enhanced brand value.
- Less volatile stock value.
- Avoiding state regulation.
- Increased customer loyalty.

Corporate social responsibility activities amongst various corporations and its stakeholders could contribute to the macroeconomic development of a developing country through sustainable benefit to all. At the same time, optimum national impact, cooperation, and communication would be encouraged and socialized. The following are the various benefits of corporate social responsibility to the society

#### **Local community and society:**

- Improved quality of life and Changed habits.
- Capacity building creates wealth and employment.

#### **Better world and environment from corporate social responsibility:**

- Balanced ecosystems.
- Waste management.
- Clean and Green environment.

#### **Corporations:**

- Goodwill and Community acceptance.
- Profit, Growth, competitive edge and image.

- Genuine dialog with stakeholders.
- Spiritual and Pride values to their families and employees.

## ❖ Business of Ethics

Business ethics (also known as corporate ethics) is a form of applied ethics or professional ethics that examines ethical principles and moral or ethical problems that arise in a business environment. It applies to all aspects of business conduct and is relevant to the conduct of individuals and entire organizations. These ethics originate from individuals, organizational statements or from the legal system. These norms, values, ethical, and unethical practices are what is used to guide business. They help those businesses maintain a better connection with their stakeholders.

Business ethics refers to contemporary organizational standards, principles, sets of values and norms that govern the actions and behaviour of an individual in the business organization. Business ethics have two dimensions, normative or descriptive. As a corporate practice and a career specialization, the field is primarily normative. Academics attempting to understand business behaviour employ descriptive methods. The range and quantity of business ethical issues reflects the interaction of profit-maximizing behaviour with non-economic concerns.

Interest in business ethics accelerated dramatically during the 1980s and 1990s, both within major corporations and within academia. For example, most major corporations today promote their commitment to non-economic values under headings such as ethics codes and social responsibility charters.

Adam Smith said, "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices." Governments use laws and regulations to point business behaviour in what they perceive to be beneficial directions. Ethics implicitly regulates areas and details of behaviour that lie beyond governmental control. The emergence of large corporations with limited relationships and sensitivity to the communities in which they operate accelerated the development of formal ethics regimes.

## ❖ Importance of Business Ethics

**1. Ethics lays the strategic decision-making:** Leaders and workers of a business characterized by ethical behaviour make decisions that are socially acceptable. They allow all the stakeholders to participate in the decision-making process.

**2. They increase employee retention:** Employees always want to stay longer in a business where the employers value their rights and opinions. To them, their basic needs are satisfied.

**3. An ethical business attracts investors:** A business that promotes ethics in its management and operations create an investment-friendly environment. Investors like putting their money where they are sure it is safe.

**4. Ethics minimizes costs:** Fewer funds are spent in employee recruitment since most employees are retained in the business.

**5. Ethical practices help in building and maintaining reputation:** A large part of ensuring business success is down to maintaining a good reputation among your customers. One of the main things that customers will scrutinize when they decide whether they trust or want to engage with a business or not is that business's ethics. If you can brand yourself explicitly as an ethical business, so much the better!

**6. An ethically oriented company is bound to avoid fines:** They comply with the law, file their tax returns in time, ensure quality of products and services, etc.

**7. Ethics in a business attracts more employees:** When your company is reputable, more people will be interested to work for you.

**8. Good Business ethics is the key to enhancing productivity:** People will work harder at their jobs if they believe that what they are doing is ethical. They will not be held back by moral qualms, and they may feel extra motivated to work because they feel that by doing so they are making the world a better place. So if you want to make a normal profit rise and rise until you are making big bucks, you need to keep your business totally ethical.

**9. Ethics create customer loyalty:** A reputation built on good ethics helps create a positive image in the marketplace. This, in turn, makes customers trust your products and services. They also pass information to their friends and family, hence, creating more customers for you.

**10. Ethics encourage teamwork:** Employers and employees who trust one another work together harmoniously and effectively.

**11. A business that values ethics attracts more suppliers:** A business without suppliers is as good as a failed enterprise. Suppliers are attracted to a company that appreciates what they supply and pay for them promptly.

**12. Ethics in enhances partnerships:** Partnerships in the business world are very crucial. They help expand your marketplace and improve business relations. In order to get a good partner(s), your reputation must be built on a strong business ethics foundation.

**13. Ethics reduces business risks:** As trust and loyalty are built on ethics, chances of losing potential customers, suppliers, employees and even the company itself are minimal.

**14. It improves a company's bottom line (last line that shows profit or loss):** The bottom line of your business will increase since costs and risks are reduced.

**15. Ethics increases business profits:** The decrease in risks and costs mean that the output is likely to be higher than the input hence the company makes a profit.

**16. Ethics lead to sustainable growth in sales:** An increase in customers leads to an increase in demand. Therefore, more goods and services are sold. It may seem that a little selfishness might help your business, however this is never the case. Selfish or unethical actions may seem to give your business a temporary boost, but they will thwart your long term goals. Ethical action is the key to sustainability and success in business.

**17. Good ethics in a business boosts the morale of the employees:** Good business ethics involves rewarding your employees. When an employee is rewarded, he/she works harder leading to more profits.

**18. Ethics helps in building consumer confidence:** Other than customer loyalty, business ethics makes consumers believe in you even during difficult times. For example, when a company's product is found to be faulty and the company takes full responsibility, consumers are bound to trust that it was just a mistake.

**19. Ethics enable a company to make good use of the limited resources:** Instead of wasting the company's resources on themselves, company leaders can put them to good use.

**20. Ethics in business allows for healthy competitions:** It is common to find two or more companies that offer similar services and goods. A company characterized with ethical behavior will not engage in malpractices such as spreading false information about the other company or lowering their prices. Instead, they will allow the customers to choose where they like.

**21. Ethics lead to long-term gains:** A company that values ethics believes in small, but long-term benefits rather than big, but short-term returns.

**22. Ethics helps in maintaining quality:** An ethical company will strive to deliver goods and services of high quality to their customers even in times when the demand is higher than supply.

**23. Ethics offers extra asset protection:** Employees who abide by the business ethics are in a position to respect and protect the business's assets. For instance, they will not make long personal calls using the business line.

**24. Ethical practices foster community improvement:** Ethics teaches the art of giving back. Ethically oriented companies will help a community to be better through things like road construction or schools construction.

**25. Good business ethics is an end in itself:** Both inside and outside of business, having good ethics is an end in itself, and something that we can derive satisfaction from in its own right. So, if you want employees, vendors and consumers to feel satisfied, then running an ethical business is very important. That way, when people go to work they will feel a sense of satisfaction at doing something that is morally sound. And, when people buy your products or services, they can do so safe in the knowledge that what they are doing is ethical.

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