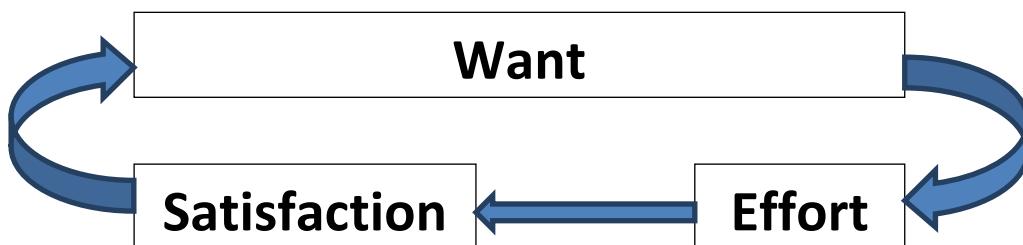


What is Economics? / Define Economics / Introduction to Economics

- Economics is a social science that studies how individuals, governments, firms and nations make choices on allocating limited resources to satisfy their unlimited wants.
- **Adam Smith (wealth definition of economics)** define economics is a study of wealth, a subject dealing with producing wealth and using it.
- **Alfred Marshall (welfare definition of economics)** defined economics as a study of mankind in the ordinary business of life. It inquires how he gets his income and how he uses it.
- **Lionel Robbins** defines Economics as a science which studies human behavior as a relationship between ends and scarce means which have alternative uses.
- **Paul Samuelson** define economics is the study of how men and society choose, with or without the use of money, to employ limited productive resources which could have alternative uses, to produce various commodities over time, and distribute them for consumption, now and in the future among various people and groups of society.
- Two major factors are responsible for the emergence of economic problems:
 1. The existence of unlimited human wants and
 2. The scarcity of available resources.
- Economics deals with how the numerous human wants are to be satisfied with limited resources.
- Thus, the science of economics centers on **want - effort - satisfaction**.



Schools of Economics

Classical School

- **Adam Smith, known as the Father of Economics**, established the first modern economic theory, called the Classical School, in 1776.
- Smith believed that people who acted in their own self-interest produced goods and wealth that benefited all of society.
- He believed that governments should not restrict or interfere in markets because they could regulate themselves and, thereby, produce wealth at maximum efficiency.
- Classical theory forms the basis of capitalism and is still prominent today.

Keynesian School

- A more recent economic theory, the **Keynesian School**, describes how governments can act within capitalistic economies to promote economic stability.
- It calls for reduced taxes and increased government spending when the economy becomes motionless and increased taxes and reduced spending when the economy becomes excessively active.
- This theory strongly influences U.S. economic policy today.

Nature of Economics

The nature of any ideology or system highlights its characteristics, as far as the study of economics is concerned, its nature is broadly discussed as under:

Economics - A Science and an Art

Economics is a science:

- Science is a structured body of knowledge that traces the relationship between cause and effect.
- Another attribute of science is that its phenomena should be open to measurement.
- Applying these characteristics, we find that economics is a branch of knowledge where the various facts relevant to it have been systematically collected, classified and analyzed.
- Economics investigates the possibility of deducing generalizations as regards the economic motives of human beings.
- The motives of individuals and business firms can be very easily measured in terms of money. Thus, economics is a science.

Economics is a Social Science:

- In order to understand the social aspect of economics, we should bear in mind that laborers are working on materials drawn from all over the world.
- They produce commodities to be sold all over the world in order to exchange goods from all parts of the world.
- It satisfies their wants. Therefore a close inter-dependence of millions of people living in distant lands unknown to one another.
- In this way, the process of satisfying wants is not only an individual process, but also a social process.
- In economics, one has, thus, to study social behavior i.e., behavior of men in-groups.

Economics is an art:

- An art is a system of rules for the attainment of a given task.
- A science teaches us to know. An art teaches us to do.
- Applying this definition, we find that economics offers us practical guidance in the solution of economic problems.
- Science and art are complementary to each other and economics is both a science and an art.

Positive and Normative Economics

Positive science:

- It only describes what it is and normative science prescribes what it must be.
- Positive science does not indicate what is good or what is bad to the society.
- It will simply provide results of economic analysis of a problem.

Normative science:

- It makes distinction between good and bad.
- It prescribes what should be done to promote human welfare.
- A positive statement is based on facts. A normative statement involves ethical values.
- For example, “12 per cent of the labor force in India was unemployed last year” is a positive statement, which could be verified by scientific measurement.

- Twelve per cent unemployment is too high is normative statement comparing the fact of 12 per cent unemployment with a standard of what is unreasonable.
- It also suggests how it can be rectified. Therefore, economics is a positive as well as normative science.

Methodology of Economics

Deductive method:

- Here, we descend from the general to particular.
- We start from certain principles that are self-evident or based on strict observations.
- Then, we carry them down as a process of pure reasoning to the consequences that they completely contain.
- For instance, traders earn profit in their businesses is a general statement which is accepted even without verifying it with the traders.
- The deductive method is useful in analyzing complex economic phenomenon where cause and effect are mixed up.
- However, the deductive method is useful only if certain assumptions are valid (Traders earn profit, if the demand for the commodity is more).

Inductive method:

- This method mounts up from particular to general
- We begin with the observation of particular facts.
- Then proceed with the help of reasoning founded on experience so as to formulate laws and theorems on the basis of observed facts.
- E.g. Data on consumption of poor, middle and rich income groups of people are collected, classified, analyzed and important conclusions are drawn out from the results.

Scope of Economics

Traditional Approach

Economics is studied under five major divisions namely consumption, production, exchange, distribution and public finance.

1. Consumption:

- The satisfaction of human wants through the use of goods and services is called consumption.

2. Production:

- Goods that satisfy human wants are viewed as “bundles of utility”.
- Hence production would mean creation of utility or producing (or creating) things for satisfying human wants.
- For production, the resources like land, labor, capital and organization are needed.

3. Exchange:

- Goods are produced not only for self-consumption, but also for sales.
- They are sold to buyers in markets.
- The process of buying and selling is exchange.

4. Distribution:

- The production of any agricultural commodity requires four factors, viz., land, labor, capital and organization.
- These four factors of production are to be rewarded for their services rendered in the process of production.

- The land owner gets rent.
- The labor earns salary.
- The capitalist is given with interest
- And the entrepreneur is rewarded with profit.
- The process of determining rent, salary, interest and profit is called distribution.

5. **Public finance:**

- It studies how the organization gets money and how it spends it.
- Thus, in public finance, we study about public revenue and public expenditure.

Modern Approach

- **Microeconomics** analyses the economic behavior of any particular decision making unit such as a household or a firm.
- **Microeconomics** studies the flow of economic resources or factors of production from the households or resource owners to business firms and flow of goods and services from business firms to households.
- It studies the behavior of individual decision making unit with regard to fixation of price and output and its reactions to the changes in demand and supply conditions.
- Hence, microeconomics is also called price theory.
- **Macroeconomics** studies the behavior of the economic system as a whole or all the decision-making units put together.
- **Macroeconomics** deals with the behavior of aggregates like total employment, gross national product (GNP), national income, general price level, etc.
- So, macroeconomics is also known as income theory.
- Microeconomics cannot give an idea of the functioning of the economy as a whole.
- Similarly, macroeconomics ignores the individual's preference and welfare.
- What is true of a part or individual may not be true of the whole and what is true of the whole may not apply to the parts or individual decision-making units.

Difference between Microeconomics and Macroeconomics

Microeconomics	Macroeconomics
Micro means small. Thus, it is the study of individual behavior of mankind. It is the study of individual incomes, consumptions, savings and investment of the individuals.	Macro means large. It is the study of the nation as a large entity like national income, distribution, consumption, savings and investments.
The objective of microeconomics is maximization of individual satisfaction and minimization of costs.	The objective of macroeconomics is to govern the economic parameters of a nation like growth in national income, equitable distribution, full employment price stability, favorable balance of payments etc.
The Microeconomics judgments are based on equality of demand and supply of individuals and business firms. The price mechanism under various market structure is determined through free price mechanism which balances demand supply position.	The macroeconomics considers the aggregate demand and aggregate supply. The adjustment in the demand and supply is a matter of central decision making in the form of price control for demand side and licensing for supply side.

Microeconomics	Macroeconomics
<p>The Microeconomics analysis is based on following assumptions:</p> <p>(1) Rational judgment of the individuals. (2) Keeping all variables except one under the analysis as static.</p>	<p>The macroeconomics analysis is based on following assumptions:</p> <p>(1) Aggregate demand of the nation. (2) Aggregate supply of resources and its allocation to meet the aggregate demand as per market demand under capitalism and as per planned allocation under socialism.</p>
<p>The Microeconomics concept is dealing with the partial equilibrium confined to industry categories and percolated to individual firms.</p>	<p>The macroeconomics analysis is related to establishment for a nation, also global equilibrium through global economic co-operation.</p>
<p>The Microeconomics considers the attainment of equilibrium under the shorter time span with the periodic adjustments for correcting the disequilibrium.</p>	<p>The macroeconomics is a long-term analysis with a secular equilibrium with a long span of leads and lags effects. The current decision of today will yield the results after a long span of time. The investments in health, education as social infrastructure, and in roads, transport, power and communication as economic infrastructure have long-term implications.</p>

Theory of Demand and Supply

- Supply and demand is perhaps one of the most fundamental concepts of economics and it is the backbone of a market economy.
- **Demand:** The quantity demanded is the amount of a product people are willing to buy at a certain price.
- The relationship between price and quantity demanded is known as the **demand relationship**.
- **Supply:** The quantity supplied refers to the amount of a certain goods producers are willing to supply when receiving a certain price.
- The correlation between price and how much of a goods or service is supplied to the market is known as the **supply relationship**.
- Price, therefore, is a reflection of supply and demand.

Determinants of Demand

- The demand of any product or service at a given point of time is affected by the following factors:
 - 1) **Price:** Price is basic factor which affect demand as price decreases demand will increases and if price increases then demand will decreases.
 - 2) **Income:** It is obvious that when incomes of a person will increases then demand will also increases.
 - 3) **Demography (Population):** As population increases demand will also increases.
 - 4) **Test and Preference of consumers:** If person like something than he will demand more and if he/she doesn't like it then refuse to buy.
 - 5) **Expectations of future price:** If consumer expects rice in price then he/she will demand more at this time and vice versa.
 - 6) **Prices of related commodities:** The demand is also affected by the prices of the substitute products.

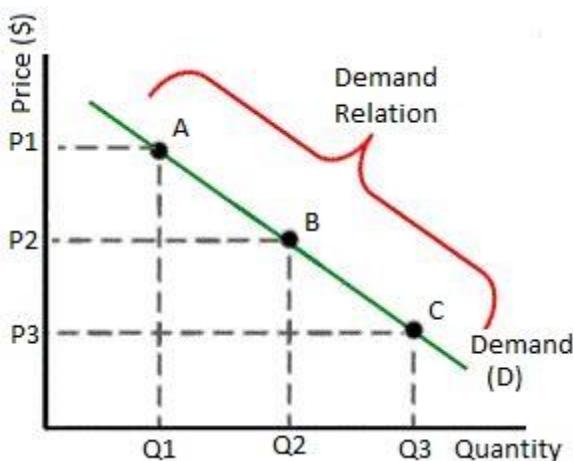
Determinants of Supply

- The supply of any product or service at a given point of time is affected by the following factors:
 - 1) **Price:** If price will increases then supplier will willing to supply more as profit is increases and vice versa.
 - 2) **Strategy of the supplier:** The strategies followed by the suppliers determine the quantity released at different prices.

- 3) **Number of supplier:** The number of supplier represents the market structure viz. monopoly or competition which becomes the basis for volume of supply.
- 4) **Government policies:** The government policy of taxation, price controls, incentives to buy consumer and industrial products affects the supply of commodities.
- 5) **Technology development and adoption:** The technological advancement facilitates large production at low cost. This factor affects both the consumers and the suppliers.
- 6) **Future expectations:** The future expectations about price rise or price fall prompts the supplier to restrict or to release the supply respectively.
- 7) **Natural calamities:** the natural calamity like flood, drought, cyclone, earthquake etc. destroys the supply. Thus the quantity supplied is determined by these factors.

The Law of Demand

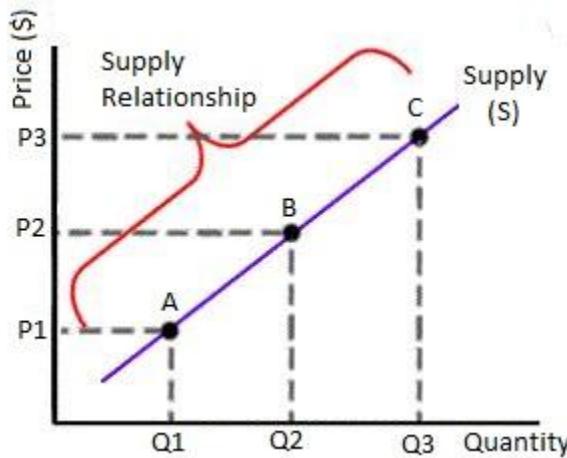
- The law of demand states that, if all other factors remain equal, the higher the price of a goods, the less people will demand that goods.
- In other words, the higher the price, the lower the quantity demanded.
- The amount of a goods that buyers purchase at a higher price is less because as the price of a goods goes up, so does the opportunity cost of buying that goods.
- As a result, people will naturally avoid buying a product that will force them to forget the consumption of something else they value more.
- The chart below shows that the curve is a downward slope.



- A, B and C are points on the demand curve.
- Each point on the curve reflects a direct correlation between quantities demanded (Q) and price (P).
- So, at point A, the quantity demanded will be Q1 and the price will be P1, and so on.
- The demand relationship curve illustrates the negative relationship between price and quantity demanded.
- The higher the price of a goods the lower the quantity demanded (A), and the lower the price, the more the goods will be in demand (C).

The Law of Supply

- Like the law of demand, the law of supply demonstrates the quantities that will be sold at a certain price.
- But unlike the law of demand, the supply relationship shows an upward slope.
- Producers supply more at a higher price because selling more quantity at higher price increases revenue.
- A, B and C are points on the supply curve.
- Each point on the curve reflects a direct correlation between quantities supplied (Q) and price (P).
- At point B, the quantity supplied will be Q2 and the price will be P2, and so on.



Time and Supply

- Unlike the demand relationship, however, the supply relationship is a factor of time.
- Time is important to supply because suppliers must, but cannot always, react quickly to a change in demand or price.
- So it is important to try and determine whether a price change that is caused by demand will be temporary or permanent.
- Let's say there's a sudden increase in the demand and price for umbrellas in an unexpected rainy season.
- Suppliers may simply accommodate demand by using their production equipment more intensively.
- If, however, there is a climate change, and the population will need umbrellas year-round, the change in demand and price will be expected to be long term.
- Suppliers will have to change their equipment and production facilities in order to meet the long-term levels of demand.

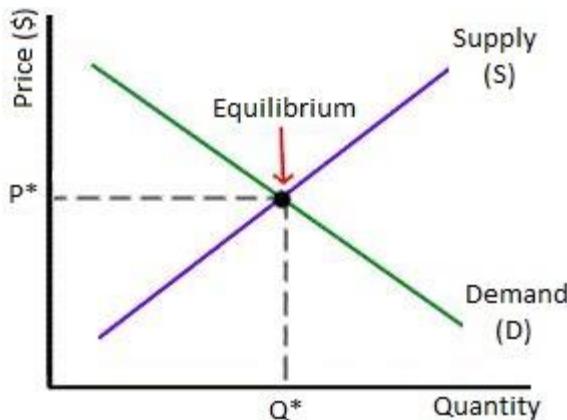
Supply and Demand Relationship

- Now that we know the laws of supply and demand, let's turn to an example to show how supply and demand affect price.
- Imagine that a special edition CD of your favorite band is released for \$20.
- Because the record company's previous analysis showed that consumers will not demand CDs at a price higher than \$20.
- Only ten CDs were released because the opportunity cost is too high for suppliers to produce more.
- However, the ten CDs are demanded by 20 people, the price will subsequently rise because, according to the demand relationship, as demand increases, so does the price.
- Consequently, the rise in price should prompt more CDs to be supplied as the supply relationship shows that the higher the price, the higher the quantity supplied.
- If, however, there are 30 CDs produced and demand is still at 20, the price will not be pushed up because the supply more than accommodates demand.
- In fact after the 20 consumers have been satisfied with their CD purchases, the price of the leftover CDs may drop as CD producers attempt to sell the remaining ten CDs.
- The lower price will then make the CD more available to people who had previously decided that the opportunity cost of buying the CD at \$20 was too high.

Equilibrium

- When supply and demand are equal (i.e. when the supply function and demand function intersect) the economy is said to be at equilibrium.

- At this point amount of goods being supplied is exactly the same as the amount of goods being demanded.
- Thus, everyone (individuals, firms, or countries) is satisfied with the current economic condition.
- At the given price, suppliers are selling all the goods that they have produced and consumers are getting all the goods that they are demanding.



- As you can see on the chart, equilibrium occurs at the intersection of the demand and supply curve.
- At this point, the price of the goods will be P^* and the quantity will be Q^* .
- These figures are referred to as equilibrium price and quantity.
- In the real market equilibrium can only ever be reached in theory.
- So the prices of goods and services are constantly changing in relation to changes in demand and supply.

Elasticity of Demand

- Demand elasticity** is a measure of how much the quantity demanded will change if another factor changes.
- Demand elasticity is important because it helps firms model the potential change in demand due to:
 - Changes in price of the goods.
 - The effect of changes in prices of other goods.
 - And many other important market factors.
- A firm grasp of demand elasticity helps to guide firms toward more optimal competitive behavior.
- Elasticity greater than one is called **elastic**.
- Elasticity less than one is called **inelastic**.
- Elasticity equal to one is **unit elastic**.
- This is important for setting prices so as to maximize profit.

Price Elasticity

- A measure of the relationship between changes in the quantity demanded of a particular goods and a change in its price.

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

- If the price elasticity of demand is equal to 0, demand is perfectly inelastic (i.e., demand does not change when price changes).
- Values between zero and one indicate that demand is inelastic (this occurs when the percent change in demand is less than the percent change in price).
- When price elasticity of demand equals one, demand is unit elastic (the percent change in demand is equal to the percent change in price).

- Finally, if the value is greater than one, demand is perfectly elastic (demand is affected to a greater degree by changes in price).
- For example, if the quantity demanded for a goods increases 15% in response to a 10% decrease in price, the price elasticity of demand would be $15\% / 10\% = 1.5$.
- The degree to which the quantity demanded for a goods change in response to a change in price can be influenced by a number of factors.
 1. Number of close substitutes.
 2. Type of goods whether it is a necessity or luxury (necessities tend to have inelastic demand while luxuries are more elastic).
- Businesses evaluate price elasticity of demand for various products to help predict the impact of a pricing on product sales.

Income Elasticity

- **Income elasticity** of demand is an economics term that refers to the sensitivity of the quantity demanded for a certain product in response to a change in consumer incomes.

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

- For example, if the quantity demanded for a goods increases for 15% in response to a 10% increase in income, the income elasticity of demand would be $15\% / 10\% = 1.5$.
- The quantity demanded for normal necessities will increase with income, but at a slower rate than luxury goods.
- This is because consumers, rather than buying more of the necessities, will likely use their increased income to purchase more luxury goods and services.
- The quantity demanded for luxury goods is very sensitive to changes in income.
- Low-grade goods have a negative income elasticity of demand - the quantity demanded for inferior goods falls as incomes rise.

Cross Elasticity / Cross-Price Elasticity

- **Cross elasticity** of demand captures the responsiveness of the quantity demanded of one goods to a change in price of other goods.

$$\text{Cross Elasticity } (E_{A,B}) = \frac{\% \text{Change in Quantity Demanded for good A}}{\% \text{Change in Price of good B}}$$

- The cross-price elasticity may be a positive or negative value, depending on whether the goods are complements or substitutes.
- If two products are complements, an increase in demand for one is accompanied by an increase in the quantity demanded of the other.
- For example, an increase in demand for cars will lead to an increase in demand for fuel.
- The value of the cross-price elasticity for complementary goods will thus be negative.
- A positive cross-price elasticity value indicates that the two goods are substitutes.
- For substitute goods, as the price of one goods rises, the demand for the substitute goods increases.
- For example, if the price of coffee increases, consumers may purchase less coffee and more tea.
- Conversely, the demand for a substitute goods falls when the price of another goods is decreased.
- In the case of perfect substitutes, the cross elasticity of demand will be equal to positive infinity.

Promotional Elasticity of Demand

- Now a day promotion is become important factor in the market. As customer came to know about product by promotional activity.
- Promotion by means of media or by giving some gifts consumers will attract towards that product or service and it will affect the demand.

$$\text{Promotional Elasticity of Demand} = \frac{\% \text{ change in sales volume}}{\% \text{ change in promotional expenses}}$$

- Promotional Elasticity of Demand is:
 - Higher when product is luxury for example air condition.
 - Medium when product is of comfort for example air cooler.
 - Lower when product is of necessity for example fen.
- Promotional Elasticity of Demand is more affected when market is of competition.

Theory of production

- Production theory is the economic process of producing outputs from the inputs.
- Production uses resources to create a good or service that are suitable for use or exchange in a market economy.
- This can include manufacturing, storing, shipping, and packaging.
- There are three aspects to production processes:
 1. The quantity of the good or service produced.
 2. The form of the good or service created.
 3. The distribution of the good or service produced.
- **Adam Smith:** Production is a creation of physical assets.
- **Alfred Marshal:** Production is a creation of utilities.
- **Philip Kotler:** Production is a creation of bundle of satisfaction.

Utility

- "**Utility**" is an economic term introduced by Daniel Bernoulli referring to the total satisfaction received from consuming a good or service.
- The economic utility of a good or service is important to understand because it will directly influence the demand, and therefore price, of that good or service.
- A consumer's utility is hard to measure, however it can be determined indirectly with consumer behavior theories. It assumes that consumers will strive to maximize their utility.
- Following types of utilities are generated by the business activities:
 1. **Form utility** through production process which transforms the form of raw materials into marketable goods and services e.g. log of wood converted into a chair.
 2. **Place utility** through transport services. An agro products of rural areas fetch higher price in urban areas e.g. cereals, pulses, fruits, vegetables, flowers etc.
 3. **Time utility** through storing services. A production in a peak season with low price is stored and marketed in slack season at higher price.
 4. **Possession utility** through direct marketing or marketing through agents which transfer ownership in a product through buying and selling deals.

Measurement of Utility: Cardinal Utility and Ordinal Utility

- The measurement of utility has always been a controversial issue whether it is cardinal or ordinal.

Cardinal Utility Concept

- Neo-classical economists, such as Alfred Marshall, Leon Walrus, and Carl Menger believed that utility is cardinal or quantitative like other mathematical variables. Such as height, weight, velocity, air pressure, and temperature.
- Therefore, these economists developed cardinal utility concept to measure the utility derived from a good.
- They developed a unit of measuring utility, which is known as **utils**.
- For example, according to the cardinal utility concept, an individual gains 20 utils from ice-cream and 10 utils from coffee.
- Assumptions of the cardinal utility:
 - a) One util equals one unit of money
 - b) Utility of money remains constant

- However, over a passage of time, it has been felt by economists that the exact or absolute measurement of utility is not possible.
- There are a number of difficulties involved in the measurement of utility.
- This is because of the fact that the utility derived by a consumer from a good depends on various factors, such as changes in consumer's moods, tastes, and preferences.
- These factors are not possible to determine and measure.
- Therefore, no such technique has been devised by economists to measure utility.
- Utility; thus, is not measurable in cardinal terms.
- However, the cardinal utility concept has a prime importance in consumer behavior analysis.

Ordinal Utility Concept

- Modern economists, such as J.R. Hicks, gave the concept of ordinal utility of measuring utility.
- According to this concept, utility cannot be measured numerically, it can only be ranked as 1, 2, 3, and so on.
- For instance, an individual prefers ice-cream than coffee, which implies that utility of ice-cream is given rank 1 and coffee as rank 2.
- Modern economists believed that utility is related to psychological aspect of consumers; therefore, it cannot be measured in quantitative terms.
- Modern economists also believed that the concept of ordinal utility meets the theoretical requirements of consumer behavior analysis even when there is no cardinal measure of utility is available.

Production Function

- In economics, a production function relates physical output of a production process to physical inputs or factors of production.
- It is a mathematical function that relates the maximum amount of output that can be obtained from a given number of inputs - generally capital and labor.
- Firms use the production function to determine how much output they should produce, and what combination of inputs they should use to produce.
- Increasing marginal costs can be identified using the production function.
- If a firm has a production function $Q=F(K,L)$ (that is, the quantity of output (Q) is some function of capital (K) and labor (L)).
- Then if $2Q < F(2K,2L)$, the production function has increasing marginal costs and diminishing returns to scale.
- Similarly, if $2Q > F(2K,2L)$, there are increasing returns to scale.
- If $2Q = F(2K,2L)$, there are constant returns to scale.

Examples of Common Production Functions

1. One very simple example of a production function might be $Q=K+L$.

Where Q is the quantity of output, K is the amount of capital, and L is the amount of labor used in production.

This production function says that a firm can produce one unit of output for every unit of capital or labor it employs.

From this production function we can see that this industry has constant returns to scale - that is, the amount of output will increase proportionally to any increase in the amount of inputs.

2. Another common production function is the Cobb-Douglas production function.

One example of this type of function is $Q=K^{0.5}L^{0.5}$.

This describes a firm that requires the least total number of inputs when the combination of inputs is relatively equal.

For example, the firm could produce 25 units of output by using 25 units of capital and 25 of labor, or it could produce the same 25 units of output with 125 units of labor and only one unit of capital.

3. Finally, the Leontief production function applies to situations in which inputs must be used in fixed proportions.

Starting from those proportions, if usage of one input is increased without another being increased, output will not change.

This production function is given by **$Q = \min(K, L)$** .

For example, a firm with five employees will produce five units of output as long as it has at least five units of capital.

Factors of Production

- Economic resources are the goods or services available to individuals and businesses used to produce valuable consumer products.
- The classic economic resources include land, labor and capital.
- Entrepreneurship is also considered an economic resource, as individuals are responsible for creating businesses and moving economic resources in the business environment.
- These economic resources are also called the factors of production.
- The factors of production describe the function that each resource performs in the business environment.

Land

- Land is the economic resource encompassing natural resources found within the economy.
- This resource includes timber, land, fisheries, farms and other similar natural resources.
- Land is usually a limited resource for many economies.
- Although some natural resources, such as timber, food and animals, are renewable, the physical land is usually a fixed resource.
- Nations must carefully use their land resource by creating a mix of natural and industrial uses.
- Using land for industrial purposes allows nations to improve the production processes for turning natural resources into consumer goods.

Labor

- Labor represents the human capital available to transform raw or natural resources into consumer goods.
- Human capital includes all individuals capable of working in the economy and providing various services to other individuals or businesses.
- This factor of production is a flexible resource as workers can be allocated to different areas of the economy for producing consumer goods or services.
- Human capital can also be improved through training or educating workers to complete technical functions or business tasks when working with other economic resources.

Capital

- Capital has two economic definitions as a factor of production.
- Capital can represent the monetary resources companies use to purchase natural resources, land and other capital goods.

- Monetary resources flows through an economy as individuals buy and sell resources to individuals and businesses.
- Capital also represents the major physical assets individuals and companies use when producing goods or services.
- These assets include buildings, production facilities, equipment, vehicles and other similar items.
- Individuals may create their own capital production resources, purchase them from another individual or business or lease them for a specific amount of time from individuals or other businesses.

Entrepreneur

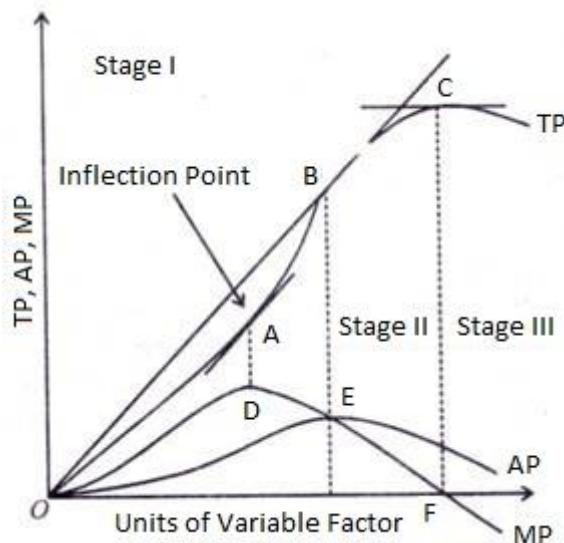
- Entrepreneurship is considered a factor of production because economic resources can exist in an economy and not be transformed into consumer goods.
- Entrepreneurs usually have an idea for creating a valuable good or service and assume the risk involved with transforming economic resources into consumer products.
- Entrepreneurship is also considered a factor of production since someone must complete the managerial functions. Like (1) gathering, (2) allocating and (3) distributing economic resources or consumer products to individuals and other businesses in the economy.

Assumptions of The law of variable proportions

1. Only one factor is variable while others are held constant.
2. All units of the variable factor are homogeneous.
3. There is no change in technology.
4. It is possible to vary the proportions in which different inputs are combined.
5. It assumes a short-run situation, for in the long-run all factors are variable.
6. The product is measured in physical units, i.e., in quintals, tones, etc. The use of money in measuring the product may show increasing rather than decreasing returns if the price of the product rises, even though the output might have declined.

The law of variable proportions

- The law states that as the quantity of a variable input is increased by equal doses keeping the quantities of other inputs constant, total product will increase, but after a point at a diminishing rate.
- If the number of units of a variable factor is increased, keeping other factors constant, how output changes is the concern of this law.
- Suppose land, plant and equipment are the fixed factors, and labour is variable factor.
- When the number of labors is increased successively to have larger output, the proportion between fixed and variable factors is altered and the law of variable proportions sets in.
- The law of variable proportions (or the law of non-proportional returns) is also known as the law of diminishing returns.
- But, as we shall see below, the law of diminishing returns is only one phase of the more comprehensive law of variable proportions.
- The law of variable proportions is presented diagrammatically in Figure below The Total Product (TP) curve first rises at an increasing rate up to point A where its slope is the highest.
- From point A upwards, the total product increases at a diminishing rate till it reaches its highest point C and then it starts falling.



- Point A where the tangent touches the TP curve is called the **inflection point** up to which the total product increases at an increasing rate and from where it starts increasing at a diminishing rate.
- The marginal product curve (MP) and the average product curve (AP) also rise with TP.
- The MP curve reaches its maximum point D when the slope of the TP curve is the maximum at point A.
- The maximum point on the AP curves is E where it coincides with the MP curve.
- This point also coincides with point B on TP curve from where the total product starts a gradual rise.
- When the TP curve reaches its maximum point C the MP curve becomes zero at point F.
- When TP starts declining, the MP curve becomes negative.
- It is only when the total product is zero that the average product also becomes zero.
- The rising, the falling and the negative phases of the total, marginal and average products are in fact the different stages of the law of variable proportions which are discussed later.

Example

No. of Workers	Total Product	Average Product	Marginal Product	
1	8	8	8	Stage I
2	20	10	12	
3	36	12	16	
4	48	12	12	
5	55	11	7	Stage II
6	60	10	5	
7	60	8.6	0	
8	56	7	-4	Stage III

- Given these assumptions, let us illustrate the law with the help of Above Table, where on the fixed input land of 4 acres, units of the variable input labor are employed and the resultant output is obtained.
- The production function is revealed in the first two columns. The average product and marginal product columns are derived from the total product column.

- *Average Product = $\frac{\text{Total Product}}{\text{No.of Workers}}$*
- Marginal Product is change in total production when we increase one worker.
- For example in table 3 worker produce 36 units and 4 worker produce 48 unit then marginal product is $(48 - 36) = 12$.
- An analysis of the Table shows that the total, average and marginal products increase at first, reach a maximum and then start declining.
- The total product reaches its maximum when 7 units of labor are used and then it declines.
- The average product continues to rise till the 4th unit while the marginal product reaches its maximum at the 3rd unit of labor, then they also fall.
- It should be noted that the point of falling output is not the same for total, average and marginal product.
- The marginal product starts declining first, the average product following it and the total product is the last to fall.
- This observation points out that the tendency to diminishing returns is ultimately found in the three productivity concepts.

Three Stages of Production

Stage-I: Increasing Returns

- This stage is shown in the figure from the origin to point E where the MP curve reaches its maximum and the AP curve is still rising.
- In this stage, the TP curve also increases rapidly.
- Thus this stage relates to increasing returns.
- It becomes cheaper to produce the additional output. Consequently, it would be foolish to stop producing more in this stage.
- Thus the producer will always expand through this stage I.

Causes of Increasing Returns

1. When more units of the variable factor are applied to a fixed factor, the fixed factor is used more intensively and production increases rapidly.
2. When units of the variable factor are applied in sufficient quantities, division of labor and specialization lead to per unit increase in production and the law of increasing returns operate.
3. The fixed factors are indivisible which means that they must be used in a fixed minimum size. When more units of the variable factor are applied on such a fixed factor, production increases more than proportionately.

Stage-II: Diminishing Returns

- It is the most important stage of production. Stage II starts from point E where the MP curve intersects the AP curve which is at the maximum.
- Then both continue to decline with AP above MP and the TP curve begins to increase at a decreasing rate till it reaches point C.
- In figure, it lies between BE and CF. Here land is scarce and is used intensively.
- In this stage the total product increases at a diminishing rate and the average and marginal product decline.
- This is the only stage in which production is feasible and profitable because in this stage the marginal productivity of labor, though positive, is diminishing but is non-negative.

- Hence it is not correct to say that the law of variable proportions is another name for the law of diminishing returns.
- In fact, the law of diminishing returns is only one phase of the law of variable proportions.
- The law of diminishing returns in this sense has been defined by Prof. Benham:
"As the proportion of one factor in a combination of factors is increased, after a point, the average and marginal product of that factor will diminish."

Causes of Diminishing Returns

1. The distortion in the combination of factors may be either due to the increase in the proportion of one factor in relation to others or due to the scarcity of one in relation to other factors.
2. For instance, if plant is expanded by installing more machines, it may become unwieldy. Industrial control and supervision become difficult, and diminishing returns set in.
3. There may be shortage of trained labor or raw material that leads to decrease in output.

Stage-III: Negative Marginal Returns

- Production cannot take place in stage III either. For in this stage, total product starts declining and the marginal product becomes negative.
- In the figure, this stage starts from the dotted line CF where the MP curve is below the X-axis.

The Best Stage

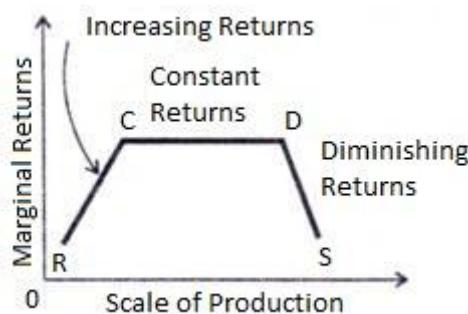
- In stage I, when production takes place to the left of point E, the fixed factor is excess in relation to the variable factors which cannot be used optimally.
- To the right of point F, the variable input is used excessively in Stage III. Therefore, no producer will produce in this stage because the marginal production is negative.
- Thus the first and third stages are economically not feasible.
- So production will always take place in the second stage in which total output of the firm increases at a diminishing rate and MP and AP are the maximum, then they start decreasing and production is optimum.

Assumptions of the Law of Returns to Scale

1. All factors (inputs) are variable but enterprise is fixed.
2. A worker works with given tools and implements.
3. Technological changes are absent.
4. There is perfect competition.
5. The product is measured in quantities.

The Law of Returns to Scale

- The law of returns to scale describes the relationship between outputs and scale of inputs in the long-run when all the inputs are increased in the same proportion.
- In the words of **Prof. Roger Miller**, "Returns to scale refer to the relationship between changes in output and proportionate changes in all factors of production."
- To meet a long-run change in demand, the firm increases its scale of production by using more space, more machines and labors in the factory'.



- As shown in figure it can be divided in three stages when we increase scale of production.
 - Increasing Returns
 - Constant Returns
 - Diminishing Returns

Example

Given these assumptions, when all inputs are increased in unchanged proportions and the scale of production is expanded, the effect on output shows three stages: increasing returns to scale, constant returns to scale and diminishing returns to scale. They are explained with the help of Table and Figure below.

Unit	Scale of production	Total Returns	Marginal Returns	
1	1 worker+2 acres Land	8	8	Increasing Returns
2	2 worker+4 acres Land	17	9	
3	3 worker+6 acres Land	27	10	
4	4 worker+8 acres Land	38	11	Constant Returns
5	5 worker+10 acres Land	49	11	
6	6 worker+12 acres Land	59	10	
7	7 worker+14 acres Land	68	9	Diminishing Returns
8	8 worker+16 acres Land	76	8	

Increasing Returns to Scale

- Returns to scale increase, because the increase in total output is more than proportional to the increase in all inputs.
- It shows increasing returns to scale. In the figure RS is the returns to scale curve where R to C portion indicates increasing returns.

Causes of Increasing Returns to Scale

- Indivisibility of Factors:**
 - Some factors cannot be available in very small sizes. They are available only in certain minimum sizes. For example machines, management, labor, and finance etc.
 - When a business unit expands, the returns to scale increase because the indivisible factors are employed to their maximum capacity.
- Specialization and Division of Labor:**

- When the scale of the firm is expanded work can be divided into small tasks and workers can be concentrated to narrower range of processes.
- For this, specialized equipment can be installed. Thus with specialization, efficiency increases and increasing returns to scale follow.

3. Internal Economies:

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

4. External Economies:

- When the industry itself expands to meet the increased long-run demand for its product, external economies appear which are shared by all the firms in the industry.
- When a large number of firms are concentrated at one place, skilled labor, credit and transport facilities are easily available.
- Subsidiary industries crop up to help the main industry.
- Trade journals, research and training centers appear which help in increasing the productive efficiency of the firms.

Constant Returns to Scale

- Returns to scale become constant as the increase in total output is in exact proportion to the increase in inputs.
- If the scale of production is increased further, total returns will increase in such a way that the marginal returns become constant.
- In the figure, the portion from C to D of the RS curve is horizontal which depicts constant returns to scale.

Causes of Constant Returns to Scale

1. Internal Economies and Diseconomies:

- As the firm expands further, internal economies are counterbalanced by internal diseconomies.

2. External Economies and Diseconomies:

- The returns to scale are constant when external diseconomies and economies are neutralized and output increases in the same proportion.

3. Divisible Factors:

- When factors of production are perfectly divisible, substitutable, and homogeneous with perfectly elastic supplies at given prices, returns to scale are constant.

Diminishing Returns to Scale

- Returns to scale diminish because the increase in output is less than proportional to the increase in inputs.
- In the figure, the portion from D to S of the RS curve shows diminishing returns.

Causes of Diminishing Returns to Scale

1. Indivisible factors may become inefficient and less productive.
2. Business may become unwieldy and produce problems of supervision and coordination.
3. Large management creates difficulties of control and rigidities.
4. These arise from higher factor prices or from diminishing productivities of the factors.
5. As the industry continues to expand, the demand for skilled labor, land, capital, etc. rises. And due to this raises salary, rent, and interest etc.

6. Prices of raw materials also go up. Transport and marketing difficulties emerge. All these factors tend to raise costs.

Cost

- An amount that has to be paid or given up in order to get something. In business, cost is usually a monetary valuation of (1) effort, (2) material, (3) resources, (4) time and utilities consumed, (5) risks incurred, and (6) opportunity forgone in production and delivery of a good or service.

Classification of Cost on the Basis of Service Tenure

- They are divided into two part short run and long run costs.
- In economics, "short run" and "long run" are not broadly defined as a rest of time. Rather, they are unique to each firm.

Long Run Costs

- Long run costs are accumulated when firms change production levels over time in response to expected economic profits or losses.
- In the long run there are no fixed factors of production.
- The land, labor, capital goods, and entrepreneurship all vary to reach the long run cost of producing a good or service.
- The long run is a planning and implementation stage for producers.
- They analyze the current and projected state of the market in order to make production decisions.
- Efficient long run costs are continued when the combination of outputs that a firm produces results in the desired quantity of the goods at the lowest possible cost.
- Examples of long run decisions that impact a firm's costs include changing the quantity of production, decreasing or expanding a company, and entering or leaving a market.

Short Run Costs

- Short run costs are accumulated in real time throughout the production process.
- Fixed costs have no impact of short run costs, only variable costs and revenues affect the short run production.
- Variable costs change with the output. Examples of variable costs include employee salary and costs of raw materials.
- The short run costs increase or decrease based on variable cost as well as the rate of production.
- If a firm manages its short run costs well over time, it will be more likely to succeed in reaching the desired long run costs and goals.

Comparison between Short Run and Long Run Cost

- The main difference between long run and short run costs is that in production there are no fixed factors in the long run; there are both fixed and variable factors in the short run.
- In the long run the general price level, contractual remuneration, and expectations adjust fully to the state of the economy.
- In the short run these variables do not always adjust due to the condensed time period.
- In order to be successful a firm must set realistic long run cost expectations. How the short run costs are handled determines whether the firm will meet its future production and financial goals.

Classification of Cost on the Basis of Cost Behaviour to Production Volume

Fixed Cost/ indirect costs / overheads

- In economics, fixed costs are business expenses that are not dependent on the level of goods or services produced by the business.
- They tend to be time-related, such as salaries or rents being paid per month, and are often referred to as overhead costs.
- Fixed costs are not permanently fixed; they will change over time, but are fixed in relation to the quantity of production for the relevant period.
- **Total Fixed Cost:** Total cost for all fixed inputs of the firm per time is called total fixed cost.
- For example firm taking land on lease Rs. 1 lack per month and borrowed money on interest Rs. 20000 per month. So total fixed cost per month is Rs. 120000 per month.

Variable Cost

- Variable costs are costs that change in proportion to the good or service that a business produces.
- They can also be considered normal costs. Fixed costs and variable costs make up the two components of total cost.
- For example Assume a business produces clothing. A variable cost of this product would be the direct material, i.e., cloth, and the direct labor.
- If it takes one laborer 10 ft. of cloth and 5 hours to make a garment, then the cost of labor and cloth increases if two garments are produced.

	1 Garment	2 Garment	3 Garment
Cloth (Direct Materials)	10 ft.	20 ft.	30 ft.
Labor (Direct Labor)	5 hrs	10 hrs	15 hrs

- The amount of materials and labor that goes into each garment increases in direct proportion to the number of garments produced. In this sense, the cost "varies" as production varies.
- **Total Variable Cost:** Total variable cost is calculated by adding variable cost of all variable inputs. It varies with output.
- For example if material required for construction of one building is double if we construct two building.

Classification of Cost on the Basis of Changes in Total Costs in Relation to Certain Specified Volume

Total Cost

- Total cost is sum of total fixed cost and total variable cost.

$$TotalCost(TC) = TotalFixedCost(TFC) + TotalVariableCost (TVC)$$
- Note that change in total cost is influenced by the change in variable cost only.

Average Cost

- The average cost is the average obtained by dividing the total cost of producing a given volume of a product by the volume of production of that product. This is the average cost of a product per unit.

$$Average\ Cost\ (AC) = Total\ Cost\ (TC)/Total\ Volume\ Produced\ (TVP)$$
- For example if a company requires Rs. 100000 for producing 10 machines than the average cost is Rs. 10000.

Marginal Cost

- The benefit of mass production can be seen in marginal cost.
- If V_1 volume of product is manufactured in X_1 cost and it requires X_2 cost for producing $V_1 + 1$ volume then the marginal cost of production is $X_2 - X_1$ with reference to production volume V_1 .
- For example if 1000 toy is manufactured in Rs. 50000 and 1001 toy requires Rs. 50030 then the marginal cost is 30.

Some Other Important Costs

Opportunity Cost

- In real practice if alternative (X) is selected from a set of competing alternatives (X, Y), then the corresponding investment in the selected alternative is not available for any other purpose.
- If the same money is invested in some other alternative (Y) it may fetch some return.
- Since the money is invested in the selected alternative (X), one has to forget the return from the other alternatives (Y).
- The amount that is forgotten by not investing in the other alternative (Y) is known as the opportunity cost of the selected alternative (X).
- For example if you have Rs. 50000 to invest and have two option share market and real estate. And you selected share market and got Rs. 4000 return in one year. And same time if you invest it in real estate then it will give Rs. 5000 return then you have to forget Rs. 1000 due to not selecting real estate. This 1000 is called Opportunity Cost.

Implicit Cost

- The implicit cost is to be understood with reference to the explicit cost.
- The explicit cost is certain and fixed like 10% interest on bonds indicates 10% explicit cost.
- If the bonds are issued today at Rs. 92 which are repayable after 1 year with its face value or par value of Rs. 100 then Rs. 8 will become the implicit cost.
- The implicit cost in percentage will be 11.5% i.e. $\frac{100 - 92}{92} \times 100 = 8.7\%$

Sunk Cost

- Sunk costs are such cash outflows incurred currently which cannot be reversed at later stage.
- Examples are the government stamps duty or registration fee or consultancy fee or project report fee etc.
- After incurring such expenses, if business is not started then such fees cannot be recovered.

Assumptions of Break-Even Analysis

1. All costs can be separated into fixed and variable components.
2. Fixed costs will remain constant at all volumes of output.
3. Variable costs will fluctuate in direct proportion to volume of output.
4. Selling price will remain constant.
5. Product-mix will remain unchanged.
6. The number of units of sales will coincide with the units produced so that there is no opening or closing stock.
7. Productivity per worker will remain unchanged.
8. There will be no change in the general price level.

Break-Even Analysis

- The main objective of break-even analysis is to find the cut-off production volume from where a firm will make profit. Let

 $s = \text{selling price per unit}$

 $v = \text{variable cost per unit}$

 $FC = \text{fixed cost per period}$

 $Q = \text{volume of production}$
- Total sales revenue (S) of the firm is given by the following formula:
 $S = s * Q$
- Total cost (TC) of the firm for a given production volume is given by:
 $TC = \text{Total variable cost} + \text{Fixed cost}$
 $TC = v * Q + FC$
- The linear plot of above two equations is:

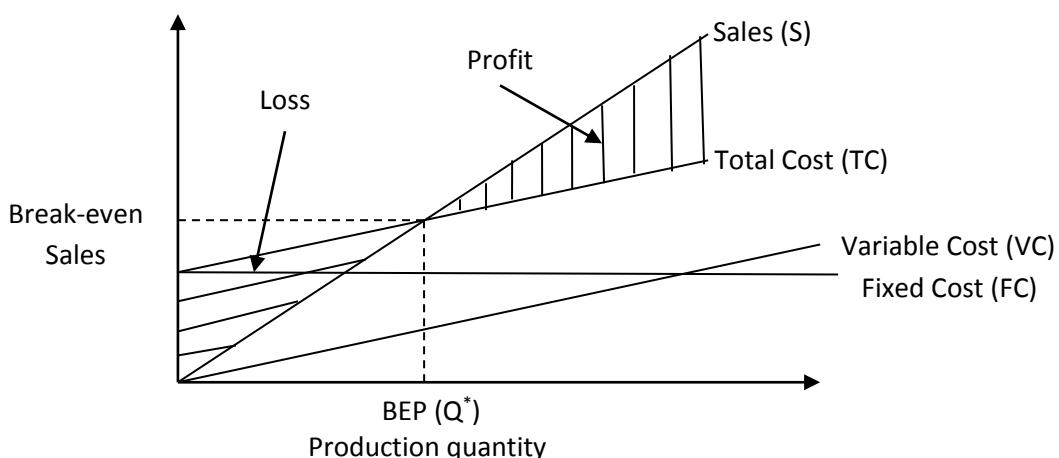


Fig.:– Break-even chart

- The intersection point of the total sales revenue line and the total cost line is called the break-even point.
- On X-axis volume of production at BEP is called break-even sales quantity and on Y-axis at BEP we get break-even sales.
- At break-even point revenue is equals to total cost and so it is also called No profits No loss situation.
- Quantity less than break-even quantity will put firm in loss as total cost is more than total revenue. Similarly quantity greater than break-even quantity will make profit.
- Profit is calculated as follows:
 $\text{Profit} = \text{Sales} - (\text{Fixed cost} + \text{Variable costs})$
 $\text{Profit} = s * Q - (FC + v * Q)$
- Break-even quantity and break-even sales can be calculated as follows:

$$\text{Break even quantity} = \frac{\text{Fixed Cost}}{\text{Selling price/unit} - \text{Variable cost/unit}}$$

$$\text{Break even quantity} = \frac{FC}{s - v} \text{ (in units)}$$

$$\text{Break even sales} = \frac{\text{Fixed Cost}}{\text{Selling price/unit} - \text{Variable cost/unit}} * \text{Selling price/unit}$$

$$\text{Break even sales} = \frac{\text{FC}}{\text{s} - \text{v}} * \text{s} \text{ (in Rs.)}$$

Limitation of Break-Even Analysis

1. Break-even analysis is based on the assumption that all costs and expenses can be clearly separated into fixed and variable components. In practice, however, it may not be possible to achieve a clear-cut division of costs into fixed and variable types.
2. It assumes that fixed costs remain constant at all levels of activity. It should be noted that fixed costs tend to vary beyond a certain level of activity.
3. It assumes that variable costs vary proportionately with the volume of output. In practice, they move, no doubt, in sympathy with volume of output, but not necessarily in direct proportions.
4. The assumption that selling price remains unchanged gives a straight revenue line which may not be true.
5. The assumption that only one product is produced or that product mix will remain unchanged is difficult to find in practice.
6. Distribution of fixed cost over a variety of products poses a problem.
7. It assumes that the business conditions may not change which is not true.
8. It assumes that production and sales quantities are equal and there will be no change in opening and closing stock of finished product, this is not true in practice.
9. The break-even analysis does not take into consideration the amount of capital employed in the business. In fact, capital employed is an important determinant of the profitability of a concern.

Application of Break-Even Analysis

1. It helps in the determination of selling price which will give the desired profits.
2. It helps in the fixation of sales volume to cover a given return on capital employed.
3. It helps in forecasting costs and profit as a result of change in volume.
4. It gives suggestions for shift in sales mix.
5. It helps in making inter-firm comparison of profitability.
6. It helps in determination of costs and revenue at various levels of output.
7. It is an aid in management decision-making (e.g., make or buy, introducing a product etc.), forecasting, long-term planning and maintaining profitability.
8. It reveals business strength and profit earning capacity of a concern without much difficulty and effort.

Contribution

- The contribution is the difference between the sales and the variable cost.
 $\text{Contribution} = \text{Sales} - \text{Variable costs}$
 $\text{Contribution/unit} = \text{Selling price/unit} - \text{Variable cost/unit}$

Margin of Safety (M.S.)

- The margin of Safety (M. S.) is the sales over and above the break-even sales. It can be calculated by two methods and one can be derived from other.
- Method I:

$$M. S. = \frac{\text{Profit}}{\text{Contribution}} * \text{sales}$$
- Method II derived from method I:

$$M.S. = \frac{\text{Profit}}{\text{Contribution}} * \text{sales}$$

$$M.S. = \frac{s * Q - (FC + v * Q)}{\text{Sales} - \text{Variable costs}} * \text{sales}$$

$$M.S. = \frac{s * Q - (FC + v * Q)}{(s * Q) - (v * Q)} * (s * Q)$$

$$M.S. = \frac{(s * Q - v * Q - FC)}{(s * Q) - (v * Q)} * (s * Q)$$

$$M.S. = \frac{(s * Q - v * Q) - (FC)}{(s * Q) - (v * Q)} * (s * Q)$$

$$M.S. = (s * Q) - \frac{FC}{s - v} * s$$

M.S. = Sales – Break even sales

- Now M.S. as a percent of sales:

$$\text{M.S. as a percent of sales} = \frac{\text{M.S.}}{\text{Sales}} * 100$$

Example

Alpha Associates has the following details:

Fixed cost = Rs. 20,00,000

Variable cost per unit = Rs. 100

Selling price per unit = Rs. 200

Find

- The break-even sales quantity
- The break-even sales
- If the actual product quantity is 60,000, find (i) contribution; and (ii) margin of safety by all methods (iii) margin of safety as a percent of sales.

Solution

Fixed cost (FC) = Rs. 20,00,000

Variable cost per unit (v) = Rs. 100

Selling price per unit (s) = Rs. 200

$$(a) \text{Break even quantity} = \frac{FC}{s-v} = \frac{20,00,000}{200-100} = 20,000 \text{ units}$$

$$(b) \text{Break even sales} = \frac{FC}{s-v} * s = \frac{20,00,000}{200-100} * 200 = 40,00,000$$

$$(c) (i) \text{Contribution} = \text{Sales} - \text{Variable costs} = s * Q - v * Q = 200 * 60,000 - 100 * 60,000 \\ \text{Contribution} = 60,00,000$$

$$(c) (ii) \text{margin of safety}$$

Method I

$$M.S. = \frac{\text{Profit}}{\text{Contribution}} * \text{sales} = \frac{\text{Sales} - (FC + v * Q)}{\text{Contribution}} * \text{sales}$$

$$M.S. = \frac{60,000 * 200 - (20,00,000 + 100 * 60,000)}{60,00,000} * 1,20,00,000 = 80,00,000$$

Method II

$$M.S. = \text{Sales} - \text{Break even sales} = 60,000 * 200 - 40,00,000 = 80,00,000$$

$$\text{M.S. as a percent of sales} = \frac{\text{M.S.}}{\text{Sales}} * 100 = \frac{80,00,000}{1,20,00,000} * 100 = 67\%$$

Introduction to Market

- **Market** is a means by which the exchange of goods and services takes place as a result of buyers and sellers being in contact with one another, either directly or through intermediating agents or institutions.
- A market is a group of buyers and sellers, where buyers determine the demand and sellers determine the supply, together with the means whereby they exchange their goods or a service is called the **market**.
- For example vegetable market, or cereals market, where buyers come to buy and sellers come to sell their products.
- In modern business environment, the market is used in a wider context. The market of the products and services has not remained to a specific place.

Meaning of Market

- **Prof. R. Chapman** has beautifully defined market as under: “The term market refers not necessarily to a place but always to a commodity and the buyer and sellers who are in direct competition with one another.”
- According to **Prof. Benham**, “A market means any area over which buyers and sellers are in such close touch with one another, either directly or through dealers that the price obtainable in one part of the market on the prices paid on the other parts.”
- The world renowned marketing guru **Philip Kotler** defines market as under: “Market means a combination of actual and potential users.”

Types of Market

- The markets are broadly classified in terms of the number of consumers and the number of suppliers, their relative strengths, the degree of collusion among them, the extent of differentiation, ease of entry and exit etc.

Perfect Competition Market

- Perfect competition indicates a state of market with large number of buyers and sellers and thus the individual buyer or seller is incapable of influencing the price.
- Because of large number of buyers the quantity picked up by individual buyers is negligible and they are not in a position to dictate their terms with the sellers or suppliers.
- So also, the quantity commanded by the suppliers is negligible and thus they are incapable of dictating their terms.
- The efficient market where goods are produced using the most efficient techniques and the least amount of factors.
- This market is considered to be unrealistic but it is nevertheless of special interest for imaginary and theoretical reasons.

Characteristics of Perfect Competition Market

- **A large number buyers and sellers** – A large number of consumers with the willingness and ability to buy the product at a certain price, and a large number of producers with the willingness and ability to supply the product at a certain price.
- **No barriers of entry and exit** – No entry and exit barriers make it extremely easy to enter or exit a perfectly competitive market.

- **Perfect factor mobility** – In the long run factors of production are perfectly mobile, allowing free long term adjustments to changing market conditions.
- **Perfect information/knowledge** - All consumers and producers are assumed to have perfect knowledge of price, utility, quality, and production methods of products.
- **Zero transaction costs** - Buyers and sellers do not incur costs in making an exchange of goods in a perfectly competitive market.
- **Profit maximization** - Firms are assumed to sell where marginal costs meet marginal revenue, where the most profit is generated.
- **Homogeneous products** - The products are perfect substitutes for each other. I.e., -the qualities and characteristics of a market good or service do not vary between different suppliers.
- **Non-increasing returns to scale** - The lack of increasing returns to scale (or economies of scale) ensures that there will always be a sufficient number of firms in the industry.
- **Property rights** - Well defined property rights determine what may be sold, as well as what rights are conferred on the buyer.
- **Rational buyers** - buyers capable of making rational purchases based on information given.

Monopoly Market

- The term monopoly is a combination of two Greek terms, mono means single and poly means seller. Thus, monopoly refers to a state of market with a single seller or single supplier.
- It represents the opposite of perfect competition.
- This market is composed of a single seller who will therefore have full power to set prices. So that they are **price maker** and not **price taker**.
- As far as buyers are concerned, there is large number of buyers in a monopoly market. So buyers are in a weaker bargaining position.

Characteristics of Monopoly Market

- **Single seller:** In a monopoly, there is one seller of the good that produces all the output. Therefore, the whole market is being served by a single company, and for practical purposes, the company is the same as the industry.
- **No substitutes:** in the monopoly, no close substitute available, so buyers have to buy that product only.
- **High Barriers to entry as suppliers:** Other sellers are unable to enter the market of the monopoly.
- **Price Maker:** Decides the price of the good or product to be sold, but does so by determining the quantity in order to demand the price desired by the firm.
- **Price Discrimination:** happens when a firm charges a different price to different groups of buyers for an identical good or service. Example: 10% discount for students.
- **Generation of super normal profit:** As supplier is single he will generate more profit than normal business.

Monopolistic Competition/ Imperfect Competition Market

- The perfect competition and the monopoly are the extreme state of market structure which is unrealistic in real world.
- The monopolistic competition explains the real situation of the modern economic life of modern business world.
- This market is formed by a high number of firms which produce a similar good that can be seen as unique due to differentiation that will allow prices to be held up higher than marginal costs.

- For example medicines, cosmetics, and tooth-paste.
- In other words, each producer will be considered as a monopoly thanks to differentiation, but the whole market is considered as competitive because the degree of differentiation is not enough to undermine the possibility of substitution effects.

Characteristics of Monopolistic Competition Market

- **Large number of buyers:** There are large numbers of buyers who are demanding specific products which have close substitutes. They also switch over to other close substitutes in case of unfavorable market developments.
- **Large number of suppliers:** there are large numbers of supplier but less than the perfect competition.
- **Product differentiation:** The concept of the homogeneous products of perfect competition is changed to close substitutes with product differentiation and resultant market segmentation tactics of marketing are restored to by competing firms.
- **Less entry and exit barrier:** There are few barriers to entry and exit.
- **Huge advertisement budget:** in monopolistic competition advertisement is need much more otherwise close substitute will replace market.
- **Price sensitivity:** It is highly elastic. So slight change in price will divert the consumer.
- **Concept of group or chain:** Under the monopolistic competition, a mild course of unification is resorted through group companies or chain shops, franchises etc.

Oligopoly Market

- In oligopoly market structure the total market demand is shared among few giant players. For example two wheeler markets there are Hero, Honda, Bajaj, Mahindra etc.
- If there are only two players, it is a special case of oligopoly which termed as **Duopoly**.
- In the oligopoly each seller enjoys a defined market share in the total demand.
- Where the power of only one player enjoying huge market share, is termed as market leader.

Characteristics of Oligopoly Market

- **Number of firms:** "Few" – a "handful" of sellers. There are so few firms that the actions of one firm can influence the actions of the other firms.
- **Interdependence:** The distinctive feature of an oligopoly is interdependence. Oligopolies are typically composed of a few large firms. Each firm is so large that its actions affect market conditions. Therefore the competing firms will be aware of a firm's market actions and will respond appropriately. This means that in contemplating a market action, a firm must take into consideration the possible reactions of all competing firms and the firm's countermoves.
- **Profit maximization conditions:** An oligopoly maximizes profits.
- **Ability to set price:** Oligopolies are price setters rather than price takers.
- **Entry and exit:** Barriers to entry are high. The most important barriers are government licenses, economies of scale, patents, access to expensive and complex technology, and strategic actions by current firms designed to discourage or destroy emerging firms. Additional sources of barriers to entry often result from government regulation favoring existing firms making it difficult for new firms to enter the market.
- **Long run profits:** Oligopolies can retain long run abnormal profits. High barriers of entry prevent sideline firms from entering market to capture excess profits.
- **Product differentiation:** Product may be homogeneous (steel) or differentiated (automobiles).

- **Perfect knowledge:** Assumptions about perfect knowledge vary but the knowledge of various economic factors can be generally described as selective. Oligopolies have perfect knowledge of their own cost and demand functions but their inter-firm information may be incomplete. Buyers have only imperfect knowledge as to price, cost and product quality.
- **Non-Price Competition:** Oligopolies tend to compete on terms other than price. Loyalty schemes, advertisement, and product differentiation are all examples of non-price competition.

National Income (NI)

Some important definition of national income given by different thinkers is as follows:

- **Alfred Marshall:** The labour and capital of country acting on its national resources produce annually a certain net aggregate of commodities, material and immaterial including services of all kind. This is the true national income or revenue of the country.
- **A. C. Pigou:** The national dividend is that part of the objective income of the public, including income received from abroad, which can be measured in money.
- **C. Rangarajan & Bakul Dholakia:** National income is the aggregate income value of the annual flow of final goods and services in the national economy.

The above definitions make it clear that national income is the monetary measure of –

- The net value of all products and services.
- In an economy during a year.
- Counted without duplication.
- After allowing for depression.
- Both in the public and private sector of products and services.
- In consumption and capital goods sector.
- The net gains from international transactions.

Stock and Flow Concept of NI

- There are two basic kinds of quantities.
- A **flow** is any quantity that must be measured over a period of time.
- Income is a flow.
- A **stock** is any quantity that is measured at a single instant in time.
- At any point of time the abstract liabilities are always equated with stock of liquid assets (cash) or illiquid assets (land, buildings, machines, and materials etc.).
- The amount of orange juice I drink in a month is a flow.
- The amount of orange juice I have right now in my refrigerator is a stock.
- The amount of water that passes over Niagara Falls in an hour is a flow.
- The amount of water in all the world's oceans is a stock.
- Income is a flow, whether for an individual, or with all the individuals added up to get national income.
- Everything that is done with income is also a flow: paying taxes, saving, consuming.
- The entire framework that we are putting together is a system of flows.

Relationship between stock of wealth and flow of income

1. The stock concept represents the holding of wealth at a particular point of time which is useable for the generation of the flow of income.

2. The stock of wealth is always presented at a particular point of time.
3. The change in the stock of wealth during the holding period occurs due to following reasons:
 - o Generation of flow income will add up as stock of wealth for the next period of time.
 - o Depreciation on fixed assets will reduce value of stock of wealth
4. It should be noted that period-end increase in the stock of wealth arise from the following two sources:
 - o Periodic recurring operating income.
 - o One time capital gains between two points of time. Example: price of land is increase by two lacs.

NI at Current Price

- In this method NI is calculated by using current market price for measurement of factor cost.
- As it is consider current market price it is inclusion of fluctuation due to inflation.
- It is also describe as monetary income.
- It does not give true picture of economic growth of a country.
- In India national income data compilation is done by Central Statistical Organization (CSO).
- Year to year growth rate is calculated as follows:

$$\text{Growth Rate at current price (in \%)} = \frac{\text{Monetary value at the end of year}}{\text{Monetary value at the beginning of year}} \times 100$$

- Growth rate at current price for year 2015-2016 is 8.6%.
- Causes of the changes in the NI at current price are:
 1. Due to inflation.
 2. Due to real change in the final value of goods and services.

NI at Constant Price

- In this method NI is calculated by using some base year's market price for measurement of factor cost.
- As it is consider base year's market price it is not affected due to inflation.
- Base year is some past year selected by experts. In India current base year is 2011-2012. And before this 2004-2005 was considered as base year.
- It is also describe as real income.
- It gives true picture of economic growth of a country.
- In India national income data compilation is done by Central Statistical Organization (CSO).
- Growth rate in relation to base year is calculated as follows:

$$\text{Growth Rate at constant price (in \%)} = \frac{\text{Monetary value at the end of year}}{\text{Monetary value at the base year}} \times 100$$

- Growth rate at constant price for year 2015-2016 is 7.6%.
- Causes of the changes in the NI at current price are only Due to real change in the final value of goods and services.

Gross National Product (G.N.P)

- **Gross national product (GNP)** is a broad measure of a nation's total economic activity. GNP is the value of all finished goods and services produced in a country in one year by its nationals.

Calculation of GNP

- GNP includes income earned by citizens and companies abroad, but does not include income earned by foreigners within the country.

- The figures used to assess GNP include the manufacturing of tangible goods (cars, furniture and agricultural products) and the provision of services (education, healthcare, and business services).
- GNP does not include the services used to produce manufactured goods because their value is included in the price of the finished product.
- However, GNP does include depreciation and indirect business taxes like sales tax.

The formula for GNP is:

Gross National Product

$$\begin{aligned}
&= \text{Consumption} + \text{Government Expenditures} + \text{Investments} + \text{Exports} \\
&+ \text{Foreign Production by national Companies} - \text{Domestic Production by Foreign Companies}
\end{aligned}$$

Gross Domestic Products (GDP)

- **Gross Domestic Product (GDP)** is the broadest quantitative measure of a nation's total economic activity. More specifically, GDP represents the monetary value of all goods and services produced within a nation's geographic borders over a specified period of time.

Calculation of GDP

The formula for GDP is:

$$\text{GDP} = \text{Consumption} + \text{Government Expenditures} + \text{Investment} + \text{Exports} - \text{Imports}$$

- Consumption:
 - Durable goods (items expected to last more than three years)
 - Nondurable goods (food and clothing)
 - Services
- Government Expenditures:
 - Defense
 - Roads
 - Schools
- Investment Spending:
 - Nonresidential (spending on plants and equipment), Residential (single-family and multi-family homes)
 - Business inventories
- Net Exports: Exports are added to GDP
- Net Imports: Imports are deducted from GDP

Net National Product (NNP)

- The **net national product (NNP)** is the monetary value of finished goods and services produced by a country's citizens, whether overseas or resident, in the time period being measured (i.e., the gross national product, or GNP) minus the amount of GNP required to purchase new goods to maintain existing stock (i.e., depreciation).

The formula for NNP is:

$$\text{NNP} = \text{GNP} - \text{Depreciation on Gross Capital Investment}$$

Net Domestic Product (NDP)

- The **net domestic product (NDP)** is an annual measure of the economic output of a nation that is adjusted to account for depreciation, calculated by subtracting depreciation from the gross domestic product (GDP).

The formula for NDP is:

$$NNP = GDP - \text{Depreciation on Gross Capital Investment}$$

Per Capita National Income

- The per capita income indicates a share of every Indian citizen in the total national income.

$$\text{Per capital Income (in Rs.)} = \frac{\text{Total NI during a period}}{\text{Total number of citizens in a country}}$$

Personal Income (PI)

- Personal income refers to all of the income collectively received by all of the individuals or households in a country.
- Personal income includes compensation from a number of sources including salaries, wages and bonuses received from employment or self-employment; dividends and distributions received from investments; rental receipts from real estate investments and profit-sharing from businesses.

Disposable Income/ Disposable Personal Income (DPI)

- Disposable income, also known as disposable personal income (DPI), is the amount of money that households have available for spending and saving after income taxes have been accounted for.

$$DPI = PI - \text{Income tax paid}$$

Basic Economic Problems

There are three basic economic problems.

1. Poverty
2. Unemployment.
3. Inflation

Let's discuss each one by one.

Poverty

Definition: - Poverty is about not having enough money to meet basic needs including **food, clothing, and shelter**.

Concepts of Poverty

There are two concepts of poverty

1. Relative Poverty

- **Relative poverty** is the condition in which people lack the minimum amount of income needed in order to maintain the average standard of living in the society in which they live.
- Relative poverty is considered the easiest way to measure the level of poverty in an individual country.
- Relative poverty is defined relative to the members of a society and, therefore, differs across countries.
- People are said to be impoverished if they cannot keep up with standard of living as determined by society.
- Relative poverty also changes over time.
- As the wealth of a society increases, so does the amount of income and resources that the society considers necessary for proper conditions of living.
- Example

Person	Income
A	5000
B	10000
C	15000
D	20000

- It is obvious that A is poorest person while D is richest person.
- However, Relative poverty may be assessed on the basis of some standard level of income.
- If Rs. 20000 P.M. is consider as standard level of income then A, B, & C are considered relatively poor.
- If Rs. 10000 P.M. is consider as standard level of income then only A is considered relatively poor.

2. Absolute Poverty

- **Absolute poverty** refers to a condition where a person does not have the minimum amount of income needed to meet the minimum requirements for one or more basic living needs over an extended period of time. This includes things like
 - Food
 - Safe drinking water
 - Sanitation facilities
 - Health
 - Shelter

- Education etc.
- Living in absolute poverty is harmful and can endanger your life.
- The standards set for absolute poverty are the same across countries.
- When it was established in 1990, the World Bank set the global absolute poverty line as living on less than \$1 a day.
- Absolute Poverty in India:
 - Earlier, India used to define the poverty line based on a method defined by a task force in 1979.
 - It was based on expenditure for buying food worth 2,400 calories in rural areas, and 2,100 calories in urban areas.
 - In 2011, the Suresh Tendulkar Committee defined the poverty line on the basis of monthly spending on food, education, health, electricity and transport.
 - According to this estimate, a person who spends less than Rs. 27.2 in rural areas and Rs. 33.3 in urban areas a day are defined as living below the poverty line.
 - This has been criticized for fixing the poverty line too low.
 - According to a committee headed by former Reserve Bank governor C Rangarajan, people living on less than Rs. 32 a day in rural areas and Rs. 47 a day in urban areas is poor.

Causes of Poverty

1. Low rate of economic growth.

- Poor economic growth rate generates lower income.
- The low income restrict from availing even basic necessities of life like food, shelter and clothing

2. Economic inequalities.

- It is uneven distribution of income and consumption.
- Due to this rich becomes richer and poor becomes poorer.
- According to one survey the top 3 percent of the rural households account for about 26 percent of the land area, while bottom 55 percent hold just 10 percent of the total land area.

3. Benefits of public investment have accrued more to the upper section of the society.

- It has been found that the fruits of public investment undertaken during the last five decades have accrued more to the upper section of the society than to the middle and lower income groups.
- Subsidies in modern technique of irrigation will benefit more to rich farmer than poor one.

4. Unemployment and underemployment.

- Lack of employment will promote poverty.
- Due to less work or no work people is not getting income and they are not able to full fill their basic need.

5. Inflationary price rise.

- Due to inflation price of the product rise and hence poor people cannot buy their necessary product which leads to poverty.
- Indian economy all throughout the planning period, save for a few exceptional years has been witnessing a spiral of inflationary price rise in spite of our avowed objective of growth with stability.

6. Faster population growth amongst the poor.

- Poverty is also related with population growth.
- It is observed that population growth is large among the poor people.
- Population growth among poor is more due to lack of awareness about family planning and education will limit their thinking.

7. Low level of literacy amongst the poor.

- Poverty and illiteracy are inter related factors.

- Illiterate people will have limited job opportunities.

- Illiterate people will get job only at bottom of the organization so their income is also low.

8. Inadequacies of anti-poverty programs.

- Generally anti-poverty programs are inadequate and inefficiently implemented.
- It is right to say that poor designing, poorer identification and the poorest implementation have almost paralyzed poverty alleviation program in India.

9. Corruption.

- Corruption is very big problem of any economy.
- In an economy if corruption is there than what benefits are decided by government will not reach to right people for which it is allotted.
- Corruption will restrict better steps taken to reduce poverty.

10. Natural calamity.

- It is universal problem and we don't know in advance when, where, how, and size of problem.
- It natural disaster activity like flood, earthquake etc.
- It is due to change in environmental condition that some time generated by men by means of pollution.

Measures to Reduce Poverty

1. Rapid economic growth.

- As we know low economic growth is one cause of poverty.
- Rapid economic growth will help us to solve this problem.
- In India economic growth rate is slow that is one of the reason that we are having still poverty.

2. Reducing economic inequalities.

- Reducing inequality of income is another kingpin of poverty eradication.
- By providing opportunity to people to do work we can help them to overcome from poverty.
- Develop small agricultural business and cattle farming illiterate people can also earn money. So focus on such business.
- Help poor people collect tax from rich people based on income.
- Do not collect tax on necessary product like salt, wheat etc. and collect more tax on comfort product like air conditioner, car etc.
- Example - Progressive Income Tax

3. Employment oriented planning.

- Do planning in such a way that all people will get employment and able to fully fill their need.
- Develop small scale business or household business which gives opportunities to people to earn money.
- Promote in-house business like cloth designing, food packet preparation etc.
- Pattern of investment should be such that it provides gainful employment to people and not infrastructure centric.
- Example - Make in India

4. Adoption of appropriate pattern of production.

- The pattern of production has to be so designed as to cater to the needs of the poor and weaker sections of the society.
- It is necessary to give a high priority to agriculture and industries, producing essential articles of mass consumption.
- Distribution will also have to be evolved so that the essential articles are supplied to the vulnerable sections of the society in adequate quantities and at reasonable prices.
- Example - Drop Irrigation

5. Control of inflation and price stability.

- No program of removal of poverty can success till inflation is continuous increasing.
- Expansion of employment will not reduce poverty if continuous price rise is there.
- It is essential that suitable monetary, fiscal and other measures are adopted to control inflation and stabilize price.
- It essential to make such a policy so that essential things are reach to the poor people at reasonable price.
- Example - Reduction of import duty on essential commodities

6. Removal of illiteracy.

- There is close relation between poverty and illiteracy.
- Removal of illiteracy is integral part of poverty eradication program.
- Generally poverty and illiteracy go together.
- Literate people can able to do many type of job while illiterate people cannot. So removal of illiteracy will help to reduce poverty.
- Government is taking some steps for the same.
- Example - Right to free primary education

7. Population control.

- Generally large family size is big problem for poor people.
- If they get small work then they cannot fulfill need of large family.
- Example - Family planning

8. Special program of poverty eradication

- **Self-Employment program**
 - These programs aim at providing the poor households with productive assets financed by subsidies and credit.
 - Example - Gram Rozgar Yojana
- **Wage-Employment program**
 - These programs provide direct wage-employment to the poor and the process create productive assets.
 - Example - Mahatma Gandhi NREGA
- **Social security program**
 - These programs are launched to provide social security to the weakest among the poor.
 - Example - Aam Aadmi Bima Yojana

Unemployment

Definition: - Unemployment refers to a situation in which a person is jobless though

1. He/ She is able to work.
2. He/ She is willing to work.
3. He/ She is ready to accept the current wage rate. &
4. He/ She is in search of job.

Meaning of Unemployment

- Unemployment is a concept which is connected with only active labour force in the country.
- Active labour force includes age group 15-60 year. Above and below this age limit is not considered in active labour force.

- Housewives, physically handicapped, old person, and children etc. are not considered in active labour force.
- There are two possible divisions in unemployment.

1. Voluntarily Unemployed

- Voluntary unemployment refers to a situation when Person choose not to work because their expected salary is higher than the usual salary.
- In other words, unemployed of their own will.
- Such persons are not included in labour force of the country.
- Sometimes people reject employment opportunities if they do not receive desired wages or if they are not offered the kind of work they wish to do.

2. Involuntarily Unemployed

- An involuntary unemployment means a situation in which all able persons who are willing to work at the prevailing wage rate do not get work.
- Such people are (i) physically and mentally fit to work and are also (ii) willing to work at the going rate but are out of Job.
- This type of unemployment is due to deficiency of aggregate demand sufficient to ensure full employment.
- It indicates excess supply of labour which the rigid wage-rate has failed to eliminate.
- In short, if involuntary unemployment exists, the economy cannot be said to be at the level of full employment equilibrium.
- It will indicate under-employment equilibrium in the economy.
- All calculation include involuntarily unemployed person only voluntarily unemployed person are not considered in unemployment problem.

Dimensions of Unemployment

- **Economic**
 - It indicates unutilized or underutilized manpower.
 - We cannot get desired increases in production and national income.
- **Social**
 - He starts support to any activity to overthrow the existing economic and social system.
- **Psychological**
 - Cannot live life with self-respect.
 - Become mentally frustrated.

Types of Unemployment

1. **Cyclical Unemployment**
 - ✓ Cyclical unemployment is the fluctuating rate of unemployment resulting from swings in the business cycle. Arises due to ups & downs in economic activity.
 - ✓ This type of unemployment increases during a recession and decreases during an expansion.
 - ✓ Businesses are unwilling to spend money on wages when they believe consumers are not buying their products.
 - ✓ It is short-term or long-term phenomenon.
 - ✓ For example, an auto worker may be laid off during a recession, when people are buying fewer cars. When people buy fewer cars, the auto makers don't need as many employees to meet the consumer demand. So as the demand for cars decreases, so does the demand for auto workers.
 - ✓ As the economy strengthens, and consumers start to spend more money on goods (like cars), the unemployed auto worker will probably be rehired.

2. Frictional Unemployment

- ✓ It is always presence in the economy, resulting from temporary transitions made by workers and employers.
- ✓ It is caused because, unemployed workers may not always take the first job offer they receive because of the wages and necessary skills.
- ✓ This type of unemployment is also caused by failing firms, poor job performance, or outdated skills.
- ✓ This may also be caused by workers who will quit their jobs in order to move to different parts of the country.
- ✓ Frictional unemployment can be seen as a transaction cost of trying to find a new job.
- ✓ It is the result of not having perfect information of available jobs.

3. Structural unemployment.

- ✓ The Structural Unemployment is the situation when the jobs are available, and also the workers are willing to work, but they don't have the required job skills suitable for the vacant positions.
- ✓ It occurs due to the change in the demand for specific types of worker because of the fundamental shifts in the economy.
- ✓ Advances in technology and changes in market conditions often turn many skills outdated.
- ✓ For e.g. with the rise of computers, many jobs in manual book keeping have been replaced by highly efficient software users.
- ✓ Workers need to acquire new skills in order to obtain such jobs.

4. Seasonal unemployment.

- ✓ Worker of seasonal business will get employment in season only and in off season they are unemployed.
- ✓ Example – workers of mango farm.

Causes of Unemployment

1. Slow rate of economic growth.

- The overall economic growth rate during last five decades of planning has been about 4 to 5 percent.
- This growth rate in the context of rising population has been found to be too slow.
- Due to slow economic growth rate expansion of employment opportunity is very low.

2. Preference to capital centric techniques of production.

- The growth of employment depends on the volume and pattern of investment in the economy.
- Most of the investment has gone into capital intensive techniques and areas of production.
- It is easy to work with capital centric technique than human being so most of the business follow that only.
- Example-Buying new technique machine instead of increasing labour.

3. Defective system of education.

- System of education are going to affect unemployment a lot.
- As we know that today person having education but still unemployed because skill require to work in industry is lacking.
- It is needed to reform the education system and make it such a that it can give output as student who can directly work in industry.
- Example- Not giving industry ready students.

4. Absence of skill development opportunities.

- There is very less opportunity available in India for skill development.
- Due to this person cannot able to work in many places where skill is needed.
- Example- Training program is very less.

5. Lack of man-power planning.

- Proper man-power planning is highly needed.
- Lack of man power planning will leads to more employee available in one sector and less in other sector.
- Due to this some jobs are available but unemployment person cannot do that job and owner cannot get right person for work.
- Example- Imbalance in skill and requirement.

6. Immobility of labour.

- One of the reason of unemployment is limited mobility of labour, both geographical and occupational.
- Many a times, people are not willing go too far off places in the country even if work is available there.
- They prefer jobs only at their residential places or nearby areas.
- Example- Home-sickness.

7. Rapid growth of population.

- Fast growth of population will directly affect unemployment.
- As population increases we need to increase employment but we have limited resources so it is very difficult to generate new jobs.
- So population growth is big problem against any developing economy.

Remedies to Resolve Unemployment

1. Accelerating economic growth rate.

- Economic growth rate affect unemployment directly.
- Various steps taken for economic growth will expand overall output of economy which result into increase in employment.
- Planned development by accelerating industrialization, removing the deficiency of demand, stabilizing the rate of domestic investment and consumer demand can fight the problem of unemployment.

2. Change in pattern of investment.

- Both the organized and un-organized sectors must adopt labor-intensive technology if sufficient employment opportunities are to be generated in both the rural and urban sectors of the economy.
- The decline in employment elasticity of output growth is primarily due to the increasing trend in capital intensity in the organized industrial sector as well as in agriculture.
- Increasing mechanization of agriculture in various states has lowered the employment elasticity of growth of agricultural output.
- Of course, the use of labor-intensive techniques with lower productivity of workers in the industry and agriculture may lower the growth of output.

3. Employment oriented planning.

- For solving unemployment problem in the urban areas, the organized industrial sector must also absorb a sufficient number of workers.
- The failure of the organized industrial sector to generate enough employment opportunities is due to the use of capital-intensive technologies imported from abroad.
- The tendency to use the higher capital-intensive technology by the Indian industries in the post reform period has been intensified because they are trying to improve competitiveness to face competition from imported commodities.
- Capital has become relatively cheap due to various fiscal concessions such as liberal depreciation and investment allowance and low interest rates on borrowed funds for investment.
- Consequent to the use of high capital-intensive technologies in our industries the labour productivity has been increasing while employment has been growing at a snail pace.

- Therefore, to encourage the use of relatively more labor-intensive technologies and thereby to generate more employment opportunities, fiscal and monetary concessions mentioned above on use of capital must be withdrawn.

4. Role of employment exchange.

- More employment exchanges should be opened.
- Information regarding employment opportunities should be given to people. So that people can take advantage of that information and develop them self for that area.

5. Appropriate labour policy.

- We need flexible labour law access of finance to small enterprise and removal of inspector raj.
- The Employment Assurance Scheme (EAS) was designed to provide employment in the form of manual work in the lean agricultural season.

6. Encouragement to self-employment.

- 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.
- Also motivate people to do small scale and household business so that they can earn and for that various help should be provided from government.
- Arranging various financial help, credit granting, and markets for selling their products.
- The government has also launched some programs namely Training for Rural Youth for Self-Employment (TRYSEM) and Jawahar Rozgar Yojana.
- Prime Minister's Rozgar Yojana was introduced in August 1993 to provide self-employment opportunities to the educated urban youths.

7. Reform of 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.
- Other people should be provided with industrial education so that they can work in that industry.
- Different industrial training centers must be open based on area and business type in that area so that people of that area will be capable to work in that industries.

8. Control of population growth.

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

Inflation

Definition: - Inflation is defined as a sustained increase in the general level of prices for goods and services.

- It is measured as an annual percentage increase.
- As inflation rises, every rupee you own buys a smaller percentage of a good or service.
- The value of a rupee does not stay constant when there is inflation.
- The value of a rupee is observed in terms of purchasing power.
 - Real, tangible goods that money can buy.
- When inflation goes up, there is a decline in the purchasing power of money.
 - For example, if the inflation rate is 10% annually, then theoretically a RS 100 pack of gum will cost RS 110 in a year.

Types of Inflation - On the Basis of Causes

Demand-pull inflation

- Demand-pull inflation results from strong consumer demand. Many individuals purchasing the same good will cause the price to increase. And when such an event happens to a whole economy for all types of goods, it is called demand-pull inflation.



- Demand-pull inflation is used by Keynesian economics to describe what happens when price levels rise because of an imbalance in the aggregate supply and demand.
- When the aggregate demand in an economy strongly outweighs the aggregate supply, prices go up.
- Economists describe demand-pull inflation as a result of too many dollars chasing too few goods.

Causes of demand-pull inflation

- Growing economy.
- Expectation of inflation.
- Overexpansion of the money supply.
- Strong brand.
- Technological innovation.

Cost-push inflation

- Cost push inflation is inflation caused by an increase in prices of inputs like labour, raw material, etc.
- The increased price of the factors of production leads to a decreased supply of these goods.
- While the demand remains constant, the prices of commodities increase causing a rise in the overall price level. This is known as cost push inflation.



Causes of cost-push inflation

- Companies that achieve a monopoly over an industry.
- Salary increases.
- Natural disasters.
- Government regulation and taxation.
- Shift in exchange rates.

Currency inflation

- This type of inflation is caused by the printing of currency notes.
- A situation in which more money becomes available without an increase in production and services, causing prices to rise.

Credit inflation

- Being profit-making institutions, commercial banks sanction more loans and advances to the public than what the economy needs.
- There are many cases in which an increase in the supply of credit will lead to an increase in the supply of money.
- For example, most bank loans result in the creation of new deposit currency.
- To be more specific, when a bank makes a loan it doesn't transfer part of its existing deposit base to the borrower rather, it creates new money "out of thin air" and thus alters the value of all existing currency units.
- Such credit expansion leads to a rise in price level.

Deficit-induced inflation

- The budget of the government reflects a deficit when expenditure exceeds revenue.
- To meet this gap, the government may ask the central bank to print additional money.
- Due to pumping of additional money price rise this is called the deficit-induced inflation.

Types of Inflation Based - on Degree of Rise in Price

Creeping inflation

- Circumstance where the inflation of a nation increases gradually, but continually, over time.
- This tends to be a typically pattern for many nations.
- Although the increase is relatively small (less than 3%) in the short-term, as it continues over time the effect will become greater and greater.

Walking/Moderate inflation

- When prices rise moderately and the annual inflation rate is a single digit (3% - 10%), it is called walking or trotting inflation.
- Inflation at this rate is a warning signal for the government to control it before it turns into running inflation.

Running inflation

- When prices rise rapidly like the running horse at a rate of 10% - 20% per annum, it is called running inflation.
- Its control requires strong monetary and fiscal measures, otherwise it leads to hyperinflation.

Hyper/ Galloping inflation

- When prices rises 20% to 100% per annum or even more, it is called galloping or hyperinflation.
- Such a situation brings a total collapse of the monetary system because of the continuous fall in the purchasing power of money.

Causes of Inflation

Demand Side Factors

1. Increase in money supply will leads to increase in demand and hence inflation.
2. Increase in government spending through deficit financing money supply in economy will increase which leads to inflation.
3. Expansionary monetary policy will increase money supply.
4. Bouyant economy and expansion of private sector capital projects.

5. Existence of parallel black money economy.
6. Repayment of public debt.
7. Income from exports.

Supply Side Factors

1. Shortage of factor of production (inputs).
2. Labour instability.
3. Priorities set by producers in such a way that they can earn more profit and hence basic product may not produce in sufficient amount.
4. Price rise in the international inputs.
5. Natural calamities.
6. Artificial scarcity will leads to storage of necessary and selling slowly at higher price.

Perceptual Factors

1. Expected salary rise will increases current consumption and price rise.
2. Due to expectation of getting higher price in future supplier will restrict the supply.
3. Due to expectation of rise in price in future producer will buy more raw material.

Measures to Control Inflation

Monetary measures

1. Credit Control will limit money supply in the market and hence inflation will reduce.
2. Issue of New Currency must be stopped or limited so that further inflation will not rise.
3. Increase in Bank Rate will restrict other banks to take money from RBI and hence money supply in market will reduce.
4. Increase in Cash Reserve Ratio (CRR) will restrict bank to supply money in the market as they need to keep more money with RBI.
5. Increase in Statutory Liquidity Ratio (SLR) will restrict money flow in market as bank have to maintain more money with them.
6. Withdraw liquid funds from economy through Open Market Operations (OMO). By selling government property money can be reduced from economy.

Fiscal Measures

1. Reduction in public Expenditure will reduce deficit-financing and less money will supply in economy.
2. Increased taxation will collect more money from economy and hence reduce demand.
3. Tax incentives on savings and investments. Various schemes of investment and saving must be introduced which provide relaxation in tax so that people are more attracted towards that.
4. Extension of repayment of public debt.

Other Measures

1. Price control strategy must be introduced so that common man can fulfill their need.
2. Rationing is the way by which government provide basic product at low price so that everyone can survive.
3. Increase Production will meet demand of economy and leads to price fall so it will stabilize price and reduce inflation.

What is Economy?

- An entire network of producers, distributors, and consumers of goods and services in a local, regional, or national community.
- Careful management of available resources.

What is Economics?

- The branch of knowledge concerned with the production, consumption, and transfer of wealth.
- Economics is the study of the production and consumption of goods and the transfer of wealth to produce and obtain those goods. Economics explains how people interact within markets to get what they want or accomplish certain goals. Since economics is a driving force of human interaction, studying it often reveals why people and governments behave in particular ways.

Introduction to Money

- *Money is an economic good that acts as a medium of exchange in transactions.*
- *Money is any item or verifiable record that is generally accepted as payment for goods and services.*
- *“Anything that is generally acceptable as a means of exchange and at the same time acts as a measure and a store of value”. By Crowther (renowned economist)*
- Money is a liquid wealth.
- Ideal money has three critical characteristics:
 - it acts as a medium of exchange.
 - it is an economic good.
 - it is a means of economic calculation.
- Barter System was used when money was not available in the form of coin or currency notes. It is a system of exchange by which goods or services are directly exchanged for another goods or services without using a medium of exchange, such as money. E.g. 1 cow for 100kg wheat

Meaning of Money

- The term money is derived from the Latin word “Moneta”, i.e. an acceptable medium of transfer. Money represents any object i.e. coins or currency notes which are widely accepted as a medium of exchange between the dealing parties.

Characteristics of Money

1. **Durability:** Money must withstand physical wear and tear. It can be used over and over again.
2. **Portability:** People can take money with them from one place to another place easily.
3. **Divisibility:** Money must be easily divided into smaller denominations. (Rupees, Paisa)
4. **Uniformity:** Money must be uniform, easy to count and measure.
5. **Limited Supply:** The money supply must be kept in limited and by some central authority.
6. **Acceptability:** Everyone in an economy must be able to exchange money for goods or service.
7. **Recognizability:** It should be easily identifiable, differentiable and measurable.

Functions of Money

Money is a matter of functions four, a medium, a measure, a standard and a store

1. Medium of Exchange

- Money is a common instrument which can be used to buy any physical goods or intangible services. The Liquid form of the money can be translated to any form of illiquid asset for long-term use like care or short-term use like lunch. Money is very much efficient medium of exchange compared to barter system.

2. Measure of value

- A unit of account is a standard numerical monetary unit of measurement of the market value of goods, services, and other transactions. Also known as a "measure" or "standard" of relative worth. A unit of account is a necessary prerequisite for the formulation of commercial agreements that involve debt. To function as a 'unit of account', whatever is being used as money must be:
 1. Divisible into smaller units without loss of value.
 2. Fungible, that is, one unit or piece must be perceived as equivalent to any other. That's why diamonds, works of art or real estate are not suitable as money.
 3. A specific weight, or measure, or size to be verifiably countable. For instance, coins are often milled with a reeded edge, so that any removal of material from the coin will be easy to detect.

3. Standard of Measure

- Money acts as a standard measure and common denomination of trade. It is thus a basis for quoting and bargaining of prices. It is necessary for developing efficient accounting systems.

4. Store of Value

- Money, being a unit of value and a generally acceptable means of payment, provides a liquid store of value because it is so easy to spend and so easy to store. By acting as a store of value, money provides security to the individuals to meet unpredictable emergencies and to pay debts that are fixed in terms of money. It also provides assurance that attractive future buying opportunities can be exploited.

Types of Money

Money can be categorized or classified in several ways

On the basis of Physical form

1. **Metallic Money:** It is also known as coin and made from some metal. They are generally smaller units of currency like 25 Paisa, 50 Paisa, 1 Rs., etc.
2. **Paper Money:** It is also known as currency note. It is printed on special paper. It represents the most liquid movable property which is used in the instant payment mechanism. E.g. Rs. 10, Rs. 100, Rs. 500, Rs. 1000, etc.
3. **Plastic Money:** They are also known as cards. They are issued by the recognized and approved institutes by the central bank of country. E.g. Credit cards, Debit Cards, Travelling Cards, etc.

On the basis of money creation by government and the banking system

1. **Narrow Money (Fiat Money) (M1):** Narrow Money is also known as Fiat money. It represents the coins and currencies introduced by the central bank in the economy for facilitating the exchange of value. It is created by Central Bank (in India, Reserve Bank of India (RBI)). As the payment to the holder promised by the Governor of the RBI on behalf of the President of India, it is known as legal money. The citizens have to accept it other it will become the criminal offence under the law.
2. **Wide Money (Broad Money) (M2):** It is also known as Credit Money. It includes fixed deposits, credit notes, demand draft, etc. The credit money is created by the banking system on the basis of the floating

currency used in the payment system. It is monitored by the central bank through the instrument of bank rate.

On the basis of legal force behind acceptance

1. **Legal Money:** The coins and currencies introduced in the economy by the central bank are legal money. It is also known as legal tender or legal currency.
2. **Optional Money:** Cheques, pay orders, bill of exchange, hundies, etc. are issued by the reputed individuals and institutions. The receiver of such instruments against the settlement of the monetary consideration can refuse to accept it, if he doubts the creditworthiness of the issuer.

On the basis of Accounting

1. **Cash System:** Under the cash system of accounting, the receipts and payments are made with the use of coins and currencies.
2. **Accrual System:** The monetary considerations are also accounted as incomes and expenses for ascertaining accounting profits, even if they are not received in cash. The non-cash incomes are incomes accrued but not received while the non-cash expenses are accrued expenses not paid in cash.

Introduction to Monetary Policy

Monetary policy is the process by which monetary authority of a country (generally a central bank) controls the supply of money in the economy by its control over interest rates. In India, Reserve Bank of India (RBI) frames monetary policy.

Objectives of the Monetary Policy of India, As Stated By RBI

1. Price Stability

The price stability refers to the maintenance of purchasing power of the money across the time. The cyclical fluctuations of booms and depressions affect all the stakeholders in the economy, some with positive effects and others with negative effects. The price stability results into smooth economic activities with its judicious impacts on stakeholder. Price stability promotes income generation, savings, investments and employment.

2. Exchange Rate Stability

The exchange rate is the dual rate between the two trading nations having different local currencies. E.g. Indian Rupees vs US Dollar. RBI has to manage the money supply in such a strategic manner that the external value of the rupee is stabilized over a period of time. When rupee is traded at premium then Indian importer will be gainer and Indian exporter will be loser. The situation is reversed when rupee will be traded at discount.

3. High Economic Growth

An increase in the capacity of an economy to produce goods and services, compared from one period of time to another. It is measured in Gross Domestic Product (GDP) or GDP per Capita.

4. Controlled Expansion of Bank Credit

One of the important functions of RBI is the controlled expansion of bank credit and money supply with special attention to seasonal requirement for credit without affecting the output.

5. Promotion of Fixed Investment

The aim here is to increase the productivity of investment by limiting non-essential fixed investment.

6. To Promote Efficiency

It is another essential aspect where RBI pay a lot of attention. It tries to increase the efficiency in the financial system and tries to incorporate structural changes such as deregulating interest rates, ease operational constraints in the credit delivery system, to introduce new money market instruments etc.

7. Reducing the Rigidity

RBI tries to bring about the flexibilities in the operations which provide a considerable autonomy. It encourages more competitive environment and diversification. It maintains its control over financial system whenever and wherever necessary to maintain the discipline and prudence in operations of the financial system.

Tools of Monetary Policy

The basic objective of the monetary policy is to monitor and regulate the quantity (supply of money) and cost (interest rates). This is beneficial to the long term economic growth of an economy.

Tools used to implement monetary policy can be classified in two categories, Quantitative tools and Qualitative tools

Quantitative Tools (Also known as General Credit Control Tools)

The quantitative tools regulate the money supply through its various tools like Bank Rate, Open Market Operations, Cash Reserve Ratio, Statutory Liquidity Ratio, Repurchase Option, Reverse Repo rate, etc. These are revised every quarter in India by RBI.

1. Repo Rate

The (fixed) interest rate at which the Reserve Bank provides overnight liquidity to banks against the surety of government and other approved securities under the liquidity adjustment facility. Current repo rate in India (Aug 2017) is 6%.

2. Reverse Repo Rate

The (fixed) interest rate at which the Reserve Bank absorbs liquidity, on an overnight basis, from banks against the surety of eligible government securities under the LAF. Current reverse repo rate in India (Aug 2017) is 5.75%.

3. Marginal Standing Facility (MSF)

A facility under which scheduled commercial banks can borrow additional amount of overnight money from the Reserve Bank. Amount a bank can borrow is limited and by reducing into their Statutory Liquidity Ratio (SLR) portfolio at a penal rate of interest. This provides a safety valve against unexpected liquidity shocks to the banking system. Current MSF rate in India (Aug 2017) is 6.25%.

4. Bank Rate (BR)

It is the rate at which the Reserve Bank is ready to buy or rediscount bills of exchange or other commercial papers. The Bank Rate is published under Section 49 of the Reserve Bank of India Act, 1934. This rate has been aligned to the MSF rate and, therefore, changes automatically as and when the MSF rate changes alongside policy repo rate changes. Current bank rate in India (Aug 2017) is 6.25%.

5. Cash Reserve Ratio (CRR)

The average daily balance that a bank is required to maintain with the Reserve Bank as a share of such per cent of its Net demand and time liabilities (NDTL). That balance may notify from time to time by the Reserve Bank in the Gazette of India. Current CRR in India (Aug 2017) is 4%.

6. Statutory Liquidity Ratio (SLR)

The share of Net demand and time liabilities (NDTL) that a bank is required to maintain in safe and liquid assets, such as, government securities, cash and gold. Changes in SLR often influence the availability of resources in the banking system for lending to the private sector. Current SLR in India (Aug 2017) is 20%.

7. Open Market Operations (OMOs)

These include both, outright purchase and sale of government securities, for injection and absorption of durable liquidity, respectively.

8. Market Stabilization Scheme (MSS)

This tool for monetary management was introduced in 2004. Excess liquidity of a more stable nature arising from large capital inflows. It is absorbed through sale of short-dated government securities and treasury bills. The cash so mobilized is held in a separate government account with the Reserve Bank.

Qualitative Tools (Also known as Selective Credit Control Tools)

These tools are industry and segment specific hence they are also known as selective credit control tools

1. Credit Rationing

Credit rationing refers to the situation where lenders limit the supply of additional credit to borrowers who demand funds, even if the latter are willing to pay higher interest rates. It is an example of market failure, as the price mechanism fails to bring about equilibrium in the market.

The term rationing refers to the careful decision about the use of any limited or important resource. The resource allocation is generally done in two popular ways 1) Based on Demand & Supply 2) Administered allocation by the central authority.

The bank credit is a critical national resource. It has to be used in a planned manner as per the planned objectives as specified by the Government. The RBI is a central authority in India which manages credit rationing policy. It also depends on sectors, may be liberal credit policy for agriculture sector and tight credit policy for aviation industry.

2. Margin Requirements

A Margin Requirement is the percentage of marginable securities that a customer must pay for loan or credit. e.g. A person buys house worth Rs. 1,00,000 against loan, Suppose bank gives loan of Rs. 80,000 only then person has to pay Rs. 20,000 . Thus marginal requirement in this example is 20%.

It is also known as Safety Margin. The security oriented bank credit reduces the chances of bank lending becoming bad or turning into a Non Performing Asset (NPA). Safety Margin also depends on sector. E.g. May be 0% in education sector and 30% in real estate.

Fiscal Policy

Introduction

Fiscal policy is the means by which a government adjusts its spending levels and tax rates to monitor and influence a nation's economy.

OR

Fiscal policy is the use of government revenue collection (mainly taxes) and expenditure (spending) to influence the economy.

The role of fiscal policy for economic growth relates to the stabilization of the rate of growth of an advanced country. Fiscal policy through variations in government expenditure and taxation profoundly affects national income, employment, output and prices.

When the government changes the levels of taxation and government spending, it influences aggregate demand and the level of economic activity. Fiscal policy can be used to stabilize the economy over the course of the business cycle.

It is the sister strategy to monetary policy through which a central bank influences a nation's money supply.

When a government's total expenditures exceed the revenue that it generates (excluding money from borrowings) then it is called **fiscal deficit**. Fiscal deficit is different than debt, which is an accumulation of yearly deficits.

Objectives of Fiscal Policy

1. To accelerate the Economic Growth

The principal objective of fiscal policy is to ensure rapid economic growth and development. This objective of economic growth and development can be achieved by efficient Mobilization of Financial Resources.

Government increases the financial resources internally as well as externally to boost the investment opportunities. Similarly it provides various incentives such as tax concessions to the entrepreneurs and MNC for this purpose. Government can achieve a high rate of economic growth and development if all these measures are carried out through fiscal policy.

By means of higher rate of economic growth, the problem of unemployment can also be solved. However, it may create some problems in the maintenance of price stability.

2. Efficient allocation of Financial Resources

The central and state governments have tried to make efficient allocation of financial resources. These resources are allocated for Development Activities which includes expenditure on railways, infrastructure, etc. While Non-development Activities includes expenditure on defense, interest payments, subsidies, etc.

But generally the fiscal policy should ensure that the resources are allocated for generation of goods and services which are socially desirable. Therefore, India's fiscal policy is designed in such a manner so as to encourage production of desirable goods and discourage those goods which are socially undesirable.

3. Employment Generation

The government is making every possible effort to increase employment in the country through effective fiscal measure. Investment in infrastructure has resulted in direct and indirect employment. Lower taxes and duties on small-scale industrial (SSI) units encourage more investment and consequently generates more employment. Various rural employment programs have been undertaken by the Government of India to solve problems in rural areas. Similarly, self-employment scheme is taken to provide employment to technically qualified persons in the urban areas.

4. Price Stability and Control of Inflation

One of the main objective of fiscal policy is to control inflation and stabilize price. Therefore, the government always aims to control the inflation by reducing fiscal deficits, introducing tax savings schemes, Productive use of financial resources, etc.

5. Equality of Income Distribution and Wealth

Fiscal policy aims at achieving equity or social justice by reducing income inequalities among different sections of the society. The direct taxes such as income tax are charged more on the rich people as compared to lower income groups. Indirect taxes are also more in the case of semi-luxury and luxury items, which are mostly consumed by the upper middle class and the upper class. The government invests a significant proportion of its tax revenue in the implementation of Poverty Alleviation Programs to improve the conditions of poor people in society.

6. Capital Formation

The objective of fiscal policy in India is also to increase the rate of capital formation so as to accelerate the rate of economic growth. An underdeveloped country is trapped in vicious (danger) circle of poverty mainly on account of capital deficiency. In order to increase the rate of capital formation, the fiscal policy must be efficiently designed to encourage savings and discourage and reduce spending.

7. Balanced Regional Development

Another main objective of the fiscal policy is to bring about a balanced regional development. There are various incentives from the government for setting up projects in backward areas such as Cash subsidy, Concession in taxes and duties in the form of tax holidays, Finance at concessional interest rates, etc.

8. Increasing National Income

The fiscal policy aims to increase the national income of a country. This is because fiscal policy facilitates the capital formation. This results in economic growth, which in turn increases the GDP, per capita income and national income of the country.

9. Foreign Exchange Earnings

Fiscal policy attempts to encourage more exports by way of Fiscal Measures like, exemption of income tax on export earnings, exemption of sales tax and octroi, etc. Foreign exchange provides fiscal benefits to import substitute industries. The foreign exchange earned by way of exports and saved by way of import substitutes helps to solve balance of payments problem.

Tools of Fiscal Policy

The tools of the fiscal policy are the arms which regulate and control the measures for attaining the objectives of the fiscal policy.

1. The quantum of **public expenditure** that can be manageable within the scope of the fiscal measures of fund raining.
2. The volume of **public debt** should be within the reasonable limit to the growth in the national income. As the taxable income supplements to the public borrowings for meeting the public expenditure, the opportunities of public borrowings are also the tools of the fiscal policy.
3. The **taxation** is a prime tool of the fiscal policy. The decisions about the volume of the tax income as a mode of financing the public expenditure is a crucial decision. It should develop a judicious balance between the government needs on one side and the incentives to work for income generation. Too much of taxation kills the incentive to works and it also becomes the basis for hiding the income and paying less tax. Moreover balance should be established between the direct tax like income tax and indirect tax like excise, custom duties, etc.

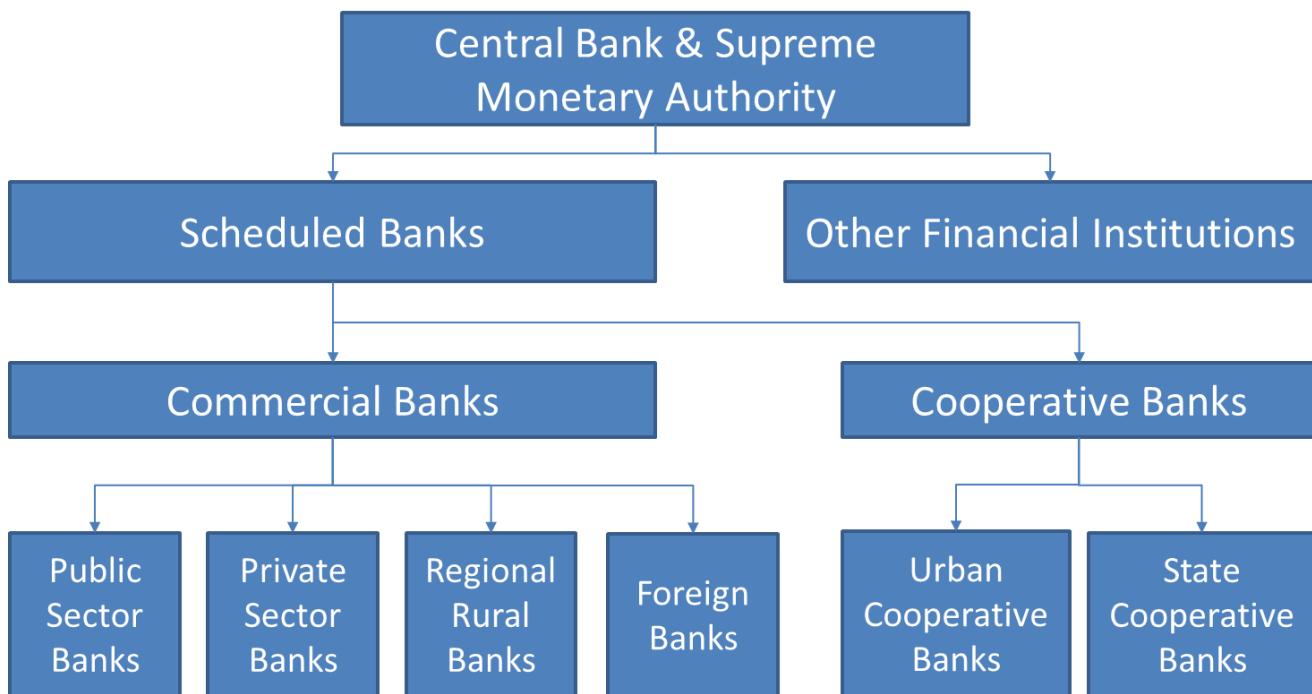
Banking

Bank: A bank is a licensed and regulated financial institution that lends money, accepts deposits and carries out other financial transactions for its clients.

Banking: Financial activities done by bank is called Banking. The development of banking as a financial institution is important development of the monetary system.

As per Banking Regulation Act, 1949, banking is defined as “Banking relates to the acceptance of deposits from the public for the purpose of lending and investments, repayable on demand or otherwise and withdrawal by cheque, draft, and order or otherwise.”

Types of Banks



Scheduled Banks

A scheduled bank, in India, refers to a bank which is listed in the 2nd Schedule of the Reserve Bank of India Act, 1934. Schedules banks can be further classified in commercial & cooperative banks. The major difference between these two is their holding pattern.

Scheduled Commercial Banks

Public Sector Banks

Public sector banks are owned and operated by the Government. Government owns majority of the equity share capital (at least 51% or more) and their shares are listed at the recognized stock exchanges of India. Main objects of public sector banks are planned economic development and serve to the people rather than earn profits.

Currently 27 public sector banks are working in India out of which 21 are nationalized banks and 6 are State Bank of India and its associate banks. E.g. SBI, BOB, PNB, Canara Bank, CBI, Dena Bank, Indian Bank, etc.

Private Sector Banks

Private sector banks are owned and operated by private institutes. They are free to operate as per market forces but they have to follow all rules & regulations of banking specified by RBI. A greater share is held by private players and not the government. Currently 30 private sectors banks are working in India. E.g. ICICI Bank, HDFC Bank, Axis Bank, Kotak Mahindra Bank etc.

Regional Rural Banks

Regional rural banks were brought into operation with the objective of providing credit to the rural and agricultural regions and were brought into effect in 1975 by RRB Act. These banks are restricted to operate only in the areas specified by government of India. These banks are owned by State Government and a sponsor bank. This sponsorship was to be done by a nationalized bank and a State Cooperative bank. E.g. Saurashtra Gramin Bank, Baroda Gujarat Gramin Bank, etc.

Foreign Banks

The foreign banks are registered or incorporated in their home country not in India. They have several branches in India. Currently 40 foreign banks are working in India. E.g. HSBC, Standard Chartered Bank, City Bank, etc.

Scheduled Co-operative Banks

Co-operative banks are controlled, owned, managed and operated by cooperative societies and came into existence under the Cooperative Societies Act in 1912. These banks are located in the urban as well in the rural areas. Although these banks have the same functions as the commercial banks, they provide finance to farmers, salaried people, small scale industries, etc. and their rates of interest of interest are lower as compared to other banks. Currently 52 Urban & 16 State cooperative banks are working in India. E.g. The Kalupur Commercial Cooperative Bank Ltd., Rajkot Nagrik Sahkari Bank Ltd., etc.

Functions of Bank

Primary Functions (Banking Functions)

They are the main functions of a bank.

Acceptance of Deposits

The bank collects deposits from the public. These deposits can be of different types

- **Saving Account**
 - Savings account is an interest yielding account for an individual or family members. Deposits in savings account are used for saving money and sake of safety. This facility is given to small saver and normally for a short period of time. The rate of interest is low, at present around 4%. Savings account holder can access facilities like Cheque Book, ATM Card, Internet Banking, etc. Company or firm cannot open saving account.
- **Current Account**
 - Current account is operated by businessmen for a company \ firm \ business house. Many more facilities are offered in current account compared to saving account but no interest is paid. The account holders can get the benefit of overdraft facility. An individual cannot open current account. Service charges are higher compared to saving account.
- **Fixed Deposit Account**
 - Lump sum amount is deposited at one time for a specific period. Higher rate of interest is paid, which varies with the period and amount of deposit. Withdrawals are not allowed before the expiry of the period. Those who have surplus funds for long term go for fixed deposits.

- **Recurring Deposits**

- This type of account is operated by salaried persons and petty traders. A certain sum of money is periodically deposited into the bank. Withdrawals are permitted only after the expiry of certain period. A higher rate of interest is paid.

Advances of Loans

The bank advances loans to the business community and other members of the public. The rate charged is higher than what it pays on deposits. The difference in the interest rates (lending rate and the deposit rate) is its profit.

- **Loans**

- It is normally for short term say a period of one year or medium term say a period of five years. Now a days, banks do lend money for long term. Repayment of money can be in the form of installments spread over a period of time or in a lump sum amount. The rate of interest may be slightly lower than what is charged on overdrafts and cash credits. Loans are normally secured against tangible assets of the company. E.g. Car Loan, Home Loan, etc.

- **Overdraft**

- This type of advances are given to current account holders. No separate account is maintained. All entries are made in the current account. A certain amount is sanctioned as overdraft which can be withdrawn within a certain period of time say three months or so. Interest is charged on actual amount withdrawn. An overdraft facility is granted against a collateral security. It is sanctioned to businessman and firms.

- **Cash Credits**

- Cash credit is a form of working capital credit given to the business firms. Under this arrangement, the customer opens an account and the sanctioned amount is credited with that account. The customer can operate that account within the sanctioned limit as and when required. It is made against security of goods, personal security etc. Reserve Bank discourages this type of facility to business firms as it imposes an uncertainty on money supply. Hence this method of lending is slowly phased out from banks and replaced by loan accounts. Cash credit system is not in use in developed countries.

Secondary Functions

Collection of Money

As an agent the bank collects cheques, drafts, promissory notes, interest, dividends etc., on behalf of its customers and credit the amounts to their accounts.

Payments of Money

Certain payments payable by the bank clients to outside parties are directly made by the banks to the concerned parties under due intimation to clients. Such payments to be made on behalf of clients include insurance premium, utility bills, fees, rents, taxes, etc.

Internet money transfer and e-banking

The bank transfers money from one place to another through electronic media. These facilities transfer the funds quickly and at negligible costs.

Merchant banking

Merchant Banking is a combination of Banking and consultancy services. It provides consultancy to its clients for financial, marketing, managerial and legal matters. It helps a businessman to start a business. It helps to

raise finance. It helps to expand and modernize the business. It helps in restructuring of a business. It helps to revive sick business units. It also helps companies to register, buy and sell shares at the stock exchange.

Dematerialize account service

In the modern developed share market transactions, the purchase and sale of shares and securities are made on dematerialized based (electronic entry). The bank provides the demat account services to those clients who are dealing in shares and other financial assets.

Ancillary Functions

The ancillary functions of the commercial banks are financial functions relating to the money and credit management.

- Locker (Safe Deposit Vaults)
- ATM
- Credit Card & Debit Card
- Issue of Letter of Credit
- Issue of Pay Orders
- Portfolio Management
- Dealing in Foreign Exchange

Central Bank

Introduction

A central bank, reserve bank, or monetary authority is an institution that manages a state's currency, money supply, and interest rates. Central banks also usually oversee the commercial banking system of their respective countries. E.g. Bank of England (UK), Federal Bank (USA), Reserve Bank of India (RBI), People's Bank of China (China), etc.

Reserve Bank of India (RBI)



RBI is India's central banking institution, which controls the monetary policy of the Indian rupee. It was established in 1935 in accordance with the provisions of the Reserve Bank of India Act, 1934.

The Central Office of the Reserve Bank is situated in Mumbai. Main Person of RBI is known as Governor who sits and formulates policies at central office, Mumbai.

RBI has 19 regional offices, most of them in state capitals and 9 Sub-offices.

The Preamble of the Reserve Bank of India describes the basic functions of the Reserve Bank as "...to regulate the issue of Bank Notes and keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage."

Functions of Reserve Bank of India

The Reserve Bank of India performs various traditional central banking functions as well as undertakes different promotional and developmental measures to meet the dynamic requirements of the country. The broad objectives of the Reserve Bank are:

1. Issue of Currency Notes

RBI has the sole right to issue currency notes of all denominations except one-rupee notes. One-rupee notes are issued by the Ministry of Finance of the Government of India. The Reserve Bank acts as the only source of legal tender. It has a separate Issue Department, which is entrusted with the job of issuing currency notes. It has powers not only to issue and withdraw but even to exchange these currency notes for other denominations. It issues these notes against the security of gold bullion, foreign securities, rupee coins, exchange bills and promissory notes and government of India bonds. Currency notes issued by the RBI are declared unlimited legal tender throughout the country.

2. Banker to Government

The Reserve Bank acts as the banker, agent and adviser to Government of India:

1. It maintains and operates government deposits
2. It collects and makes payments on behalf of the government
3. It helps the government to float new loans and manages the public debt
4. It sells for the Central Government treasury bills of 91 days duration
5. It provides development finance to the government for carrying out five year plans,
6. It undertakes foreign exchange transactions on behalf of the Central Government,
7. It makes 'Ways and Means' advances to the Central and State Governments for periods not exceeding three months
8. It acts as the agent of the Government of India in the latter's dealings with the International Monetary Fund (IMF), the World Bank, and other international financial institutions

3. Banker's Bank

The organized financial system of India is managed and supervised by the RBI through the networking of the scheduled banks. The RBI performs the following functions in the capacity of the banker's bank.

1. **Liquidity management of banks through Cash Reserve Ratio:** The banks are obliged to keep certain part of the time and demand deposits mobilized by them with the RBI. Such CRR requirements limit the credit granting power of the bank and ensures the liquidity on maturity.
2. **Clearing House Functions:** Alongwith the interbank lending and borrowing through the Call Rate mechanism, the RBI acts as a clearing house of the banking system under the buffer of the CRR maintained by all the banks with the RBI.
3. **Advisory Function:** The RBI advises the commercial banks on the monetary and financial matters necessary for their efficient functioning.
4. **Lender of the last choice:** In case of financial crisis faced by the banks at any time, the RBI acts a lender of the last choice to resolve the crisis and to maintain the confidence of the depositing and investing

public. Along with the Liquidity Adjustment Facility through the Repo mechanism, RBI also assists the banks in case of crisis.

4. Controller of Credit

RBI Bank administers control over the credit that the commercial banks grant. RBI's monetary policy used to control the demand and supply of money (liquidity) in the economy. Such a method is used by RBI to bring "Economic Development with Stability". It means that banks will not only control inflationary trends in the economy but also boost economic growth which would ultimately lead to increase in real national income with stability.

5. Custodian of Foreign Exchange Reserve

RBI has the custody of the country's reserves of international currency. It has the responsibility to maintain the official rate of exchange. Thus maintenance of external value of the rupee is an essential function of RBI. It does so through regulating and controlling the foreign exchange transactions. The Foreign Exchange Management Act empowers the RBI to issue direction for the administration of exchange control. For this purpose the RBI has set up separate department called Foreign Exchange Control department.

6. Data Collection and Publicity

Being the apex monetary authority of the country, the RBI collects process and publishes statistical data on several topics. It includes interest rate, inflation, savings and investments etc. This data proves to be quite useful for researchers and policy makers.

7. Promotional Functions

As an apex organization, the RBI always tries to promote the banking habits in the country. It institutionalizes savings and takes measures for an expansion of the banking network. During economic reforms it has taken many initiatives for encouraging and promoting banking in India.

The RBI also tries to encourage the facilities for providing finance for foreign trade especially exports from India. The Export-Import Bank of India (EXIM Bank India) and the Export Credit Guarantee Corporation of India (ECGC) are supported by refinancing their lending for export purpose.

8. Supervisory Functions

The RBI also performs many supervisory functions. It has authority to regulate and administer the entire banking and financial system. Some of its supervisory functions are given below.

- Granting license to banks
- Bank Inspection
- Control over NBFIs (Non-Banking Financial Institutions)
- Implementation of the Deposit Insurance Scheme

Banking Concepts

1. Bank Rate
2. Cash Reserve Ratio (CRR)
3. Statutory Liquidity Ratio (SLR)
4. Repo and Reverse Repo Rate

Refer Topic Quantitative Tools for detail

Define management.

Management

- Management involves coordinating and supervision/control the activities of others so that their activities are accomplished efficiently and effectively.
- Efficiently refers activity or producing effectively with a minimum of waste, expense, or unnecessary effort.
- In short, utilization of available resources (Man – Power, Money and Material) efficiently.
- Effectively refers “doing things right”- doing those work activities that will help the organization to reach its goals.
- Effectively and Effectiveness is an important in management:
 - ✓ Efficiency = Low Wastages
 - ✓ Effectiveness = High Attainment
- Simply speaking management means what managers do.
- Management is a purposive activity.
- It is something that directs group efforts towards the accomplishment (achievement) of certain pre-defined goals.
- It is the process of working with and through others to effectively and efficiently accomplish the goals of the organization, in the changing world. Of course, these goals may vary from one organization to another.

Definition given by different experts

- **According to F.W Taylor**, “Management is an art of knowing what to do, when to do and see that it is done in the best and cheapest way.”
 - **According to Mary Parker Follett**, “Management is an art of getting things done through people.”
 - **According to George R. Terry**, “He defines management as a process consisting of planning, organization, actuating and controlling, performed to determine and accomplish the objectives by the use of people and resources.”
 - **According to Harold Koontz**, “Management is an art of getting things done through and with the people in formally organized groups. It is an art of creating an environment in which people can perform and individuals and can co-operate towards achievement of group goals”.
 - **According to Henri Fayol**, “Management is to forecast (estimate), to plan, to organize, to command, to co-ordinate and control activities of others.”
-

Explain the scope of management.

Production management:

- Production means creation of utilities by converting raw material into final product by various scientific methods and regulations. It is very important field of management. Various sub-areas of the production department are as follows.

- Plant lay out and location: This area deals with designing of plant layout, decide about the plant location for various products and providing various plant utilities
- Production planning: Managers have to plan about various production policies and production methods.
- Material management: This area deals with purchase, storage, issue and control of the material required for production department.
- Research and Development: This area deals with research and developmental activities of manufacturing department. Refinement in existing product line or develop a new product is the major activities.
- Quality Control: Quality control department works for production of quality product by doing various tests which ensure the customer satisfaction.

Marketing management:

- Marketing management involves distribution of the product to the buyers. It may need number of steps. Sub areas are as follows
- Advertising: This area deals with advertising of product, introducing new product in market by various means and encourage the customer to buy these products.
- Sales management: Sales management deals with fixation of prices, actual transfer of products to the customer after fulfilling certain formalities and after sales services.
- Market research: It involves in collection of data related to product demand and performance by research and analysis of market.

Finance and accounting management:

- Financial and accounting management deals with managerial activities related to procurement and utilization of fund for business purpose. Its sub areas are as follows
- Financial accounting: It relates to record keeping of various financial transactions their classification and preparation of financial statements to show the financial position of the organization.
- Management accounting: It deals with analysis and interpretation of financial record so that management can take certain decisions on investment plans, return to investors and dividend policy
- Taxation: This area deals with various direct and indirect taxes which organization has to pay.
- Costing: Costing deals with recording of costs, their classification, analysis and cost control.

Personnel Management:

- Personnel management is the phase of management which deals with effective use and control of manpower. Following are the sub areas of Personnel management
- Personnel planning: This deals with preparation inventory of available manpower and actual requirement of workers in organization.
- Recruitment and selection: This deals with hiring and employing human being for various positions as required.

- Training and development: Training and development deals with process of making the employees more efficient and effective by arranging training programs. It helps in making team of competent employees which work for growth of organization.
 - Wage administration: It deals in job evaluation, merit rating of jobs and making wage and incentive policy for employees.
 - Industrial relation: It deals with maintenance of overall employee relation, providing good working conditions and welfare services to employees.
-

Explain management is a science as well as an art.

Properties of Science

- Science is a systematized (systematic) body of knowledge based on certain principles.
- Science knowledge is obtained through the process of observation, experimentation and testing.

Science thus has following fundamentals.

1. Universally acceptance principles

- Scientific principles represent fundamental or essential truth about a particular field of an inquiry. These principles may be of gravitation which can be applied in all countries irrespective of the time.
- Management also contains some fundamental principles which can be applied universally like the principle of Unity of Command. This principle is relevant to all type of organizations (business or non-business).

2. Inquiry & Observation

- There are scientific principles which are derived through scientific inquiry and observation, which are based on certain logic. For example, the principle that earth goes round the sun has been scientifically proved by observation and inquiry.
- Management certain principles are also on scientific Inquiry & observation. For example-Principles of Henry Fayol of Fair Remuneration. He observed the fair remuneration to personal helps in creating a satisfied work force.

3. Cause& Effect Relationship

- Principles of science make cause and effect relationship between various variables. E.g. when water boiled at 100 Degree, liquid change into the vapor.
- The same is true for management; therefore it also establishes cause and effect relationship. For Example: if workers are given bonuses, fair wages they will work hard but when they are not treated with fair wages, it reduces productivity of organization.

4. Test of validity and predictability

- Validity of scientific principles can be tested at any time or any number of times. Each time these tests should give same result. For example: H₂ and O will always give H₂O.
- Principles of management can also be tested for its validity. For example: principle of unity of command can be tested by comparing two persons-one

having single boss and one have to report two bosses. The performance of first one will be better than second one.

5. Experimentation

- The principles of science are derived after repeated experimentation. For example: To expand any metal, it has to be heated at certain degree of temperature.
- Management certain principles are also based on experimentation. For example: Henry Fayol principles developed on certain experiments.

Properties of an art

- An art may be defined as an application of personalized and general knowledge, how to do things creatively and skillfully.
- It can be improved through constant practice only.

1. Practical knowledge

- Every art required practical knowledge only learning of theory is not enough. It is very important to have practical knowledge of theoretical principles. E.g. to become good dress designer, the person has to know different way of stitches, different designs, dimensions, situations etc. to use them appropriately.
- A manager can never been successful just by obtaining degree in management; he/she must also know how to apply various principles in situations by functioning in capacity of manager.

2. Personalized skill

- Although theoretical base may be same with every artist, but each one has his own style and approach towards his job. That is why the level of success and quality of performance differs from person to person. E.g. there are several singers but shri. Lata Mangeshkar is recognized for her different way of singing and which is the best one.
- Similarly management as an art is also personalized. Every manager has his own way of managing things based on his knowledge, experience and personality that is why some managers like shri. Narayan Murthy.

3. Creative Art

- Every artist has an element of creativity in line. Every artist must have quality of intelligence & imagination.
- Management is also creative in nature like any other art. It combines human and non-human resources in useful way so as to achieve desired results.

4. Continuous practice

- Practice makes a man perfect. Every artist becomes more skillful through constant practice.
- Similarly managers learn through an art of trial and error initially but application of management principles over the years make them perfect in the job of managing.

5. Goal-Oriented

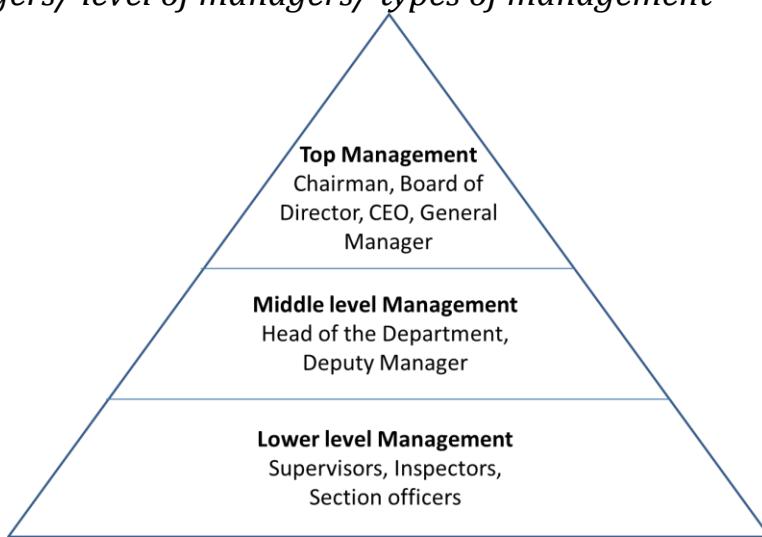
- Every art is result oriented as it seeks to achieve concrete results. In the same manner, management is also directed towards accomplishment of pre-determined goals.
- Managers use various resources like men, money, material, machinery & methods to promote growth of an organization.
- Management is both an art as well as a science.
- The above mentioned points clearly tell that management combines features of both science as well as an art.
- It is considered as a science because it has an organized body of knowledge which contains certain universal truth.
- It is called an art because managing requires certain skills which are personal possessions of managers.
- Science provides the knowledge & art deals with the applications of knowledge and skills.

Give the difference between management and administration.

Heading	Management	Administration
Meaning	Management is an art of getting things done through others by directing their efforts towards achievement of predetermined goals.	It is concerned with formulation of extensive objectives / goal, plans & policies.
Characteristics	Management is an executing / implementing function.	Administration is a decision-making function.
Process	Management decides who will do it & how will do it.	Administration decides what is to be done & when it is to be done.
Purpose	Management main function is to get work done through others.	Administration main purpose is to frame plans & policies.
Skill	Technical and Human skills required.	Conceptual and Human skills required.
Level	Middle & lower level function.	Top level function.

List and explain different types of managers.

Types of managers/ level of managers/ types of management



Top level management

- It consists of board of directors, chief executive or managing director.
- The top management is the ultimate source of authority and it manages goals and policies for an enterprise. It devotes more time on planning and coordinating function.
- It controls & coordinates the activities of all the organization.
- It prepares strategic plans & policies for the enterprise. It also provides direction.
- They also maintain the contacts with outside world.

Middle level management

- The branch managers and departmental managers constitute middle level. They devote more time to implement policies and strategies.
- They make plans for the sub-units of the organization.
- They interpret and explain policies from top level management to lower level.
- They also send important reports and other important data to top level management.
- They are also responsible for inspiring lower level managers towards better performance.

Lower level management

- Lower level is also known as supervisory / operative level of management.
- It consists of supervisors, foreman, section officers, superintendent etc.
- They are responsible for the quality as well as quantity of production.
- They communicate workers problems, suggestions, and other recommendation etc. to the higher level and higher level goals and objectives to the workers.
- They help to solve the grievances of the workers.
- They are responsible for providing training to the workers.
- They arrange necessary materials, machines, tools etc. for getting the things done.
- They prepare periodical reports about the performance of the workers.

- They ensure discipline in the enterprise as well as motivate workers.

List and explain the roles of manager.

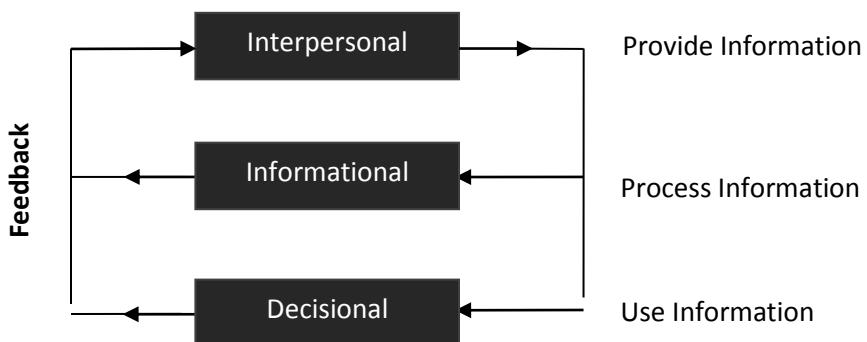
OR

Explain the role of manager as per Mintzberg.

OR

Explain Mintzberg managerial role.

- These roles can be grouped into three categories
 1. Interpersonal role
 2. Informational role
 3. Decisional role



Interpersonal role

1. Figurehead

- In the figurehead role, the manager is a symbol and represents the organization in matters of formality.
- He / She performs official duties such as the signing of legal documents on behalf of the company, participation as a social necessity to greet visitors and customers and being available for people / agencies that will only deal with him / her because of status and authority.

2. Leader

- The leader role is to motivating and directing their subordinates.
- The manager also looks after the interest of his subordinates and also tries to solve their work related problems.
- He also sets goals / objectives for his followers, co-ordinates the individual goals with the organizational goals.

3. Liaison

- The liaison role is to get connected between organization and outsiders.
- They have to interact with peers and people outside of the organization.
- The manager's networking skills to maintain internal and external contacts for information exchange are essential.
- The top level manager uses the liaison role to gain favors and information, while the supervisor uses it to maintain the routine flow of work.

Informational role

1. Monitor

- In the monitor role, the manager must establish and maintain information system; by building contacts both within and outside the organization and training staff to deliver information.

2. Disseminator

- In the role of disseminator, the manager receives, interprets, and transmits external information through the liaison role into the organization and internal information through the leader role between subordinates.

3. Spokesman

- In the role of spokesperson, the manager disseminates the organization's information into the general public, such as customers, suppliers, government and the press.

Decisional role

1. Entrepreneur

- In the entrepreneur role, the manager initiates and plans the controlled change in the organization through exploiting opportunities or solving problems and taking action to improve existing operation.

2. Disturbance Handler

- In the disturbance handler role, the manager reacts to spontaneous situations and unpredictable events which pose threats to the organization and must take action to correct the situation.

3. Resource Allocator

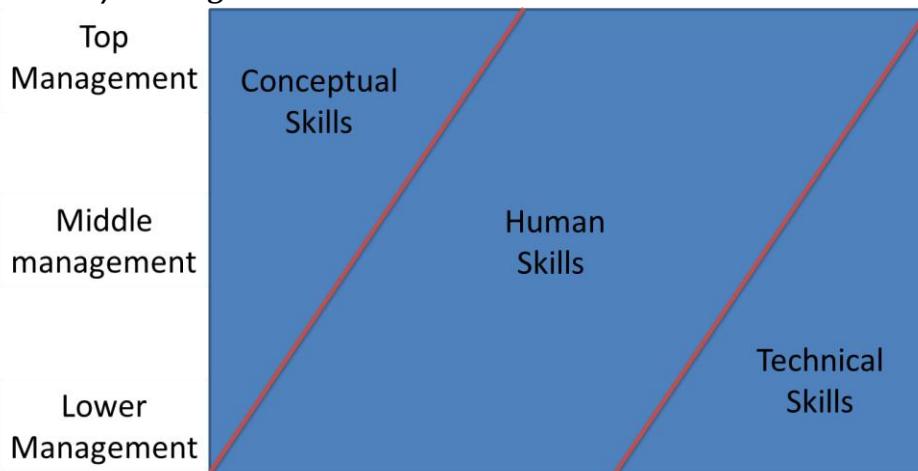
- In the resource allocator role, the manager decides where the organization will expand its efforts and makes choices on the allocation of resources such as capital fund, time, materials and manpower.

4. Negotiator

- In the negotiator role, the manager negotiates on behalf of the organization with other individuals or organizations for a new sales contract or cooperation agreement.

List and explain various managerial (management) skills.

Managerial skills/management skills



1. Conceptual Skills

- A conceptual skill is related with top level management.
- It includes analytical, creative and initiative skills.
- It helps the manager to fix goals or objective for whole organization and plan for every situation.
- According to Prof. Daniel Katz, Conceptual skills are mostly required by the top level management because they spend more time in planning, organizing and problem solving.

2. Human Skills:

- Human relations skills are also called Interpersonal skills and it is related with middle level management.
- It is an ability to work with people.
- Manager also lead, motivate, direct, communicate and develop team spirit.
- Human relations skills are required by all managers at all levels of management.

3. Technical Skills:

- It is capacity to use the different tools / machinery and techniques in an area in which a person is specialized.
- Technical skills required particularly with lower level management.

List and explain general responsibilities of CEO (Chief Executive Officer).

Responsibilities (role) of CEO are as under:

1. Board Administration and Support

- Supports operations and administration of Board by advising and informing Board members, interfacing between Board and staff, and supporting Board's evaluation of chief executive.

2. Program, Product and Service Delivery

- Oversees design, marketing, promotion, delivery and quality of programs, products and services.

3. Financial, Tax, Risk and Facilities Management

- Recommends yearly budget for Board approval and carefully manages organization's resources within those budget guidelines according to current laws and regulations.

4. Human Resource Management

- Effectively manages the human resources of the organization according to authorized personnel policies and procedures that fully conform to current laws and regulations.

5. Community and Public Relations

- Assures the organization and its mission, programs, products and services are consistently presented in strong, positive image to relevant stakeholders

6. Fundraising (nonprofit-specific)

- Oversees fundraising planning and implementation, including identifying resource requirements, researching funding sources, establishing strategies to approach funders, submitting proposals and administrating fundraising records and documentation.
-

Explain Fredrick Taylor's element of scientific management.

OR

Explain scientific approach of management given by F. W. Taylor.

- Frederick Winslow Taylor (1856-1915) is considered "father of scientific management", in other words, it is a classical management approach that emphasizes the scientific study of work methods to improve the efficiency of the workers.

Elements of scientific approach given by F.W. Taylor:

1. **Scientific Task Planning:** Scientific task planning is all about the total amount of work an average worker can do during a day under normal conditions. Management should decide in advance what work is to be done, by whom, where and when.
2. **Time Study:** The time study indicates that minimum time required finishing a particular job. The time study would indicate the time taken by workers to finish particular job is being recorded first and this information is being used to develop standard time.
3. **Motion study:** Motion study is useful to find out best order of activity to do a particular job.

4. **Functional Foremanship:** In order to achieve better production control, Taylor has given the concept of foremanship. Where the factory has divided into various department. And each department has in-charge of specialist. These functional foremanship playing role of specialist and provide expert advice to workers.
 5. **Standardization:** In scientific Management standards have to be set well in advance for the task, materials, work method, quality, time, and cost and working condition etc. this helps in simplifying the process of production and which reduce waste, improve quality of product and maximum utilization of available resources.
 6. **Differential piece rate system:** In order to motivate workers, incentive based wage system has been developed. This concept of piece rate system is based on competence of workers. The competent workers are paid more wages than incompetent one. It also encourages incompetent workers to improve their performance and achieve their standards.
-

List and explain the limitations of scientific approach of management given by F. W. Taylor.

Limitations of scientific approach of management given by F. W. Taylor

1. **Unfair mechanism:** Scientific Management main objective is to increase workers' productivity but management did not share the benefits of increased productivity with workers.
 2. **Depersonalized Work:** Scientific management everything is standardized. In short, workers have to do work repeatedly. These generate monotony and boredom.
 3. **Un-psychological:** In scientific Management there is no specific information given that how wages should be distributed as a result it becomes un-psychological.
 4. **Unoriginal:** F.W. Taylor has copied this approach from someone else's approach.
 5. **Unrealistic:** F.W.Taylor has not believed in motivation, financial needs also. That is the reason why this concept is unrealistic.
-

Explain business operation given by Henry Fayol.

Business Operation:

According to Fayol, the business operations of an organization could be divided into six activities.

1. **Technical:** producing and manufacturing products.
2. **Commercial:** Buying, selling and exchange.
3. **Financial:** Search for an optimal use of capital.
4. **Security:** protecting an employees and property.
5. **Accounting:** recording and taking stick of costs, profits and liabilities, maintain balance sheets, and compiling statistics.
6. **Managerial:** planning, organizing, commanding, coordinating and controlling.

Fayol identified five major functions: Fayol has identified five major functions: planning, organizing, commanding, coordinating and controlling. Fayol's five management

functions are clearly similar to the modern management function- planning, organizing, staffing, directing and controlling.

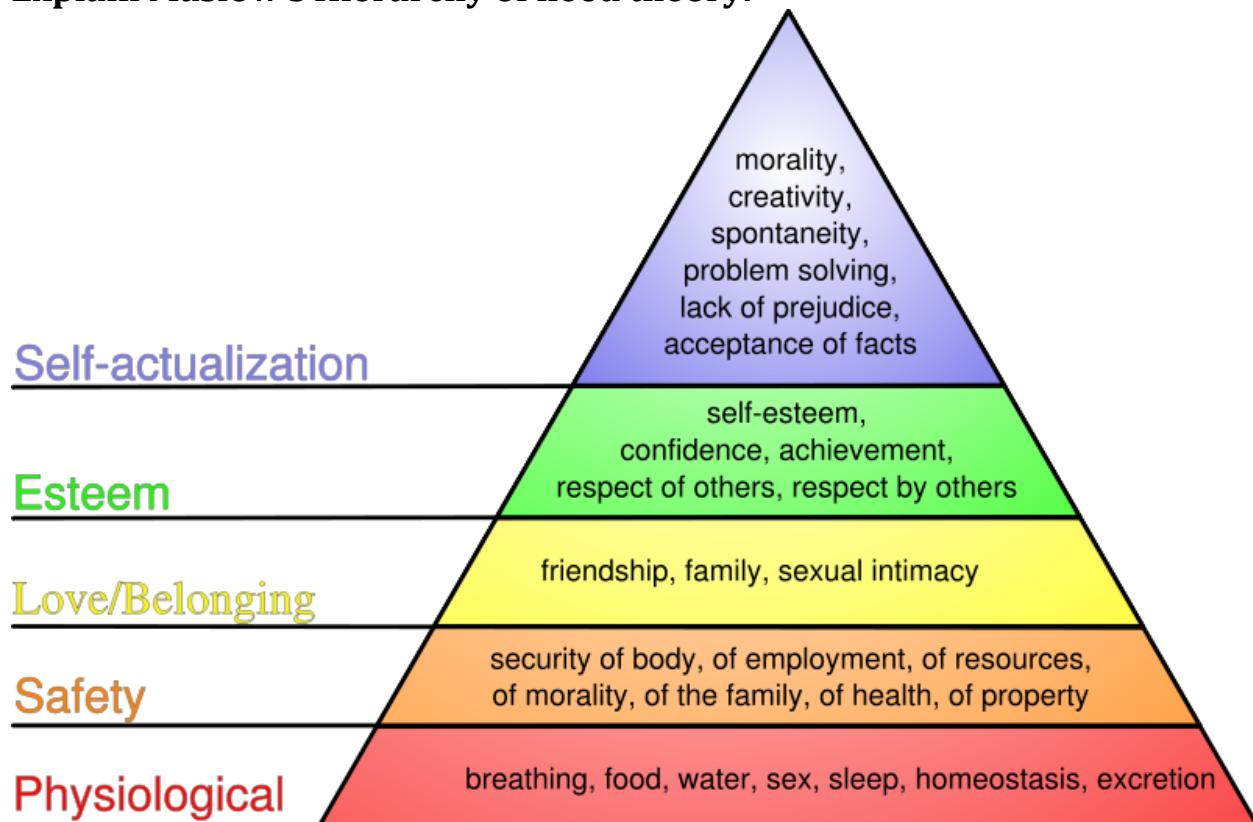
**Explain the principles of management as suggested by Henry Fayol. OR
 List and explain 14 principles of management given by Henry Fayol**

Fayol's fourteen principles of management

1. **Division of work:** According to Henry Fayol work should be divided and subdivided with various individual according to their expertise skills and knowledge in a particular area. With division of work it helps individual in acquiring speed, accuracy in his performance. Specialization leads to efficiency and effectiveness for organization.
2. **Authority and Responsibility:** the concept of authority and responsibility are closely related. Authority was defined by Fayol as the right to give orders and powers to match duty. Responsibility involves being accountable, and is therefore naturally associated with authority. Whoever assumes authority also assumes responsibility.
3. **Unity of command:** Subordinates should receive orders and be answerable to one and only one boss at a time. In other words, subordinates should not receive instructions from more than one person. Unity of command provides the enterprise of disciplined, stable and orderly existence. It creates harmonious relationship between superiors and sub-ordinates.
4. **Unity of Direction:** the entire organization should be moving towards a common direction. According to this principle, efforts of all the members of the organization should be directed towards common goal.
5. **Subordination of Individual Interests to the General Interests:** The interests of one person should not take priority over the interests of the organization as a whole.
6. **Equity:** Equity means all employees should be treated in organization as equally as possible. Equity is combination of fairness, kindness and justice.
7. **Order:** this principle is concerned with proper and systematic arrangement of things and people. Arrangement of things is called material order and people are called social order. Material order – there should be safe, appropriate and specific place for every material or machinery. Social order – selection and appointment of most suitable person on the right place. In short, right person at right place.
8. **Scalar Chain:** Managers in hierarchies are part of a chain like authority scale. Each manager, from the first line supervisor to the president, possesses certain amounts of authority. The President possesses the most authority; the first line supervisor the least. Lower level managers should always keep upper level managers informed of their work activities. The existence of a scalar chain and adherence to it are necessary if the organization is to be successful.
9. **Discipline:** According to Fayol, “Discipline means sincerity, respect of authority and observance of rules and regulation of the enterprise”. This principle applies that subordinate should respect their superiors and obey their order.

10. **Initiative:** Workers should be encouraged to take initiative in the work assigned to them. Fayol advised to them. Fayol advised that management should provide opportunity to its employees to suggest ideas, experiences and new method of work.
11. **Fair remuneration:** Fayol suggested that remuneration to be paid to the workers should be fair, reasonable, satisfactory and rewarding of the efforts. As far as possible remuneration should satisfy employer as well as employee. Fayol also recommended provision of other benefits such as free education, medical and residential facilities to workers.
12. **Stability:** Fayol emphasized that employees should not be moved frequently, from one job to another.
13. **Stability of Tenure of Personnel:** Retaining productive employees should always be a high priority of management. Recruitment and Selection Costs, as well as increased product-reject rates are usually associated with hiring new workers.
14. **Espirit de Corps:** Management should encourage harmony and general good feelings among employees.

Explain Maslow's Hierarchy of need theory.



Physiological Needs:

- Physiological needs are those required to sustain life, such as:
 - air
 - water
 - nourishment
 - sleep
- According to Maslow's theory, if such needs are not satisfied then one's motivation will arise from the quest to satisfy them. Higher needs such as social needs and esteem are not felt until one has met the needs basic to one's bodily functioning.

Safety

- Once physiological needs are met, one's attention turns to safety and security in order to be free from the threat of physical and emotional harm. Such needs might be fulfilled by:
 - Living in a safe area
 - Medical insurance
 - Job security
 - Financial reserves
- According to Maslow's hierarchy, if a person feels that he or she is in harm's way, higher needs will not receive much attention.

Social Needs

- Once a person has met the lower level physiological and safety needs, higher level needs become important, the first of which are social needs. Social needs are those related to interaction with other people and may include:
 - Need for friends
 - Need for belonging
 - Need to give and receive love

Esteem

- Once a person feels a sense of "belonging", the need to feel important arises. Esteem needs may be classified as internal or external. Internal esteem needs are those related to self-esteem such as self-respect and achievement. External esteem needs are those such as social status and recognition. Some esteem needs are:
 - Self-respect
 - Achievement
 - Attention
 - Recognition
 - Reputation
- Maslow later refined his model to include a level between esteem needs and self-actualization: the need for knowledge and aesthetics.

Self-Actualization

- Self-actualization is the summit of Maslow's hierarchy of needs. It is the quest of reaching one's full potential as a person. Unlike lower level needs, this need is never

fully satisfied; as one grows psychologically there are always new opportunities to continue to grow.

- Self-actualized people tend to have needs such as:
 - Truth
 - Justice
 - Wisdom
 - Meaning
 - Self-actualized persons have frequent occurrences of peak experiences, which are energized moments of profound happiness and harmony. According to Maslow, only a small percentage of the population reaches the level of self-actualization.
-

List and explain the qualities of a good leader.

Qualities of a good leader

1. **Proactive vs. Reactive:** The exceptional leader is always thinking three steps ahead. Working to his/her own environment with the goal of avoiding problems before they arise.
2. **Flexible/Adaptable**
How do you handle yourself in unexpected or uncomfortable situations? An effective leader will adapt to new surroundings and situations, doing his/her best to adjust.
3. **A Good Communicator:** As a leader, one must listen...a lot! You must be willing to work to understand the needs and desires of others. A good leader asks many questions, considers all options, and leads in the right direction.
4. **Respectful:** Treating others with respect will ultimately earn respect.
5. **Quiet Confidence:** Be sure of yourself with humble intentions.
6. **Enthusiastic:** Excitement is contagious. When a leader is motivated and excited about the cause people will be more inclined to follow.
7. **Open-Minded:** Work to consider all options when making decisions. A strong leader will evaluate the input from all interested parties and work for the betterment of the whole.
8. **Resourceful:** Utilize the resources available to you. If you don't know the answer to something find out by asking questions. A leader must create access to information.
9. **Rewarding:** An exceptional leader will recognize the efforts of others and reinforce those actions. We all enjoy being recognized for our actions!
10. **Well Educated:** Knowledge is power. Work to be well educated on community policies, procedures, organizational norms, etc. Further, your knowledge of issues and information will only increase your success in leading others.
11. **Open to Change:** A leader will take into account all points of view and will be willing to change a policy, program, cultural tradition that is outdated, or no longer beneficial to the group as a whole.
12. **Interested in Feedback:** How do people feel about your leadership skill set? How can you improve? These are important questions that a leader needs to constantly ask the chapter. View feedback as a gift to improve.

- 13. Evaluative:** Evaluation of events and programs is essential for an organization/group to improve and progress. An exceptional leader will constantly evaluate and change programs and policies that are not working.
- 14. Organized:** Are you prepared for meetings, presentations, and events and confident that people around you are prepared and organized as well?
- 15. Consistent:** Confidence and respect cannot be attained without your leadership being consistent. People must have confidence that their opinions and thoughts will be heard and taken into consideration.
- 16. Delegator:** An exceptional leader realizes that he/she cannot accomplish everything on his own. A leader will know the talents and interests of people around him/her, thus delegating tasks accordingly.
- 17. Initiative:** A leader should work to be the motivator, an initiator. He/she must be a key element in the planning and implementing of new ideas, programs, policies, events, etc.

List and explain the functions of management.

Functions of Management

1. Planning

- This is the core function of management because it is the foundation of the other four areas. Planning involves mapping out exactly how to achieve a specific goal. As a manager, he or she will need to map out detailed actions; what to do, when to do it and how it should be done. Think of it as bridging a gap for where we currently are and where we want to be. For example, if the company's goal is to earn profit, the manager needs to determine the steps necessary to achieve that goal. This can include spending more on advertising, hiring more experienced employees, cutting costs, or improving the products being sold.
- Planning is always a going process. There will be times when external factors will affect the company both positively and negatively. This in turn may alter the original planning process in reaching certain goals. This is known as strategic planning. Depending on the exact scope of an organization, the strategic planning process can look ahead as far as ten years or more. The findings are usually collected in a strategic planning document.

2. Organizing

- Immediately after planning, the manager needs to organize the team according to plan. This involves organizing all of the company's resources to implement a course of action and determining the organizational structure of the group. And in order to do this correctly, management will need to evaluate the different divisions of departments and the staff to figure out the best way to accomplish the tasks needed to reach their goals.
- This function is also known to be the backbone of management. Without organization, a company will have no structure and their day-to-day operation of business will most likely collapse. If management is disorganized, it can trickle down to the employees because they will lose confidence in their leaders.

3. Staffing

- The purpose of staffing is to control all recruitment and personnel needs of the organization. After management decides what they need, they may decide to hire more employees in a certain department. It is also responsible for training and development, promotions, transfers, and firing. A lot of times management and the human resource department will work together because their roles are similar in this case.
- The importance of this function has grown lately, mostly because of the increasing size of businesses and the advancement of technology. A good example of this is the IT department. The size of the IT department in a company ten years ago is nothing compared to what it is now because of the dependence we have on computers and servers. Without the staffing function, a business will certainly fail because there will not be an experienced, sufficient amount of employees within each department.

4. Directing

- Supervision, motivation, leadership, and communication are all involved in the directing function. Management needs to be able to oversee and influence the behavior of the staff and achieve the company's goals, whether that means assisting or motivating them. When morale is high within a company, it usually has a significant impact on job performance and efficiency. Incentive programs and rewards are a great way for a business to keep its employees happy and motivated.
- However, the most important aspect of directing is having good communication. This means building positive interpersonal relationships, effective problem solving and evaluating one another. Most directing takes place in meetings and other meeting sessions with the department leaders to ensure that everyone is on the same page. Poor communication will lead to poor execution in an organization.

5. Controlling

- The last function of management deals with monitoring the company's progress and ensuring that all of the other functions are operating efficiently. Since this is the last stage, there are bound to be some irregularities and complexity within the organization. This in turn can lead to certain situations and problems arising that are disrupting the company's goals. Given is the stage where all the final data is gathered, it is the management's job to take corrective action, even where there is the slightest deviance between actual and predictable results.

Explain the characteristics (nature, principles) of Planning.

Characteristics (nature, principles) of Planning

1. Planning is goal-oriented.

- Planning is made to achieve desired objective of business.
- The goals established should general acceptance otherwise individual efforts & energies will go misguided and misdirected.
- Planning identifies the action that would lead to desired goals quickly & economically.
- It provides sense of direction to various activities. E.g. Maruti Udyog is trying to capture once again Indian Car Market by launching diesel models.

2. Planning is looking ahead.

- Planning is done for future.
- It requires peeping in future, analyzing it and predicting it.
- Thus planning is based on forecasting.
- A plan is a synthesis of forecast.
- It is a mental predisposition for things to happen in future.

3. Planning is an intellectual process.

- Planning is a mental exercise involving creative thinking, sound judgment and imagination.
- It is not a mere guesswork but a rotational thinking.
- A manager can prepare sound plans only if he has sound judgement, foresight and imagination.

- Planning is always based on goals, facts and considered estimates.
- 4. Planning involves choice & decision making.**
 - Planning essentially involves choice among various alternatives.
 - Therefore, if there is only one possible course of action, there is no need planning because there is no choice.
 - Thus, decision making is an integral part of planning.
 - A manager is surrounded by no. of alternatives. He has to pick the best depending upon requirements & resources of the enterprises.
- 5. Planning is the primary function of management / Primacy of Planning.**
 - Planning lays foundation for other functions of management.
 - It serves as a guide for organizing, staffing, directing and controlling.
 - All the functions of management are performed within the framework of plans laid out.
 - Therefore planning is the basic or fundamental function of management.
- 6. Planning is a Continuous Process.**
 - Planning is a never ending function due to the dynamic business environment.
 - Plans are also prepared for specific period of time and at the end of that period, plans are subjected to revaluation and review in the light of new requirements and changing conditions.
 - Planning never comes to an end till the enterprise exists issues, problems may keep cropping up and they have to be tackled by planning effectively.
- 7. Planning is all Pervasive.**
 - It is required at all levels of management and in all departments of enterprise.
 - Of course, the scope of planning may differ from one level to another.
 - The top level may be more concerned about planning the organization as a whole whereas the middle level may be more specific in departmental plans and the lower level plans implementation of the same.
- 8. Planning is designed for efficiency.**
 - Planning leads to accomplishment of objectives at the minimum possible cost.
 - It avoids wastage of resources and ensures adequate and optimum utilization of resources.
 - A plan is worthless or useless if it does not value the cost incurred on it.
 - Therefore planning must lead to saving of time, effort and money.
 - Planning leads to proper utilization of men, money, materials, methods and machines.
- 9. Planning is Flexible.**
 - Planning is done for the future.
 - Since future is unpredictable, planning must provide enough room to cope with the changes in customer's demand, competition, govt. policies etc.
 - Under changed circumstances, the original plan of action must be revised and updated to make it more practical.

Explain the importance (advantages) of Planning.

Importance (advantages) of Planning

1. Planning facilitates management by objectives.

- Planning begins with determination of objectives.
- It highlights the purposes for which various activities are to be undertaken.
- In fact, it makes objectives more clear and specific.
- Planning helps in focusing the attention of employees on the objectives or goals of enterprise.
- Without planning an organization has no guide.
- Planning compels manager to prepare a Blue-print of the courses of action to be followed for accomplishment of objectives.
- Therefore, planning brings order and rationality into the organization.

2. Planning minimizes uncertainties.

- Business is full of uncertainties.
- There are risks of various types due to uncertainties.
- Planning helps in reducing uncertainties of future as it involves anticipation of future events.
- Although future cannot be predicted with cent percent accuracy but planning helps management to anticipate future and prepare for risks by necessary provisions to meet unexpected turn of events.
- Therefore with the help of planning, uncertainties can be forecasted which helps in preparing standbys as a result, uncertainties are minimized to a great extent.

3. Planning facilitates co-ordination.

- Planning revolves around organizational goals.
- All activities are directed towards common goals.
- There is an integrated effort throughout the enterprise in various departments and groups.
- It avoids duplication of efforts. In other words, it leads to better co-ordination.
- It helps in finding out problems of work performance and aims at rectifying the same.

4. Planning improves employee's moral.

- Planning creates an atmosphere of order and discipline in organization.
- Employees know in advance what is expected of them and therefore conformity can be achieved easily.
- This encourages employees to show their best and also earn reward for the same.
- Planning creates a healthy attitude towards work environment which helps in boosting employees moral and efficiency.

5. Planning helps in achieving economies.

- Effective planning secures economy since it leads to orderly allocation of resources to various operations.
- It also facilitates optimum utilization of resources which brings economy in operations.

- It also avoids wastage of resources by selecting most appropriate use that will contribute to the objective of enterprise. For example, raw materials can be purchased in bulk and transportation cost can be minimized. At the same time it ensures regular supply for the production department, that is, overall efficiency.

6. Planning facilitates controlling.

- Planning facilitates existence of certain planned goals and standard of performance.
- It provides basis of controlling.
- We cannot think of an effective system of controlling without existence of well thought out plans.
- Planning provides pre-determined goals against which actual performance is compared.
- In fact, planning and controlling are the two sides of a same coin. If planning is root, controlling is the fruit.

7. Planning provides competitive edge.

- Planning provides competitive edge to the enterprise over the others which do not have effective planning. This is because of the fact that planning may involve changing in work methods, quality, quantity designs, extension of work, redefining of goals, etc.
- With the help of forecasting not only the enterprise secures its future but at the same time it is able to estimate the future motives of its competitor which helps in facing future challenges.
- Therefore, planning leads to best utilization of possible resources, improves quality of production and thus the competitive strength of the enterprise is improved.

8. Planning encourages innovations.

- In the process of planning, managers have the opportunities of suggesting ways and means of improving performance.
- Planning is basically a decision making function which involves creative thinking and imagination that ultimately leads to innovation of methods and operations for growth and prosperity of the enterprise.

Explain the process (steps) of Planning.

Process (steps) of Planning

1. Establishment of objectives

- Planning requires a systematic approach.
- Planning starts with the setting of goals and objectives to be achieved.
- Objectives provide a rationale for undertaking various activities as well as indicate direction of efforts.
- Moreover objectives focus the attention of managers on the end results to be achieved.
- As a matter of fact, objectives provide nucleus to the planning process. Therefore, objectives should be stated in a clear, precise and unambiguous language. Otherwise the activities undertaken are bound to be ineffective.
- As far as possible, objectives should be stated in quantitative terms. For example, Number of men is working, wages given, units produced, etc. But such an objective

cannot be stated in quantitative terms like performance of quality control manager, effectiveness of personnel manager.

- Such goals should be specified in qualitative terms.
- Hence objectives should be practical, acceptable, workable and achievable.

2. Establishment of Planning Premises

- Planning premises are the assumptions about the lively shape of events in future.
- They serve as a basis of planning.
- Establishment of planning premises is concerned with determining where one tends to deviate from the actual plans and causes of such deviations.
- It is to find out what obstacles are there in the way of business during the course of operations.
- Establishment of planning premises is concerned to take such steps that avoid these obstacles to a great extent.
- Planning premises may be internal or external. Internal includes capital investment policy, management labor relations, philosophy of management, etc. Whereas external includes socio- economic, political and economic changes.
- Internal premises are controllable whereas external are non- controllable.

3. Choice of alternative course of action

- When forecast are available and premises are established, a number of alternative course of actions have to be considered.
- For this purpose, each and every alternative will be evaluated by weighing its pros and cons in the light of resources available and requirements of the organization.
- The merits, demerits as well as the consequences of each alternative must be examined before the choice is being made.
- After objective and scientific evaluation, the best alternative is chosen.
- The planners should take help of various quantitative techniques to judge the stability of an alternative.

4. Formulation of derivative plans

- Derivative plans are the sub plans or secondary plans which help in the achievement of main plan.
- Secondary plans will flow from the basic plan. These are meant to support and expedite the achievement of basic plans.
- These detail plans include policies, procedures, rules, programmes, budgets, schedules, etc. For example, if profit maximization is the main aim of the enterprise, derivative plans will include sales maximization, production maximization, and cost minimization.
- Derivative plans indicate time schedule and sequence of accomplishing various tasks.

5. Securing Co-operation

- After the plans have been determined, it is necessary rather advisable to take subordinates or those who have to implement these plans into confidence.
- The purposes behind taking them into confidence are :-
- Subordinates may feel motivated since they are involved in decision making process.

- The organization may be able to get valuable suggestions and improvement in formulation as well as implementation of plans.
- Also the employees will be more interested in the execution of these plans.

6. Follow up/Appraisal of plans

- After choosing a particular course of action, it is put into action.
- After the selected plan is implemented, it is important to appraise its effectiveness.
- This is done on the basis of feedback or information received from departments or persons concerned.
- This enables the management to correct deviations or modify the plan.
- This step establishes a link between planning and controlling function.
- The follow up must go side by side the implementation of plans so that in the light of observations made, future plans can be made more realistic.

Explain the characteristics (features, nature, principles) of Organizing.

Characteristics (nature, principles) of Organizing

1. **Identifying and Enumerating the Activities:** After the objective is selected, the management has to identify total task involved and its break-up closely related component activities that are to be performed by an individual or division or a department.
2. **Assigning the Duties:** When activities have been grouped according to similarities and common purposes, they should be organized by a particular department. Within the department, the functional duties should be allotted to particular individuals.
3. **Defining and Granting the Authority:** The authority and responsibility should be well defined and should correspond to each other. A close relationship between authority and responsibility should be established.
4. **Creating Authority Relationship:** After assigning the duties and delegations of authority, the establishment of relationship is done. It involves deciding who will act under whom, who will be his subordinates, what will be his span of control and what will be his status in the organization. Besides these formal relationships, some informal organizations should also be developed.
5. **Specialization and division of work:** The entire philosophy of organization is centered on the concepts of specialization and division of work. The division of work is assigning responsibility for each organizational component to a specific individual or group thereof. It becomes specialization when the responsibility for a specific task lies with a designated expert in that field. The efforts of the operatives are coordinated to allow the process at hand to function correctly. Certain operatives occupy positions of management at various points in the process to ensure coordination.
6. **Orientation towards goals:** Every organization has its own purposes and objectives. Organizing is the function employed to achieve the overall goals of the organization. Organization harmonizes the individual goals of the employees with overall objectives of the firm.

7. **Composition of individuals and groups:** Individuals form a group and the groups form an organization. Thus, organization is the composition of individual and groups. Individuals are grouped into departments and their work is coordinated and directed towards organizational goals.
8. **Continuity:** An organization is a group of people with a defined relationship in which they work together to achieve the goals of that organization. This relationship does not come to end after completing each task. Organization is a never ending process.

Explain the importance (advantages) of Organizing.

Importance (advantages) of Organizing

1. **Facilitated Administration and management:** Organization is an important and the only tool to achieve enterprise goals set by administration and explained by management. Sound organization increases efficiency, avoids delay and duplication of work, increases managerial efficiency, increases promptness, and motivates employees to perform their responsibility.
2. **Stimulates Creativity:** A sound and well-conceived organization structure is the source of creative thinking and initiation of new ideas.
3. **Co-ordination in the Enterprises:** Different jobs and positions are welded together by structural relationship of the organization. The organizational process exerts its due and balanced emphasis on the co-ordination of various activities.
4. **Eliminates Overlapping and Duplication or work:** Over lapping and duplication of work exists when the work distribution is not clearly identified and the work is performed in a haphazard and disorganized way. Since a good organization demands that the duties be clearly assigned amongst workers, such overlapping and duplication is totally eliminated.
5. **Helps to achieve organizational goal:** Organization is employed to achieve the overall objectives of business firms. Organization focuses attention of individual's objectives towards overall objectives.
6. **Optimum use of resources:** To make optimum use of resources such as men, material, money, machine and method, it is necessary to design an organization properly. Work should be divided and right people should be given right jobs to reduce the wastage of resources in an organization.
7. **To perform managerial function:** Planning, Organizing, Staffing, Directing and Controlling cannot be implemented without proper organization.
8. **Facilitates growth and diversification:** A good organization structure is essential for expanding business activity. Organization structure determines the input resources needed for expansion of a business activity similarly organization is essential for product diversification such as establishing a new product line.
9. **Humane treatment of employees:** Organization has to operate for the betterment of employees and must not encourage monotony of work due to higher degree of specialization. Now, organization has adapted the modern concept of systems approach based on human relations and it discards the traditional productivity and specialization approach.

Explain the process (steps) of Organizing.

Process (steps) of Organizing

1. Identification and Division of Work:

- The first step of organizing is the identification and division of work. At this step, the total work is divided into various activities.
- For example, the various activities of a mobile phone manufacturing company can be like this (i) purchase of raw material, (ii) purchase of manufactured parts, (iii) Production, (iv) stocking of goods, (v) research, (vi) advertisement, (vii) sales, (viii) financial arrangement (ix) maintenance of accounts, (x) correspondence (xi) arrangement of employees, etc.

2. Departmentalization:

- The departmentalization of activities starts once the various activities have been designed to achieve the objectives of the company. The activities of the same nature are grouped together and assigned to a particular department (It is known as grouping.) e.g., purchase of raw material, purchase of manufactured parts, etc. are given to the purchase department.
- And productions, stocking the goods, research activities are given to the production department. Similarly, advertisement and sales can be given to the marketing department and the financial arrangements, maintenance of accounts and correspondence can be put in the charge of finance department.

3. Assignment of Duties:

- At this stage, the responsibility of each individual or post is decided, e.g., the purchase manager will be given the task of purchasing goods, the sales manager will be given the work of sale of goods, the advertising manager will be given the work of advertisement and in the same way the finance manager will be given the responsibility of making financial arrangements.
- While assigning these duties, it is important to match the nature of the work and the capabilities of the person to whom the work is given.

4. Establishing Reporting Relations:

- When two or more than two persons work for the attainment of common goals their interrelationship must be defined very clearly. Everybody should know as to who is his superior and subordinate?
- For example, the purchase manager will be the superior for all the employees of the purchase department; they will receive orders from him and will also be responsible to him.

Explain the characteristics (features, nature, principles) of Staffing.

Characteristics (nature, principles) of Staffing

1. **Staffing is a function of management:** Staffing is one of the important functions of management. Previously the staffing was considered as the part of the organizing function but now it is considered as a separate and distinct function of management and provides the due importance to the manning of the organizational roles.

2. **Managerial Responsibility:** Staffing is an integral part of the management process and also it is the responsibility of every manager. In the large or big organization staffing function is performed by the separate personnel department. It is the duty of every manager to perform the staffing activities such as selection, training, performance appraisal, and remuneration of the employees.
3. **Affected by internal and external environment:** The performance of the staffing function depends upon both the internal and external factors. Internal factors include the policies and rules of the company regarding the recruitment, selection, promotion, and transfer of employees. Further the external factors include the government policies and the education policies which affect the demand and supply of the suitable manpower in the economy.
4. **Concerned with the human element:** The function of staffing is concerned with the recruitment and selection of the human resources. Additionally the human relation skills are required for training, development, and performance appraisal of the employees in the organization. So if the function of staffing is performed properly it will certainly help in improving the human relations in the organization.
5. **Staffing is a continuous function:** Staffing function is continuously performed in the established as well as in the new organization. In the new organization the functions of recruitment and selection are given more importance and in the established organizations the functions of promotion, development, training, and the performance appraisal of the employees is given more importance. So staffing is the continuous and never ending process because of the changes in the work force of the organization.
6. **Purpose:** The purpose of staffing is to ensure that the right number and the right type of the people are working on the right jobs at the right time and right place. Its objective is to ensure optimum and efficient manpower in the enterprise.

Explain the importance (advantages) of Staffing.

Importance (advantages) of Staffing

1. **Facilitating the availability of competent staff:** The efficient performance of the company depends upon the quality of the people employed. Staffing discovers the efficient and talented staff for the various positions in the organization, which prove as an asset for the enterprise.
2. **Optimum use of human resources:** Recruitment, selection, training, and development of the human resources require a large amount of outlay and cost of the companies. So for getting the maximum output from the personnel staffing function is required to be performed in the efficient manner.
3. **Development of human resources:** Staffing adopts various measures to develop the managers to their maximum so that they can accept more challenging jobs and shoulder more responsibilities. Staffing trains and develops the personnel's for the future jobs.
4. **Motivating the human resources:** Staff is placed on the job, for which they are best suitable, which gives them sense of satisfaction and pleasure. Staffing also help in determining the capability of employees for the promotions and the other financial and

non-financial incentives. So suitable incentives are provided to the employees which motivates them to perform better at work.

5. **Supplying the necessary information:** Staffing provides the information regarding promotion, transfer, retirement, and demotion of employees in the organization. This information helps in taking various important decisions regarding the employees.
6. **Ensuring the maximum productivity:** Selection of the most suitable employee for the every job provides the right men on the right job. This ensures the maximum productivity with the minimum wastage. Staffing also increases the productivity of the workers as they are placed on their best suited jobs.

Explain the process (steps) of Staffing.

Process (steps) of Staffing

1. **Determining manpower requirement:** The first step in the process of staffing is to determine the number and type of manpower required in the organization. In this complicated environment this determination is done by the top management. The period for which the personnel's are required is also determined. This determination of the manpower requirements is made after considering the acquisition, utilization, improvement, and preservation of the organization's human assets.
2. **Recruitment and selection:** In this step the acquisition of the most competent and qualified staff to meet the manpower requirements is made. After this the applicants are evaluated for the different positions. The best candidates are selected and the right jobs are assigned to them.
3. **Training and the development of the personnel:** In this step the training and development of the employees is arranged to secure the efficiency of the operations. Training increases the efficiency of the employees and makes them more competent and useful for the organization.
4. **Performance appraisal:** Periodic evaluation of the employees is made to know about their capabilities. This evaluation of the employees is made in the terms of verifiable objectives.
5. **Compensation:** In this step the compensation and remuneration of the employees or workers is determined. While determining the remuneration it is considered that the personnel's should get the remuneration according to the work done by them. Further, the incentives are also determined for motivating the employees for performing better at work.
6. **Job Changes:** According to the needs of the enterprise the suitable employees are promoted to the higher ranks. Also if there is requirement the employees can also be shifted from one job to another with the same level of responsibilities and rank.

Explain the characteristics (features, nature, principles) of Directing.

Characteristics (features, nature, principles) of Directing

1. **Pervasive Function:** Directing is required at all levels of organization. Every manager provides guidance and inspiration to his subordinates.

2. **Continuous Activity:** Direction is a continuous activity as it continues throughout the life of organization.
3. **Human Factor:** Directing function is related to subordinates and therefore it is related to human factor. Since human factor is complex and behavior is unpredictable, direction function becomes important.
4. **Creative Activity:** Direction function helps in converting plans into performance. Without this function, people become inactive and physical resources are meaningless.
5. **Executive Function:** Direction function is carried out by all managers and executives at all levels throughout the working of an enterprise; a subordinate receives instructions from his superior only.
6. **Delegate Function:** Direction is supposed to be a function dealing with human beings. Human behavior is unpredictable by nature and conditioning the people's behavior towards the goals of the enterprise is what the executive does in this function. Therefore, it is termed as having delicacy in it to tackle human behavior.

Explain the importance (advantages) of Directing.

Importance (advantages) of Directing

1. **It Initiates Actions:** Directions is the function which is the starting point of the work performance of subordinates. It is from this function the action takes place, subordinates understand their jobs and do according to the instructions laid. Whatever are plans laid, can be implemented only once the actual work starts. It is there that direction becomes beneficial.
2. **It Ingrates Efforts:** Through direction, the superiors are able to guide, inspire and instruct the subordinates to work. For this, efforts of every individual towards accomplishment of goals are required. It is through direction the efforts of every department can be related and integrated with others. This can be done through persuasive leadership and effective communication. Integration of efforts bring effectiveness and stability in a concern.
3. **Means of Motivation:** Direction function helps in achievement of goals. A manager makes use of the element of motivation here to improve the performances of subordinates. This can be done by providing incentives or compensation, whether monetary or non - monetary, which serves as a "Morale booster" to the subordinates. Motivation is also helpful for the subordinates to give the best of their abilities which ultimately helps in growth.
4. **It Provides Stability:** Stability and balance in concern becomes very important for long term survival in the market. This can be brought upon by the managers with the help of four tools or elements of direction function - judicious blend of persuasive leadership, effective communication, strict supervision and efficient motivation. Stability is very important since that is an index of growth of an enterprise. Therefore a manager can use of all the four traits in him so that performance standards can be maintained.
5. **Coping up with the changes:** It is a human behavior that human beings show resistance to change. Adaptability with changing environment helps in sustaining planned growth and becoming a market leader. It is directing function which is of use to meet with

changes in environment, both internal as external. Effective communication helps in coping up with the changes. It is the role of manager here to communicate the nature and contents of changes very clearly to the subordinates. This helps in clarifications, easy adaptions and smooth running of an enterprise. For example, if a concern shifts from handlooms to power looms, an important change in technique of production takes place. The resulting factors are less of manpower and more of machinery. This can be resisted by the subordinates. The manager here can explain that the change was in the benefit of the subordinates. Through more mechanization, production increases and thereby the profits. Indirectly, the subordinates are benefited out of that in form of higher remuneration.

6. **Efficient Utilization of Resources:** Direction finance helps in clarifying the role of every subordinate towards his work. The resources can be utilized properly only when less of wastages, duplication of efforts, overlapping of performances, etc. don't take place. Through direction, the role of subordinates become clear as manager makes use of his supervisory, the guidance, the instructions and motivation skill to inspire the subordinates. This helps in maximum possible utilization of resources of men, machine, materials and money which helps in reducing costs and increasing profits.

Explain the characteristics (features, nature, principles) of Controlling.

Characteristics (nature, principles) of Controlling

1. **Control is a Managerial Process:** Management process comprises of five functions, viz., planning, organizing, staffing, directing and controlling. Thus, control is part of the process of management.
2. **Control is forward looking:** Whatever has happened has happened, and the manager can take corrective action only of the future operations. Past is relevant to suggest what has gone wrong and how to correct the future.
3. **Control exists at each level of Organization:** Anyone who is a manager, has to involve into control – may be Chairman, Managing Director, CEO, Departmental head, or first line manager. However, at every level the control will differ – top management would be involved in strategic control, middle management into tactical control and lower level into operational control.
4. **Control is a Continuous Process:** Controlling is not the last function of management but it is a continuous process. Control is not a one-time activity, but a continuous process. The process of setting the standards needs constant analysis and revision depending upon external forces, plans, and internal performance.
5. **Control is closely linked with Planning:** Planning and controlling are closely linked. The two are rightly called as ‘Siamese twins’ of management. “Every objective, every goal, every policy, every procedure and every budget become standard against which actual performance is compared. Planning sets the ship’s course and controlling keeps it on course. When the ship begins to veer off the course, the navigator notices it and recommends a new heading designed to return the ship to its proper course. Once control process is over its findings are integrated into planning to prescribe new standards for control.

6. **Purpose of Controlling is Goal Oriented and hence positive:** Control is there because without it the business may go off the track. The controlling has positive purpose both for the organization (to make things happen) and individuals (to give up a part of their independence for the attainment of organizational goals).

Explain the importance (advantages) of Controlling.

Importance (advantages) of Controlling

1. **Guides the Management in Achieving Pre-determined Goals:** The continuous flow of information about projects keeps the long range of planning on the right track. It helps in taking corrective actions in future if the performance is not up to the mark.
2. **Ensures Effective Use of Scarce and Valuable Resources:** The control system helps in improving organizational efficiency. Various control devices act as motivators to managers. The performance of every person is regularly monitored and any deficiency if present is corrected at the earliest. Controls put psychological pressure on persons in the organization. On the other hand control also enables management to decide whether employees are doing right things.
3. **Facilitates Coordination:** Control helps in coordination of activities through unity of action. Every manager will try to coordinate the activities of his subordinates in order to achieve departmental goals. Similarly the chief executive also coordinates the functioning of various departments. The control acts as a check on the performance and proper results are achieved only when activities are coordinated.
4. **Leads to Delegation and Decentralization of Authority:** A decision about follow-up action is also facilitated. Control makes delegation easier/better. Decentralization of authority is necessary in big enterprises. The management cannot delegate authority without ensuring proper control. The targets or goals of various departments are used as a control technique. Various control techniques like budgeting, cost control; pre action approvals etc. allow decentralization without losing control over activities.
5. **Spares Top Management to Concentrate on Policy Making:** For control processes management's attention is not required every now and then. The management by exception enables top management to concentrate on policy formulation.

Explain the process (steps) of Controlling.

Process (steps) of Controlling

1. **Establish the Standards:** Within an organization's overall strategic plan, managers define goals for organizational departments in specific, precise, operational terms that include standards of performance to compare with organizational activities. However, for some of the activities the standards cannot be specific and precise. Standards, against which actual performance will be compared, may be derived from past experience, statistical methods and benchmarking (based upon best industry practices). As far as possible, the standards are developed bilaterally rather than top management deciding unilaterally, keeping in view the organization's goals. Standards may be tangible (clear, concrete, specific, and generally measurable) – numerical standards,

monetary, physical, and time standards; and intangible (relating to human characteristics) – desirable attitudes, high morale, ethics, and cooperation.

2. **Measure Actual Performance:** Most organizations prepare formal reports of performance measurements both quantitative and qualitative (where quantification is not possible) that the managers review regularly. These measurements should be related to the standards set in the first step of the control process. For example, if sales growth is a target, the organization should have a means of gathering and reporting sales data. Data can be collected through personal observation (through management by walking around the place where things are happening), statistical reports (made possible by computers), oral reporting (through conferencing, one-to-one meeting, or telephone calls), written reporting (comprehensive and concise, accounting information – normally a combination of all). To be of use, the information flow should be regular and timely.
3. **Compare Performance with the Standards:** This step compares actual activities to performance standards. When managers read computer reports or walk through their plants, they identify whether actual performance meets, exceeds, or falls short of standards. Typically, performance reports simplify such comparison by placing the performance standards for the reporting period alongside the actual performance for the same period and by computing the variance—that is, the difference between each actual amount and the associated standard. The manager must know of the standard permitted variation (both positive and negative). Management by exception is most appropriate and practical to keep insignificant deviations away. Timetable for the comparison depends upon many factors including importance and complexity attached with importance and complexity.
4. **Take Corrective Action and Reinforcement of Successes:** When performance deviates from standards, managers must determine what changes, if any, are necessary and how to apply them. In the productivity and quality-centered environment, workers and managers are often empowered to evaluate their own work. After the evaluator determines the cause or causes of deviation, he or she can take the fourth step—corrective action. The corrective action may be to maintain status quo (reinforcing successes), correcting the deviation, or changing standards. The most effective course may be prescribed by policies or may be best left up to employees' judgment and initiative. The corrective action may be immediate or basic (modifying the standards themselves).

Define Organization (Organizational structure) also list and explain characteristics (features) of Organization.

Organization

- An organized group of people with a particular purpose, such as a business or government department.
- A social unit of people that is structured and managed to meet a need or to pursue collective goals.

- All organizations have a management structure that determines relationships between the different activities and the members, and subdivides and assigns roles, responsibilities, and authority to carry out different tasks. Organizations are open systems they affect and are affected by their environment.

Characteristics (features) of Organization

1. **Outlining the Objectives:** Born with the enterprise is their long-life objective of profitable manufacturing and selling its products. Other objectives must be established by the administration from time to time to aid and support this main objective.
2. **Identifying and Computing the Activities:** After the objective is selected, the management has to identify total task involved and its break-up closely related component activities that are to be performed by an individual or division or a department.
3. **Assigning the Duties:** When activities have been grouped according to similarities and common purposes, they should be organized by a particular department. Within the department, the functional duties should be allotted to particular individuals.
4. **Defining and Granting the Authority:** The authority and responsibility should be well defined and should correspond to each other. A close relationship between authority and responsibility should be established.
5. **Creating Authority Relationship:** After assigning the duties and delegations of authority, the establishment of relationship is done. It involves deciding who will act under whom, who will be his subordinates, what will be his span of control and what will be his status in the organization. Besides these formal relationships, some informal organizations should also be developed.
6. **Division of Work:** Division of work is the basis of an organization. In other words, there can be no organization without division of work. Under division of work, the entire work of business is divided into many departments. The work of every department is further subdivided into sub works.
7. **Coordination:** Under organization different persons are assigned different works but the aim of all these persons happens to be the same the attainment of the objectives of the enterprise. Organization ensures that the work of all the persons depends on each other's work even though it happens to be different. Hence, it helps in establishing coordination.

List and explain the advantages (importance/ Need/ Significance) of Organization.

Advantages (importance/ Need/ Significance) of Organization

1. **It Facilitated Administration and management:** Organization is an important and the only tool to achieve enterprise goals set by administration and explained by management. Sound organization increases efficiency, avoids delay and duplication of work, increases managerial efficiency, increases promptness, and motivates employees to perform their responsibility.

2. **It Help in the Growth of Enterprise:** Good organization is helpful to the growth, expansion and diversifications of the enterprise.
3. **It Ensures Optimum Use of Human Resources:** Good organization establishes persons with different interests, skills, knowledge and viewpoints.
4. **It Stimulates Creativity:** A sound and well-conceived organization structure is the source of creative thinking and initiation of new ideas.
5. **A Tool of Achieving Objectives:** Organization is a vital tool in the hands of the management for achieving set objectives of the business enterprise.
6. **Prevents Corruption:** Usually corruption exists in those enterprises which lack sound organization. Sound organization prevents corruption by raising the morale of employees. They are motivated to work with greater efficiency, honesty and devotion.
7. **Co-ordination in the Enterprises:** Different jobs and positions are welded together by structural relationship of the organization. The organizational process exerts its due and balanced emphasis on the co-ordination of various activities.
8. **Eliminates Overlapping and Duplication or work:** Over lapping and duplication of work exists when the work distribution is not clearly identified and the work is performed in a haphazard and disorganized way. Since a good organization demands that the duties be clearly assigned amongst workers, such overlapping and duplication is totally eliminated.

List and explain the principles of Organization.

Principles of Organization

1. **Principle of unity of objectives:** Organizational goals, departmental goals, and individual goals must be clearly defined. All goals and objectives must have uniformity. When there is contradiction among different level of goals desired goals can't be achieved. Therefore, unity of objectives is necessary.
2. **Principle of specialization:** Sound and effective organization believes on organization. The term specialization is related to work and employees. When an employee takes special type of knowledge and skill in any area, it is known as specialization. Modern business organization needs the specialization, skill and knowledge by this desired sector of economy and thus, efficiency would be established.
3. **Principle of coordination:** In an organization many equipment, tools are used. Coordination can be obtained by group effort that emphasize on unity of action.
4. **Principle of authority:** Authority is the kind of right and power through which it guides and directs the actions of others so that the organizational goals can be achieved. It is also related with decision making. It is vested in particular position, not to the person because authority is given by an institution and therefore it is legal. It generally flows from higher level to lowest level of management.
5. **Principle of responsibility:** Authentic body of an organization is top level management, top level management direct the subordinates. Departmental managers and other personnel take the direction from top level management to perform the task. Authority is necessary to perform the work .only authority is not provided to the people but

obligation is also provided. So the obligation to perform the duties and task is known as responsibility. Responsibility can't be delegated. It can't be avoided.

6. **Principle of delegation:** Process of transferring authority and creation of responsibility between superior and subordinates to accomplish a certain task is called delegation of authority. Authority is only delegated, not responsibilities in all levels of management. The authority delegated should be equal to responsibility.
7. **Principle of efficiency:** In enterprise different resources are used. These resources must be used in effective manner. When the organization fulfill the objectives with minimum cost, it is effective. Organization must always concentrate on efficiency.
8. **Principle of unity of command:** Subordinates should receive orders from single superior at a time and all subordinates should be accountable to that superior. More superior leads to confusion, delay and so on.
9. **Principle of span of control:** Unlimited subordinates can't be supervised by manager, this principle thus helps to determine numerical limit if subordinates to be supervised by a manager. This improves efficiency.
10. **Principle of balance:** The functional activities their establishment and other performances should be balanced properly. Authority, centralization, decentralization must be balance equally. This is very challenging job but efficient management must keep it.
11. **Principle of communication:** Communication is the process of transformation of information from one person to another of different levels. It involves the systematic and continuous process of telling, listening and understanding opinions ideas, feelings, information, views etc, in flow of information.
12. **Principle of personal ability:** For sound organization, human resources are important. Employees must be capable. Able employees can perform higher. Mainly training and development programs must be encouraged to develop the skill in the employees.
13. **Principle of flexibility:** Organizational structure must be flexible considering the environmental dynamism. Sometimes, dramatically change may occur in the organization and in that condition, organization should be ready to accept the change.
14. **Principle of simplicity:** This principle emphasizes the simplicity of organizational structure, the structure if organization should be simple with minimum number of levels do that its member an understand duties and authorities.

List and explain the functions of Organization.

Functions of Organization

1. **To define the role of the individual:** An individual employed in an enterprise must know his role, position and relationship with other personnel in his department and with others. Organization becomes necessary so that the persons involved in the enterprise can identify themselves in the enterprise. It is through the organization that one can know his position and role in the unit. He can relate his position with other members of the enterprise.
2. **Determination of authority:** The assignment of a certain role proposes the granting of certain authority so that performance can be possible. Organization is necessary to

define the authority i.e., the rights and powers of men in different positions which would help them to discharge their assigned roles.

3. **Fixation of responsibility:** Each individual is assigned a certain duty organizational structure defines what performance is expected of a member of the unit of the department of the enterprise. Absence or faulty determination of responsibility will lead to irresponsible functions, behavior and attitudes.
4. **Specialization:** Modern production and management techniques are based on the idea of specialization which means the performance of different parts of a job by persons specifically suited for them. Organization is basically required to promote specialization. Efficient and smooth functioning is possible when different elements of a job are performed by experts and their efforts are pooled to attain the desired and product.
5. **Coordination:** Since the pattern of managerial operations is to be based on die division' of labor, there arises the need of coordinating the activities of various individuals or that of different departments. They perform diverse, activities and these have to be woven into the main fabric.
6. **Proper utilization of human resources:** The most important thing for enterprises is to make the best possible use of its human resources. There must not be wastage or misapplication of human efforts. This is of great importance for economy as well as for the achievement of objectives.
7. **Efficient functioning:** Efficiency is to be the watchword of an enterprise, all the factors mentioned above will have a great impact on the efficient functioning of the enterprise, and Organization avoids all duplication in jobs, overlapping and wastage. It promotes speedy, smooth and efficient functioning of the enterprise.

Explain formal Organization and informal Organization.

Formal Organization:

- When the managers are carrying on organizing process then as a result of organizing process an organizational structure is created to achieve systematic working and efficient utilization of resources. This type of structure is known as formal organizational structure.
- Formal organizational structure clearly spells out the job to be performed by each individual, the authority, responsibility assigned to every individual, the superior-subordinate relationship and the designation of every individual in the organization. This structure is created intentionally by the managers for achievement of organizational goal.

Features of Formal organization:

1. The formal organisational structure is created intentionally by the process of organising.
2. The purpose of formal organisation structure is achievement of organisational goal.
3. In formal organisational structure each individual is assigned a specific job.
4. In formal organisation every individual is assigned a fixed authority or decision-making power.
5. Formal organisational structure results in creation of superior-subordinate relations.

6. Formal organisational structure creates a scalar chain of communication in the organisation.

Advantages of Formal Organisation:

1. **Systematic Working:** Formal organisation structure results in systematic and smooth functioning of an organisation.
2. **Achievement of Organisational Objectives:** Formal organisational structure is established to achieve organisational objectives.
3. **No Overlapping of Work:** In formal organisation structure work is systematically divided among various departments and employees. So there is no chance of duplication or overlapping of work.
4. **Co-ordination:** Formal organisational structure results in coordinating the activities of various departments.
5. **Creation of Chain of Command:** Formal organisational structure clearly defines superior subordinate relationship, i.e., who reports to whom.
6. **More Emphasis on Work:** Formal organisational structure lays more emphasis on work than interpersonal relations.

Disadvantages of Formal Organisation:

1. **Delay in Action:** While following scalar chain and chain of command actions get delayed in formal structure.
2. **Ignores Social Needs of Employees:** Formal organisational structure does not give importance to psychological and social need of employees which may lead to demotivation of employees.
3. **Emphasis on Work Only:** Formal organisational structure gives importance to work only; it ignores human relations, creativity, talents, etc.

Informal Organisation

- In the formal organisational structure individuals are assigned various job positions. While working at those job positions, the individuals interact with each other and develop some social and friendly groups in the organisation. This network of social and friendly groups forms another structure in the organisation which is called informal organisational structure.
- The informal organisational structure gets created automatically and the main purpose of such structure is getting psychological satisfaction. The existence of informal structure depends upon the formal structure because people working at different job positions interact with each other to form informal structure and the job positions are created in formal structure. So, if there is no formal structure, there will be no job position, there will be no people working at job positions and there will be no informal structure.

Features of informal organisation:

1. Informal organisational structure gets created automatically without any intended efforts of managers.

2. Informal organisational structure is formed by the employees to get psychological satisfaction.
3. Informal organisational structure does not follow any fixed path of flow of authority or communication.
4. Source of information cannot be known under informal structure as any person can communicate with anyone in the organisation.
5. The existence of informal organisational structure depends on the formal organisation structure.

Advantages of Informal Organisation:

1. **Fast Communication:** Informal structure does not follow scalar chain so there can be faster spread of communication.
2. **Fulfils Social Needs:** Informal communication gives due importance to psychological and social need of employees which motivate the employees.
3. **Correct Feedback:** Through informal structure the top level managers can know the real feedback of employees on various policies and plans.
4. **Strategic Use of Informal Organisation.** Informal organisation can be used to get benefits in the formal organisation in the following way:
 - The knowledge of informal group can be used to gather support of employees and improve their performance.
 - Through grapevine important information can be transmitted quickly.
 - By cooperating with the informal groups the managers can skillfully take the advantage of both formal and informal organisations.

Disadvantages of Informal organisation:

1. **Spread Rumors:** According to a survey 70% of information spreads through informal organisational structure are rumors which may mislead the employees.
2. **No Systematic Working:** Informal structure does not form a structure for smooth working of an organisation.
3. **May Bring Negative Results:** If informal organisation opposes the policies and changes of management, then it becomes very difficult to implement them in organisation.
4. **More Emphasis to Individual Interest:** Informal structure gives more importance to satisfaction of individual interest as compared to organisational interest.

List and explain different types of Organization.

Types of Organization

Line Organisation

- A line organisation has only direct, vertical relationships between different levels in the firm. There is only line departments-departments directly involved in accomplishing the primary goal of the organisation. For example, in a typical firm, line departments include production and marketing. In a line organisation authority follows the chain of command.

Features

- Line organization has an only direct vertical relationship between different levels in the firm.

Advantages:

1. A line structure tends to simplify and clarify responsibility, authority and accountability relationships. The levels of responsibility and authority are likely to be precise and understandable.
2. Tends to simplify and clarify authority, responsibility and accountability relationships
3. Because line organisations are usually small, managements and employees have greater closeness.
4. A line structure promotes fast decision making and flexibility.
5. Simple to understand.

Disadvantages:

1. As the firm grows larger, line organisation becomes more ineffective.
2. Improved speed and flexibility may not offset the lack of specialized knowledge.
3. Managers may have to become experts in too many fields.
4. There is a tendency to become overly dependent on the few key people who perform numerous jobs.
5. Neglects specialists in planning
6. Overloads key persons.

Staff or Functional Authority Organisation

- The jobs or positions in an organisation can be categorized as:
 1. Line position: A position in the direct chain of command that is responsible for the achievement of an organization's goals and
 2. Staff position: A position intended to provide expertise, advice and support for the line positions.
- The line officers or managers have the direct authority (known as line authority) to be exercised by them to achieve the organisational goals. The staff officers or managers have staff authority (i.e., authority to advise the line) over the line. This is also known as functional authority.
- An organisation where staffs departments have authority over line personnel in narrow areas of specialization is known as functional authority organisation.
- In the line organisation, the line managers cannot be experts in all the functions they are required to perform. But in the functional authority organisation, staff personnel who are specialists in some fields are given functional authority (The right of staff specialists to issue orders in their own names in designated areas).
- The principle of unity of command is violated when functional authority exists i.e., a worker or a group of workers may have to receive instructions or orders from the line supervisor as well as the staff specialist which may result in confusion and the conflicting orders from multiple sources may lead to increased ineffectiveness. Some staff specialists may exert direct authority over the line personnel, rather than exert

advice authority (for example, quality control inspector may direct the worker as well as advise in matters related to quality).

- While this type of organisational structure overcomes the disadvantages of a pure line organisational structure, it has some major disadvantages:
 1. The potential conflicts resulting from violation of principle of unity of command and
 2. The tendency to keep authority centralized at higher levels in the organisation.

Line and Staff Organisation

- Most large organisations belong to this type of organisational structure. These organisations have direct, vertical relationships between different levels and also specialists responsible for advising and assisting line managers. Such organisations have both line and staff departments. Staff departments provide line people with advice and assistance in specialized areas (for example, quality control advising production department).
- The line functions are production and marketing whereas the staff functions include personnel, quality control, research and development, finance, accounting etc. The staff authority of functional authority organisational structure is replaced by staff responsibility so that the principle of unity of command is not violated.
- Three types of specialized staff can be identified:
 1. Advising,
 2. Service and
 3. Control.

Features:

1. Line and staff have direct vertical relationship between different levels.
2. Staff specialists are responsible for advising and assisting line managers/officers in specialized areas.
3. These types of specialized staff are (1) Advisory, (2) Service, (3) Control
 - Advisory: Management information system, Operation Research and Quantitative Techniques, Industrial Engineering, Planning etc
 - Service: Maintenance, Purchase, Stores, Finance, Marketing.
 - Control: Quality control, Cost control, Auditing etc.

Advantages:

1. Use of expertise of staff specialists.
2. Span of control can be increased
3. Relieves line authorities of routine and specialized decisions.
4. No need for all round executives.

Disadvantages:

1. Conflict between line and staff may still arise.
2. Staff officers may resent their lack of authority.
3. Co-ordination between line and staff may become difficult.

Committee Organisation

- Committee can be defined as a group of organisational members who discuss and develop solutions to problems. It can be either line or staff and can be established on a standing (permanent) or an adhoc basis.
- In business enterprises, the board of directors constitutes the committee at the highest level. The purpose of such committees is to discuss various problems and recommend solutions to the management.

Features

1. Formed for managing certain problems/situations
2. Are temporary decisions.

Advantages:

1. Committee decisions are better than individual decisions
2. Better interaction between committee members leads to better co-ordination of activities
3. Committee members can be motivated to participate in group decision making.
4. Group discussion may lead to creative thinking.

Disadvantages:

1. Committees may delay decisions, consume more time and hence more expensive.
2. Group action may lead to compromise and indecision.
3. 'Buck passing' may result.

Matrix Organisational Structure:

- It is a permanent organisation designed to achieve specific results by using teams of specialists from different functional areas in the organisation.
- This type of organisation is often used when the firm has to be highly responsive to a rapidly changing external environment.
- In matrix structures, there are functional managers and product (or project or business group) managers. Functional managers are in charge of specialized resources such as production, quality control, inventories, scheduling and marketing. Product or business group managers are in charge of one or more products and are authorized to prepare product strategies or business group strategies and call on the various functional managers for the necessary resources.
- The problem with this structure is the negative effects of dual authority. The functional managers may lose some of their authority because product managers are given the budgets to purchase internal resources. In a matrix organisation, the product or business group managers and functional managers have somewhat equal power. There is possibility of conflict and frustration but the opportunity for prompt and efficient accomplishment is quite high.

Feature:

- Superimposes a horizontal set of divisions and reporting relationships onto a hierarchical functional structure

Advantages:

1. Decentralized decision making.
2. Strong product/project co-ordination.
3. Improved environmental monitoring.
4. Fast response to change.
5. Flexible use of resources.
6. Efficient use of support systems.

Disadvantages:

1. High administration cost.
2. Potential confusion over authority and responsibility.
3. High prospects of conflict.
4. Overemphasis on group decision making.
5. Excessive focus on internal relations.

Hybrid Organisational Structure:

- A hybrid organizational structure is an approach to designing the internal operating structure of a company or other entity in a manner that makes use of several different organizational patterns, rather than relying on one particular model.
- Depending on the nature and type of the organization, this approach may combine various elements of lateral and hierarchical structures, coming up with a unique blend that is ideal for the purposes and culture of the organization involved.
- Typically, a hybrid organizational structure will seek to integrate the most desirable elements of other approaches to business organization into the model, while arranging the corporate structure so that any elements seen as liabilities are kept to a minimum.

Advantages:

1. Alignment of corporate and divisional goals.
2. Functional expertise and efficiency.
3. Adaptability and flexibility in divisions.

Disadvantages:

1. Conflicts between corporate departments and units.
2. Excessive administration overhead.
3. Slow response to exceptional situations.

Explain (Differentiate) centralization and decentralization.

Basis of Comparison	Centralization	Decentralization
Meaning	The retention of powers and authority with respect to planning and decisions, with the top management, is known as Centralization.	The dissemination of authority, responsibility and accountability to the various management levels, is known as Decentralization.
Communication Flow	Vertical	Open and Free
Decision Making	Slow	Comparatively faster
Advantage	Proper coordination and Leadership	Sharing of burden and responsibility

Power of decision making	Lies with the top management.	Multiple persons have the power of decision making.
Reasons	Inadequate control over the organization	Considerable control over the organization
Best suited for	Small sized organization	Large sized organization

List and explain factors affecting centralization and decentralization.

Factors affecting centralization and decentralization

- Importance of the decision:** How would be decision made affect the culture and image of the organization.
- Size of the organization:** A larger organization with several duties and function would highly need a much decentralized structure on its divisions.
- Willingness of top people to delegate power:** Leadership style at the top contributes so much to any kind of organization structure. Democratic leadership is much more willing to discuss and delegate some duties to others.
- Willingness of the subordinates to accept responsibility:** There should be interest from the subordinates to take responsibility and assume authority to enable delegation of duties to take place.
- Availability of management talents:** The subordinates should have enough managerial know-how and skills to be able to make just and proper decisions that is in the interest of the organization. This would mean training them to be in a position to carry out decision making efficiently.
- Rate of growth:** Organization which is static would remain for long time centralized as there are no more duties and programmes to be decentralized as opposed to continually growing organization which could have a branch in a different area, be it geographical or operational that will need line managers.

Explain Span of Control.

Span of Control

- Span of Control means the number of subordinates that can be managed efficiently and effectively by a superior in an organization. It suggests how the relations are designed between a superior and a subordinate in an organization.
- Span of control is of two types:
 - Narrow span of control:** Narrow Span of control means a single manager or supervisor oversees few subordinates. This gives rise to a tall organizational structure.
 - Wide span of control:** Wide span of control means a single manager or supervisor oversees a large number of subordinates. This gives rise to a flat organizational structure.

Factors affecting Span of Control

- Job complexity:** Subordinate jobs that are complex, ambiguous, dynamic or otherwise complicated will likely require more management involvement and a narrower span of management.

2. **Similarity of subordinate jobs:** The more similar and routine the tasks that subordinates are performing, the easier it is for a manager to supervise employees and the wider the span of management that will likely be effective.
3. **Physical proximity of subordinates:** The more geographically dispersed a group of subordinates the more difficult it is for a manager to be in regular contact with them and the fewer employees a manager could reasonably oversee, resulting in a narrower span of management.
4. **Abilities of employees:** Managers who supervise employees that lack ability, motivation, or confidence will have to spend more time with each employee. The result will be that the manager cannot supervise as many employees and would be most effective with a narrower span of management.
5. **Abilities of the manager:** Some managers are better organized, better at explaining things to subordinates, and more efficient in performing their jobs. Such managers can function effectively with a wider span of management than a less skilled manager.
6. **Technology:** Cell phones, email, and other forms of technology that facilitate communication and the exchange of information make it possible for managers to increase their spans of management over managers who do not have access to or who are unable to use the technology.

Explain Departmentation (Departmentalization) and also explain its advantages (benefits/merits).

Departmentation (Departmentalization)

- Departmentalization is an aspect of organizational design that includes the subdivision of a business into units based on their function or other criteria.
- In departmentalization, similar activities are grouped together to form various departments.
- For example, all the activities relating to accounts are grouped together to make the accounts department. Similarly, we have purchase department, production department, sales department, finance department, human resource (HR) department, etc.
- So, departmentalization is the process of dividing the organization into different departments. It is the process by which an organization expands horizontally. There are many bases or types of departmentalization. A department consists of, head of department, specific functions and staff. The head of department (HOD) is responsible to the CEO of the organization for the functions of his department.

Advantages of Departmentation

1. **Develop specialization:** Departmentalization leads to the benefits of specialization. In departmentalization, works are divided into different departments on the basis of their nature and responsibility is entrusted to skilled and efficient manager. When a manager is involved in one specific function, his expertise and efficiency increases in that particular field.

2. **Administrative control:** In departmentalization, the standard of performance of each department and objective to be achieved is planned. When actual performance deviates with planned performance, corrective measures are taken to remove the barriers.
3. **Fixation of responsibility:** Departmentalization divides works into different units on the basis of nature and responsibility is entrusted to departmental managers. And the departmental managers are accountable to the job performed by the staff of their concerned departments.
4. **Helpful for expansion:** Departmentalization facilitates top manager to direct and supervise the work performed by subordinate managers. It also helps to divide work into different units on the basis of nature, and responsibility is entrusted to departmental managers. Such division of work, thus, is helpful for expansion of business.
5. **Management development:** Departmentalization helps to develop new managers by providing them opportunity to take independent decision and initiatives. Consequently, a high skilled subordinate level manager can get opportunity to promote to the higher level.

Explain methods (types/bases) of Departmentation.

Methods (types/bases) of Departmentation

1. **Functional departmentalization:** Grouping activities by functions performed. Activities can be grouped according to function (work being done) to pursue economies of scale by placing employees with shared skills and knowledge into departments for example human resources, IT, accounting, manufacturing, logistics, and engineering. Functional departmentalization can be used in all types of organizations.
2. **Product departmentalization:** Grouping activities by product line. Tasks can also be grouped according to a specific product or service, thus placing all activities related to the product or the service under one manager. Each major product area in the corporation is under the authority of a senior manager who is specialist in, and is responsible for, everything related to the product line. LA Gear is an example of company that uses product departmentalization. Its structure is based on its varied product lines which include women's footwear etc.
3. **Customer departmentalization:** Grouping activities on the basis of common customers or types of customers. Jobs may be grouped according to the type of customer served by the organization. The assumption is that customers in each department have a common set of problems and needs that can best be met by specialists. The sales activities in an office supply firm can be broken down into three departments that serve retail, wholesale and government accounts.
4. **Geographic departmentalization:** Grouping activities on the basis of territory. If an organization's customers are geographically dispersed, it can group jobs based on geography. For example, the organization structure of Coca-Cola has reflected the company's operation in two broad geographic areas – the North American sector and the international sector, which includes the Pacific Rim, the European Community, Northeast Europe, Africa and Latin America groups.

5. **Process departmentalization:** Grouping activities on the basis of product or service or customer flow. Because each process requires different skills, process departmentalization allows homogenous activities to be categorized. For example, the applicants might need to go through several departments namely validation, licensing and treasury, before receiving the driver's license.
6. **Divisional departmentalization:** When the firm develops independent lines of business that operate as separate companies, all contributing to the corporation profitability, the design is called divisional departmentalization or (M-FORM).

Define Market, Marketing and Marketing management.

Market

- Market refers to the physical location where buyers and sellers meet for concluding a deal e.g cloth market, vegetable market etc.

Marketing

- Marketing is a specialized activity directed towards bringing together a producer on one hand and consumer or a buyer on the other.

Marketing management

- Marketing management is defined as the process of overseeing and planning new product development, advertising, promotions and sales.
- Marketing management facilitates the activities and functions which are involved in the distribution of goods and services.
- According to Philip Kotler, Marketing management is the analysis, planning, implementation and control of programmes designed to bring about desired exchanges with target markets for the purpose of achieving organizational objectives.

Explain characteristics (features) of Marketing Management.

Characteristics (features) of Marketing Management

1. **Customer-orientation:** All business activities should be directed to create and satisfy the customer. Importance on the needs and wants of consumers keep the business on the right track. All marketing decisions should be made on the basis of their impact on the customer. Consumer becomes the guide of business.

2. **Marketing Research:** Under the marketing concept; knowledge and understanding of customer's needs, wants and desires is very vital. Therefore, a regular and systematic marketing research program is required to keep abreast of the market. In addition, innovation and creativity are necessary to match the products of requirements of customers.

Up-to-date and adequate knowledge must be available to answer the following questions:

- What business are we really in?
- Who are our customers?
- What do the customers want?
- How should we distribute our products?
- How can we communicate most effectively with our customers?

3. **Marketing Planning:** The marketing concept calls for a goal-oriented approach to marketing. The overall objectives of the firm should be the earning of profits through satisfaction of customers. On the basis of this goal, the objectives and policies of marketing and other departments should be defined precisely. Marketing planning helps to inject the philosophy of consumer-orientation into the total business systems and serves as a guide to the organization's efforts.

4. **Integrated Marketing:** Once the organizational and departmental goals are formulated, it becomes necessary to match the organizational goals with the goals of the individuals working in the organization. The activities and operation of various organizational units should be properly coordinated to achieve the defined objectives. The marketing department should develop the marketing mix which is most appropriate for accomplishing the desired goals through the satisfaction of customers.
5. **Customer Satisfaction:** The aim should be to maximize profit over the long run through the satisfaction of customers wants.
6. **Marketing is both a Science and Art:** Marketing is a science as it provides some general principles to guide the managers in their working. Marketing is an art as every situation requires to be tackled differently and in an effective manner. Neither the science should be over-emphasized nor should art be discounted. The reality is that both of them go together and are both mutually interdependent and complementary.
7. **Voluntary Exchange of Values:** Marketing is always about exchange of value to each other without any coercion or force, i.e., voluntary exchange. Selling is only a tip of marketing iceberg. Value assessment is a subjective assessment of benefits. A customer benefits include what a buyer receives in exchange. Buyer's cost includes price, time, effort, and risk (s)/he undertakes. The marketer must provide equal value through marketing mix.
8. **Achievement of Organizational Objectives and Customer Needs:** Marketing is a purposeful activity. It is always to achieve the organizational objectives as well as satisfying customers. Organizational objective for a commercial organization may be profit and for a non-commercial organization it may be different (police wants to bring down crimes, and anti-tobacco campaign wants to eliminate tobacco consumption).
9. **Selection of Target Markets:** No marketer can satisfy everyone in the market. A marketer has to select target markets rather than a quixotic attempt to win every market and be all things to all men. Not everyone likes the same diaper, shampoo or car. Therefore, marketers start with market segmentation, choosing a target groups (s), identifying target group needs and requirements and meeting these needs in a better way than the competitors through suitable marketing mix.
10. **Beneficial to all the Stakeholders:** Favoring one of the stakeholders at the cost of others cannot be marketing. Profit maximization, by hook or crook, may be beneficial to the firm, but customer will lose. Making use of polythene bags may make convenience for the customers, but environment will suffer.

Explain importance of Marketing Management.

Importance of Marketing Management

1. **Marketing Helps in Transfer, Exchange and Movement of Goods:** Marketing is very helpful in transfer, exchange and movement of goods. Goods and services are made available to customers through various intermediaries' viz., wholesalers and retailers etc. Marketing is helpful to both producers and consumers. To the former, it tells about

the specific needs and preferences of consumers and to the latter about the products that manufacturers can offer.

2. **Marketing is Helpful in Raising and Maintaining the Standard of Living of the Community:** Marketing is above all the giving of a standard of living to the community. Paul Mazur states, "Marketing is the delivery of standard of living". Professor Malcolm McNair has further added that "Marketing is the creation and delivery of standard of living to the society". By making available the uninterrupted supply of goods and services to consumers at a reasonable price, marketing has played an important role in raising and maintaining living standards of the community. Community comprises of three classes of people i.e., rich, middle and poor. Everything which is used by these different classes of people is supplied by marketing.
3. **Marketing Creates Employment:** Marketing is complex mechanism involving many people in one form or the other. The major marketing functions are buying, selling, financing, transport, warehousing, risk bearing and standardization, etc. In each such function different activities are performed by a large number of individuals and bodies. Thus, marketing gives employment to many people.
4. **Marketing as a Source of Income and Revenue:** The performance of marketing function is all important, because it is the only way through which the concern could generate revenue or income and bring in profits. Buskirk has pointed out that, "Any activity connected with obtaining income is a marketing action. Marketing should be given the greatest importance, since the very survival of the firm depends on the effectiveness of the marketing function.
5. **Marketing Acts as a Basis for Making Decisions:** A businessman is met with many problems in the form of what, how, when, how much and for whom to produce? In the past problems was less on account of local markets. There was a direct link between producer and consumer. In modern times marketing has become a very complex and tedious task. Marketing has emerged as new specialized activity along with production. As a result, producers are depending largely on the mechanism of marketing, to decide what to produce and sell. With the help of marketing techniques a producer can regulate his production accordingly.
6. **Marketing Acts as a Source of New Ideas:** The concept of marketing is a dynamic concept. It has changed altogether with the passage of time. Such changes have far reaching effects on production and distribution. With the rapid change in tastes and preference of people, marketing has to come up with the same. Marketing as an instrument of measurement, gives scope for understanding this new demand pattern and thereby produce and make available the goods accordingly.
7. **Marketing is Helpful in Development of an Economy:** Adam Smith has remarked that "nothing happens in our country until somebody sells something". The marketing organization, more scientifically organized, makes the economy strong and stable, the lesser the stress on the marketing function, the weaker will be the economy.

Explain Marketing concepts.

Marketing 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.

Explain Marketing Mix.

OR

Explain 4 P's of Marketing.

Marketing Mix OR 4 P's of Marketing

1. **Product:** The product is either a tangible good or an intangible service that is seem to meet a specific customer need or demand. All products follow a logical product life cycle and it is vital for marketers to understand and plan for the various stages and their unique challenges. It is key to understand those problems that the product is attempting to solve. Here are some examples of the product decisions to be made:
 - Brand name
 - Functionality
 - Styling
 - Quality
 - Safety
 - Packaging
 - Repairs and Support
 - Warranty
 - Accessories and services
2. **Price:** Price covers the actual amount the end user is expected to pay for a product. How a product is priced will directly affect how it is sold. If a product is priced higher or lower than its perceived value, then it will not sell. This is why it is imperative to understand how a customer sees what you are selling. Price may also be affected by distribution plans, value chain costs and markups and how competitors price a rival product. Some examples of pricing decisions to be made include:
 - Pricing strategy (skim, penetration, etc.)
 - Suggested retail price
 - Volume discounts and wholesale pricing
 - Cash and early payment discounts
 - Seasonal pricing

- Bundling
 - Price flexibility
3. **Promotion:** The marketing communication strategies and techniques all fall under the promotion heading. These may include advertising, sales promotions, special offers and public relations. Whatever the channel is used, it is necessary for it to be suitable for the product, the price and the end user it is being marketed to. It is important to differentiate between marketing and promotion. Promotion is just the communication aspect of the entire marketing function. Some examples of promotion decisions include:
- Advertising
 - Personal selling & sales force
 - Sales promotions
 - Public relations & publicity
4. **Place:** Place or placement has to do with how the product will be provided to the customer. Distribution is a key element of placement. The placement strategy will help assess what channel is the most suited to a product. How a product is accessed by the end user also needs to compliment the rest of the product strategy. Some examples of place decisions include:
- Distribution channels
 - Market coverage (inclusive, selective, or exclusive distribution)
 - Specific channel members
 - Inventory management
 - Warehousing
 - Distribution centers
 - Order processing
 - Transportation

Define Demand Forecasting and also explain characteristics of Demand Forecasting.

Demand Forecasting

- Demand forecasting is predicting future demand for the product.
- In other words it refers to the prediction of probable demand for a product or a service on the basis of the past events and normal trends in the present.

Characteristics of Demand Forecasting

1. **Accuracy:** Various important plants are prepared on the basis of forecasts. In case of wrong forecasting, the business may be in trouble and suffer heavy losses. Hence it is necessary to have such forecasting system which amounts to maximum accuracy.
2. **Simplicity:** Forecasting method should be as simple as possible. If it is difficult or technical then the person, who is engaged in forecasting job, will not do his job properly and there will be chances always for mistake. Some information's may also require being collected from outsiders. If his method is complex or difficult then they may not be able to reply reasonably and accurately.

3. **Availability:** The objects and scope of forecasting should be as such as the relevant information are collected immediately with reasonable accuracy.
4. **Stability:** The data of forecasting must be such wherein the future changes are expected to be minimum and are reliable for planning.
5. **Economy:** Costs must be weighed against the importance of the forecast to the operations of the business.
6. **Utility:** The forecasting techniques must be easily understandable and reliable to the management.
7. **Consistency:** The forecaster has to deal with various components which are independent. If he does not make an adjustment in one component to bring it in line with a forecast of another, he would achieve a whole which would appear consistent.

Explain different methods of forecasting.

Methods of forecasting

- There are two approaches of demand forecasting
 1. Survey methods
 2. Statistical methods

Survey methods

1. **Experts' Opinion Poll:** Refers to a method in which experts are requested to provide their opinion about the product. Generally, in an organization, sales representatives act as experts who can assess the demand for the product in different areas, regions, or cities. Sales representatives are in close touch with consumers; therefore, they are well aware of the consumers' future purchase plans, their reactions to market change, and their perceptions for other competing products. They provide an approximate estimate of the demand for the organization's products. This method is quite simple and less expensive.
2. **Delphi Method:** Refers to a group decision-making technique of forecasting demand. In this method, questions are individually asked from a group of experts to obtain their opinions on demand for products in future. These questions are repeatedly asked until a consensus is obtained. In addition, in this method, each expert is provided information regarding the estimates made by other experts in the group, so that he/she can revise his/her estimates with respect to others' estimates. In this way, the forecasts are cross checked among experts to reach more accurate decision making. Every expert is allowed to react or provide suggestions on others' estimates. However, the names of experts are kept anonymous while exchanging estimates among experts to facilitate fair judgment and reduce halo effect. The main advantage of this method is that it is time and cost effective as a number of experts are approached in a short time without spending on other resources. However, this method may lead to subjective decision making.
3. **Market Experiment Method:** Involves collecting necessary information regarding the current and future demand for a product. This method carries out the studies and experiments on consumer behavior under actual market conditions. In this method, some areas of markets are selected with similar features, such as population, income

levels, cultural background, and tastes of consumers. The market experiments are carried out with the help of changing prices and expenditure, so that the resultant changes in the demand are recorded. These results help in forecasting future demand.

Statistical methods

1. **Trend Projection Method:** 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.
2. **Barometric Method:** In barometric method, demand is predicted on the basis of past events or key variables occurring in the present. This method is also used to predict various economic indicators, such as saving, investment, and income. This technique helps in determining the general trend of business activities. For example, suppose government allots land to the XYZ society for constructing buildings. This indicates that there would be high demand for cement, bricks, and steel. The main advantage of this method is that it is applicable even in the absence of past data. However, this method is not applicable in case of new products. In addition, it loses its applicability when there is no time lag between economic indicator and demand.
3. **Econometric Methods:** Econometric methods combine statistical tools with economic theories for forecasting. The forecasts made by this method are very reliable than any other method. An econometric model consists of two types of methods namely, regression model and simultaneous equations model.
4. **Other Statistical Measures:** Apart from statistical methods, there are other methods for demand forecasting. These measures are very specific and used for only particular datasets. Therefore, their usage cannot be generalized for all types of research. The different types of statistical measures are index number, time series analysis, decision tree analysis etc.

Define Market Segmentation also explain its types.

OR

Define Market Segmentation also explain bases for segmentation.

Market Segmentation

- Market segmentation is a marketing strategy which involves dividing a broad target market into subsets of consumers, businesses, or countries that have, or are perceived to have, common needs, interests, and priorities, and then designing and implementing strategies to target them.

Types of Market Segmentation

- Consumer markets can be segmented on the following customer characteristics.
 1. Geographic
 2. Demographic
 3. Psychographic
 4. Behavioristic

Geographic Segmentation

- The following are some examples of geographic variables often used in segmentation.
 - Region: by continent, country, state, or even neighborhood
 - Size of metropolitan area: often classified as urban, suburban, or rural
 - Population density: segmented according to size of population
 - Climate: according to weather patterns common to certain geographic regions

Demographic Segmentation

- Some demographic segmentation variables include:
 - Age
 - Gender
 - Family size
 - Family lifecycle
 - Generation: baby-boomers, Generation X, etc.
 - Income
 - Occupation
 - Education
 - Ethnicity
 - Nationality
 - Religion
 - Social class
- Many of these variables have standard categories for their values. For example, family lifecycle often is expressed as bachelor, married with no children (DINKS: Double Income, No Kids), full-nest, empty-nest, or solitary survivor. Some of these categories have several stages, for example, full-nest I, II, or III depending on the age of the children.

Psychographic Segmentation

- Psychographic segmentation groups customers according to their lifestyle. Activities, interests, and opinions (AIO) surveys are one tool for measuring lifestyle. Some psychographic variables include:
 - Activities
 - Interests
 - Opinions
 - Attitudes
 - Values

Behavioristic Segmentation

- Behavioral segmentation is based on actual customer behavior toward products. Some behavioristic variables include:
 - Benefits sought
 - Usage rate
 - Brand loyalty
 - User status: potential, first-time, regular, etc.
 - Readiness to buy
 - Occasions: holidays and events that stimulate purchases
- Behavioral segmentation has the advantage of using variables that are closely related to the product itself. It is a fairly direct starting point for market segmentation.

Explain advantages (benefits/merits) and disadvantages (demerits) of Market Segmentation.

Advantages (benefits) of Market Segmentation

1. The marketer can spot and compare marketing opportunities. He can examine the needs of each segment and determine to what extent the current offering satisfies these needs. Segments which have low level of satisfaction from current offerings represent excellent opportunities for the marketer.
2. With the help of knowledge about different segments, the marketer can better allocate the total marketing budget. Differences in customer response to different marketing tools serve as the basis for deciding on the allocation of market funds to different customer groups.
3. The marketer can modify his product/service and marketing appeals to suit the target segment.
4. Segmentation facilitates setting up of realistic selling targets and priorities.
5. Management can identify new profitable segments which deserve special attention.
6. It is possible to deal with competition more effectively by using resources more effectively.
7. Appropriate service packages can be developed for each market segment.

Disadvantages (demerits) of Market Segmentation

1. Segmentation increases costs. When a firm attempts to serve several market segments, there is a proliferation of products. Cost of production rises due to shorter production runs and product variations.
2. Larger inventory has to be maintained by both the manufacturer and the distributors.
3. Promotion and distribution expenditures increase when separate programmes are used for different market segments.
4. When characteristics of a market segment change, investment made already might become useless.

Define Finance Management.

Finance Management

- Financial management refers to the efficient and effective management of money (funds) in such a manner as to accomplish the objectives of the organization.
- It is the specialized function directly associated with the top management.
- According to Solomon, “Financial management is concerned with the efficient use of an important economic resource, namely, capital funds.”
- According to J. L. Massie, “Financial management is the operational activity of a business that is responsible for obtaining and effectively utilizing the funds necessary for efficient operation.”
- According to Weston & Brigham, “Financial management is an area of financial decision making harmonizing individual motives & enterprise goals.”
- According to Howard & Upton, “Financial management is the application of the planning & control functions of the finance function.”
- According to J. F. Bradley, “Financial management is the area of business management devoted to the judicious use of capital & careful selection of sources of capital in order to enable a spending unit to move in the direction of reaching its goals.”

Explain objectives (goals) of Finance Management.

Aims of Finance Management

1. **Acquiring Sufficient Funds:** The main aim of finance function is to assess the financial needs of an enterprise and then finding out suitable sources for raising them. The sources should be commensurate with the need of the business. If funds are needed for longer period's then long term sources like share capital, debentures, term loans may be explored.
2. **Proper Utilization of Funds:** Though raising of funds is important but their effective utilization is more important. The funds should be used in such a way that maximum benefit is derived from them. The returns from their use should be more than their cost.
3. **Increasing Profitability:** The planning and control of finance function aims at increasing profitability of the concern. To increase profitability sufficient funds will have to be invested. Finance function should be so planned that the concern neither suffers from inadequacy of funds nor wastes more funds than required. A proper control should also be exercised so that scarce resources are not frittered away on uneconomical operations.
4. **Maximizing Firm’s Value:** Finance function also aims at maximizing the value of the firm. Besides profits, the type of sources used for raising funds, the cost of funds, the condition of money market, the demand for products are some other considerations which also influence a firm’s value.
5. **Reduction in cost:** Capital and equity funds are utilized for production. So all types of steps should be taken to reduce firm’s cost of capital.
6. **Sources of funds:** It should be decided by keeping in view the value of the firm to collect funds through issue of shares or debentures.

7. **Reduce risks:** There won't be profits without risk. But for this reason if more risk is taken, it may become danger to the existence of the firm. Hence risk should be reduced to minimum level.
8. **Long run value:** It should be the feature of financial management to increase the long-run value of the firm. To earn more profits in short time, some firms may do the activities like releasing of low quality goods, neglecting the interests of consumers and employees.

Explain characteristics (features) of Finance Management.

Characteristics (features) of Finance Management

1. **Analytical Thinking:** Under financial management financial problems are analyzed and considered. Study of trend of actual figures is made and ratio analysis is done.
2. **Continuous Process:** Previously financial management was required rarely but now the financial manager remains busy throughout the year.
3. **Basis of Managerial Decisions:** All managerial decisions relating to finance are taken after considering the report prepared by the finance manager. The financial management is the base of managerial decisions.
4. **Maintaining Balance between Risk and Profitability:** Larger the risk in the business larger is the expectation of profits. Financial management maintains balance between the risk and profitability.
5. **Coordination between Process:** There is always a coordination between various processes of the business.
6. **Centralized Nature:** Financial management is of a centralized nature. Other activities can be decentralized but there is only one department for financial management.

Explain scope of Finance Management.

Scope of Finance Management

1. **Estimating Financial Requirements:** The first task of financial manager is to estimate short term and long-term financial requirements of his business. For this purpose, he will prepare a financial plan for present as well as for future. The amount required for purchasing fixed assets as well as for working capital will have to be ascertained.
2. **Deciding Capital Structure:** The capital structure refers to the kind and proportion of different securities for raising funds. After deciding about the quantum of funds required, it should be decided which type of securities should be raised. It may be wise to finance fixed assets through long-term debts and current assets through short-term debts.
3. **Selecting a Source of Finance:** After preparing capital structure, an appropriate source of finance is selected. Various sources from which finance may be raised include: share capital, debentures, financial institutions, commercial banks, public deposits etc. If finance is needed for short period then banks, public deposits and financial institutions may be appropriate. On the other hand, if long-term finance is required then, share capital, and debentures may be useful.

4. **Selecting a pattern of Investment:** When funds have been procured then a decision about investment pattern is to be taken. The selection of an investment pattern is related to the use of funds. A decision will have to be taken as to which asset is to be purchased. The funds will have to be spent first on fixed assets and then an appropriate portion will be retained for working capital. The decision-making techniques such as capital budgeting, opportunity cost analysis etc. may be applied in making decisions about capital expenditures.
5. **Proper cash Management:** Cash management is an important task of finance manager. He has to assess various cash needs at different times and then make arrangements for arranging cash. The cash management should be such that neither there is a shortage of it nor it is idle. Any shortage of cash will damage the credit worthiness of the enterprise. The idle cash with the business will mean that it is not properly used. Cash flow statements are used to find out various sources and application of cash.
6. **Implementing Financial Controls:** An efficient system of financial management necessitates the use of various control devices. Financial control devices generally used are budgetary control, break even analysis; cost control, ratio analysis etc. The use of various techniques by the finance manager will help him in evaluating the performance in various areas and take corrective measures whenever needed.
7. **Proper use of Surplus:** The utilization of profit or surplus is also an important factor in financial management. A judicious use of surpluses is essential for expansion and diversification plan and also in protecting the interest of shareholders. The finance manager should consider the following factors before declaring the dividend;
 - I. Trend of earnings of the enterprise
 - II. Expected earnings in future.
 - III. Market value of shares.
 - IV. Shareholders interest.
 - V. Needs of fund for expansion etc.

Explain importance (significance) of Finance Management.

Importance (significance) of Finance Management

1. **Capital Expenditures:** All your financial considerations of capital expenditures must balance the amount of income the asset will produce with the amount it will cost. If you manage your capital expenditures effectively, you will not overextend your company by borrowing too much for assets that don't provide enough income to justify the expense.
2. **Operating Cash:** You must manage your cash flow so you always have enough on hand to pay for rent, utilities, telephone, insurance, payroll and supplies. This means you must look ahead and see when your accounts receivable are due and compare that to the due dates for your outstanding bills. If you fail to manage cash flow effectively, you may not be able to pay expenses and keep your company operating.
3. **Lowering Expenses:** One of your financial management responsibilities is to keep costs as low as possible. You can ask vendors for lower prices, reduce the number of employees you use, reduce energy use and purchase supplies in bulk. If you do not

monitor and manage costs, your company will always have to increase sales dramatically to pay rising expenses.

4. **Tax Planning:** Your financial management duties include planning for taxes. This involves making sure you have cash on hand to pay estimated tax payments each quarter and also timing your purchases of major assets to get the maximum benefit.
5. **Smooth Running of an Enterprise:** Sound Financial planning is necessary for the smooth running of an enterprise. Money is to an enterprise, what oil is to an engine. As, Finance is required at each stage of an enterprise. Proper financial administration means the study, analysis and evaluation of all financial problems to be faced by the management and to take proper decision with reference to the present circumstances in regard to the procurement and utilizations of funds.
6. **Financial Administration Co-ordinates Various Functional Activities:** Financial administration provides complete co-ordination between various functional areas such as marketing, production etc. to achieve the organizational goals. If financial management is defective, the efficiency of all other departments can, in no way, be maintained
7. **Focal Point of Decision Making:** Almost, every decision in the business is taking in the light of its profitability. Financial administration provides scientific analysis of all facts and figures through various financial tools, such as different financial statements, budgets etc., which help in evaluating the profitability of the plan in the given circumstances, so that a proper decision can be taken to minimize the risk involved in the plan.
8. **Determinant of Business Success:** It has been recognized, even in India that the financial manager play a very important role in the success of business organization by advising the top management the solutions of the various financial problems as experts. They present important facts and figures regarding financial position on the performance of various functions of the company in a given period before the top management in such a way so as to make it easier for the top management to evaluate the progress of the company to amend suitably the principles and policies of the company. The financial managers assist the top management in its decision making process by suggesting the best possible alternative out of the various alternatives of the problem available. Hence, financial management helps the management at different level in taking financial decisions.
9. **Measure of Performance:** The performance of the firm can be measured by its financial results; i.e, by its size of earnings Riskiness and profitability are two major factors which jointly determine the value of the concern. Financial decisions which increase risks will decrease the value of the firm and on the other hand, financial decisions which increase the profitability will increase value of the firm. Risk and profitability are two essential ingredients of a business concern.

Explain source of Finance Management.

Source of Finance Management

Two of the main types of finance available include:

- **Debt finance:** Money provided by an external lender, such as a bank, building society or credit union.
- **Equity finance:** Money sourced internally by the business.

Once you know how much finance you need, it's important to know your options. Knowing who to approach for finance can help you find the best finance option for your business. It can also give you several alternatives if traditional finance options fail. See the list below for some common sources of debt and equity finance:

Debt Finance

1. **Financial institutions:** Financial institutions such as banks, building societies and credit unions offer a range of finance products with both short and long-term finance solutions. Some products include business loans, lines of credit, overdraft facilities, invoice financing, equipment leases and asset financing.
2. **Retailers:** If you require finance to purchase goods such as furniture, technology or equipment, many stores offer store credit through a finance company. Generally, this is a higher interest option and is suited to businesses that can pay the loan off quickly within the interest-free period.
3. **Suppliers:** Most suppliers offer trade credit that allows businesses to delay payment for goods. The terms often vary and trade credit may only be offered to businesses that have an established relationship with the supplier.
4. **Finance companies:** Most finance companies offer finance products via a retailer. Finance companies must be registered, so before you obtain finance check the Professional registers.
5. **Factor companies:** Factor companies offer a form of finance where they purchase a business' outstanding invoices at a discount. The factor company then chases up the debtors. While factoring is a way to get quick access to cash, it can be quite expensive compared to traditional financing options.
6. **Family or friends:** If a friend or relative offers you a loan that is expected to be repaid, it's called a debt finance arrangement. If you decide on this option, carefully consider how this arrangement could affect your relationship.

Equity Finance

1. **Self-funding:** Often called 'bootstrapping', self-funding is often the first step in seeking finance and involves funding purely through personal finances and revenue from the business. Investors and lenders will both expect some amount of self-funding before they agree to offer you finance.
2. **Family or friends:** Offering a partnership or share in your business to family or friends in return for equity is often an easy way of obtaining finance. However, this option must be carefully considered to ensure your relationship is not adversely affected.

3. **Private investors:** Investors can contribute funds to your business in return for a share in your profits and equity. Investors such as business angels can also work in the business providing expertise or advice as well as providing funds.
4. **Venture capitalists:** Venture capitalists are generally large corporations that invest large sums in start-up businesses with the potential for high growth and large profits. They typically require a large controlling share of the business and often provide management or industry expertise.
5. **Stock market:** Also known as an Initial Public Offering (IPO), floating on the stock market involves publicly offering shares to raise capital. This can be a more expensive and complex option and carries the risk of not raising the funds needed due to poor market conditions.
6. **Government:** In general, the government doesn't provide finance for starting up or buying a business. However, you may be eligible for a grant in certain circumstances, such as business expansion, research and development, innovation or exporting.
7. **Crowd funding:** Some social media websites offer entrepreneurs a 'crowd funding' platform for their product prototypes or innovative projects. It involves setting a funding goal, providing project and budget details and inviting people to contribute to a startup capital pool.

Explain functions of Finance Management.

Functions of Finance Management

1. **Estimating the Amount of Capital Required:** This is the foremost function of the financial manager. Business firms require capital for:
 - Purchase of fixed assets,
 - Meeting working capital requirements, and
 - Modernization 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 maximize 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. **Utilization of Funds:** The funds procured by the financial manager are to be prudently invested in various assets so as to maximize 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 plugging 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 programs 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.

Define production management.

Production Management

- 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 also deals with decision-making regarding the quality, quantity, cost, etc., of production.
- It applies management principles to production.
- 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.

List and explain the objectives of production management.

Objectives of Production Management

- **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.
- **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.
- **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.
- **Supports other functional areas:** Production management supports other functional areas in an organization, 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 modernization. The personnel department will be able to manage the human resources effectively due to the better performance of the production department.
- **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.
- **Optimum utilization of resources:** Production management facilitates optimum utilization of resources such as manpower, machines, etc. So, the firm can meet its capacity utilization objective. This will bring higher returns to the organization.

- **Minimizes cost of production:** Production management helps to minimize the cost of production. It tries to maximize the output and minimize the inputs. This helps the firm to achieve its cost reduction and efficiency objective.
- **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.

List and explain the importance of production management.

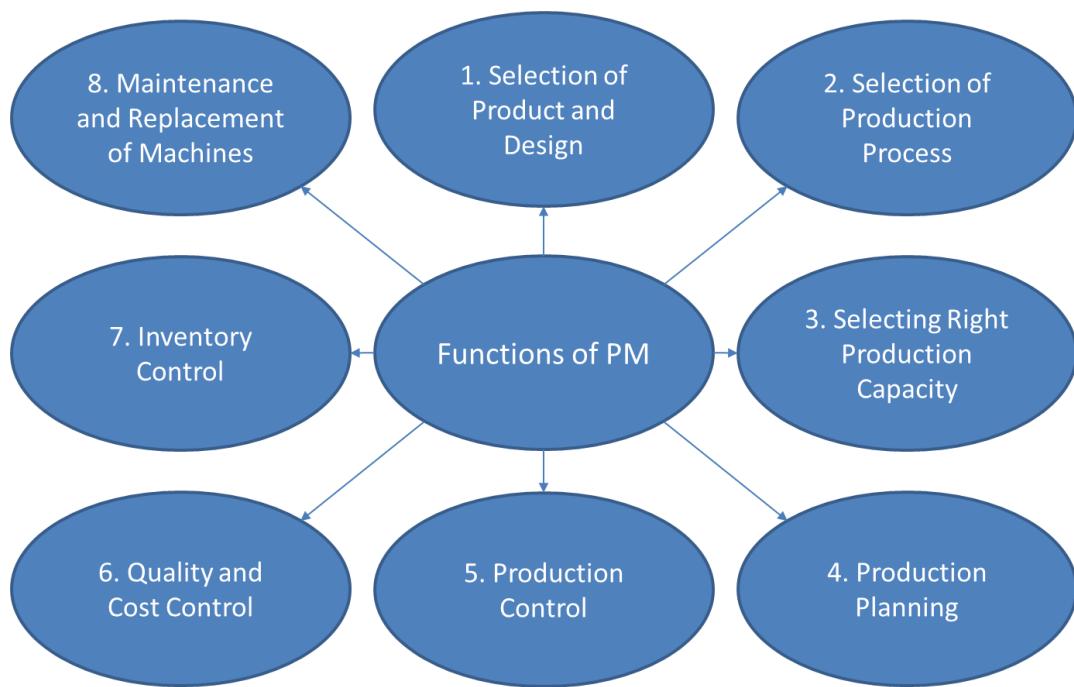
Importance of Production Management

- **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.
- **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.
- **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.
- **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.
- **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.
- **Boosts economy:** Production management ensures optimum utilization of resources and effective production of goods and services. This leads to speedy economic growth and well-being of the nation.

List and explain the functions of production management.

Functions of Production Management

- Selection of Product and Design
- Selection of Production Process
- Selecting Right Production Capacity
- Production Planning
- Production Control
- Quality and Cost Control
- Inventory Control
- Maintenance and Replacement of Machines



- **Selection of Product and Design:** Production management first selects the right product for production. Then it selects the right design for the product. Care must be taken while selecting the product and design because the survival and success of the company depend on it. The product must be selected only after detailed evaluation of all the other alternative products. After selecting the right product, the right design must be selected. The design must be according to the customers' requirements. It must give the customers maximum value at the lowest cost. So, production management must use techniques such as value engineering and value analysis.
- **Selection of Production Process:** Production management must select the right production process. They must decide about the type of technology, machines, material handling system, etc.
- **Selecting Right Production Capacity:** Production management must select the right production capacity to match the demand for the product. This is because more or less capacity will create problems. The production manager must plan the capacity for both short and long term's production. He must use break-even analysis for capacity planning.
- **Production Planning:** Production management includes production planning. Here, the production manager decides about the routing and scheduling.
 - ✓ Routing means deciding the path of work and the sequence of operations. The main objective of routing is to find out the best and most economical sequence of operations to be followed in the manufacturing process. Routing ensures a smooth flow of work.
 - ✓ Scheduling means to decide when to start and when to complete a particular production activity.

- **Production Control:** Production management also includes production control. The manager has to monitor and control the production. He has to find out whether the actual production is done as per plans or not. He has to compare actual production with the plans and finds out the deviations. He then takes necessary steps to correct these deviations.
- **Quality and Cost Control:** Production management also includes quality and cost control. Quality and Cost Control are given a lot of importance in today's competitive world. Customers all over the world want good-quality products at cheapest prices. To satisfy this demand of consumers, the production manager must continuously improve the quality of his products. Along with this, he must also take essential steps to reduce the cost of his products.
- **Inventory Control:** Production management also includes inventory control. The production manager must monitor the level of inventories. There must be neither over stocking nor under stocking of inventories.
 - ✓ If there is an overstocking, then the working capital will be blocked, and the materials may be spoiled, wasted or misused.
 - ✓ If there is an under stocking, then production will not take place as per schedule, and deliveries will be affected.
- **Maintenance and Replacement of Machines:** Production management ensures proper maintenance and replacement of machines and equipment. The production manager must have an efficient system for continuous inspection (routine checks), cleaning, oiling, maintenance and replacement of machines, equipment, spare parts, etc. This prevents breakdown of machines and avoids production halts.

Define plant layout and its types.

Plant layout

- Plant Layout is the physical arrangement of equipment and facilities within a Plant.
- Optimizing the Layout of a Plant can improve productivity, safety and quality of Products.
- Un-necessary efforts of materials handling can be avoided when the Plant Layout is optimized.
- Plant layout techniques apply to the case where several physical means have to be located in a certain area, either industrial processes or services.
- The basic objective is to ensure a smooth flow of work, material, people and information.
- There are probably two levels at which layouts are required.
- In one, the various departments have to be sited, and in other the items of equipment within a department need to be located.

Types of Layout

1. Process
2. Product
3. Cellular

4. Fixed position
5. Hybrid (mixed)

Process Layout

- Used when the operations system must handle a wide variety of products in relatively small volumes (i.e., flexibility is necessary)
- Designed to facilitate processing items or providing services that present a variety of processing requirements.
- The layouts include departments or other functional groupings in which similar kinds of activities are performed.
- A manufacturing example of a process layout is the machine shop, which has separate departments for milling, grinding, drilling, and so on.

Product (Assembly Line) Layout

- Product layouts are used to achieve a smooth and rapid flow of large volumes of products or customers through a system.
- A job is divided into a series of standardized tasks, permitting specialization of both labor and equipment.
- The large volumes handled by these systems usually make it economical to invest huge amount of money in equipment and job design.
- Operations are arranged in the sequence required to make the product. For instance, if a portion of a manufacturing operation required the sequence of cutting, polishing, and painting, the appropriate pieces of equipment would be arranged in that sequence.
- Product layouts achieve a high degree of labor and equipment utilization.

Cellular Manufacturing (CM) Layout

- Cellular manufacturing is a type of layout in which machines are grouped into what is referred to as a cell.
- Groupings are determined by the operations needed to perform work for a set of similar items, or part families that require similar processing.
- Cellular layout provides faster processing time, less material handling, less work-in-process inventory, and reduced setup time.
- Used when the operations system must handle a moderate variety of products in moderate volumes.

Fixed-Position Layouts

- In fixed-position layouts, the materials or major components remain in a fixed position, and workers, materials, and equipment are moved as needed.
- Fixed-position layout is used when product is very bulky, heavy or fragile
- Fixed-position layouts are used in large construction projects (buildings, power plants, and dams), shipbuilding and production of large aircraft and space mission rockets.
- Fixed-position layouts are widely used for farming, firefighting, road building, home building, remodeling and repair.

Hybrid (mixed) Layouts

- Actually, most manufacturing facilities use a combination of layout types.
- An example of a hybrid layout is where departments are arranged according to the types of processes but the products flow through on a product layout.
- For instance, supermarket layouts are fundamentally of a process nature, and however we find most use fixed-path material-handling devices such as roller-type conveyors both in the stockroom and at checkouts, and belt-type conveyors at the cash registers.
- Hospitals also use the basic process arrangement, although frequently patient care involves more of a fixed-position approach, in which nurses, doctors, medicines, and special equipment are brought to the patient.

List and explain factors affecting plant layout.

Factors affecting plant layout

- **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.
- **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.
- **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.
- **Volume of production:** Plant layout is generally determined by taking into consideration the quantum of production to be produced. There are three systems of production viz.,
 - ✓ Job production
 - ✓ Mass production
 - ✓ Batch production
- **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.

- **Nature of manufacturing process:** The type of manufacturing process undertaken by a business enterprise will greatly affect the type of layout to be undertaken.
 - ✓ Synthetic process
 - ✓ Analytical process
 - ✓ Conditioning process
 - ✓ Extractive process
- **Repairs and maintenance of equipment and machines:** The plant layout should be designed in such a manner as to take proper care with regard to repairs and maintenance of different types of machines and equipment being used in the industry. The machines should not be installed so closely that it may create the problems of their maintenance and repairs. It has been rightly said that “Not only should access to parts for regular maintenance such as oiling, be considered in layout but also access to machine parts and components when replacement and repair are fairly common”.

Define plant location and factors affecting plant location.

Plant location

- Plant location meaning - the establishment of an industry at a particular place.
- The selection of appropriate location can be done in two stages:
- Evaluation of various geographic areas and the selection of an optimum area.
- Within each area there is a choice of proper site which can be urban, suburban or rural.
- The fundamental object of location analysis is to maximize the profits by minimizing the total cost of production associated with the production process.
- Total costs = Fixed costs + Operational costs
- Fixed costs include expenditure on land, building, machines and other equipments etc. Operational costs are the expenditure incurred on inputs, transformation process and the distribution of output etc.
- The contribution of various factors to the total cost will vary from place to place.
- The location of the plant can have a crucial effect on the profitability of a Project, and the scope for future expansion.

Factors affecting plant location

- **Proximity to market:** Organization may choose to locate facilities close to their market, not merely to minimize transportation costs, but to provide a better service.
- **Integration with other parts of the organization:** If the new plant or facility is one of a number owned or operated by a single organization or group, it should be so situated that its work can be integrated with that of the associated units.
- **Availability of labor and skills:** Certain geographical areas have traditional skills but it is very rare that a location can be found which has appropriately skilled and unskilled labour in the desired proportions or quantities.
- **Availability of amenities:** A location which provides good external amenities is often more attractive than one which is more remote.

- **Availability of transport:** It is important that good transport facilities are readily available.
- **Availability of inputs:** A location near main suppliers will help to reduce cost and permit staff to meet suppliers easily to discuss quality, technical or delivery problems.
- **Availability of services:**
 1. Gas
 2. Electricity
 3. Water
 4. Drainage
 5. Disposal of waste
 6. Communications
- **Suitability of land and climate:** The geology of the area needs to be considered, together with the climate conditions.
- **Regional regulations:** It is important to check at an early stage that the proposed location does not violate any local regulations.
- **Safety requirements:** Some production units may present, or may be believed to present, potential dangers to the surrounding neighborhood. Location of such plants in remote areas may be desirable.
- **Site cost:** As a first charge, the site cost is important, although it is necessary to prevent immediate benefit from jeopardizing long term plans.
- **Political, cultural and economic situation:**
- **Special grants, regional taxes and import/export barriers:** Certain government and local authorities often offer special grants, low-interest loans, low rental or taxes and other inducements in the hope of attracting certain industries to particular locations.

Define HRM (Human Resource Management). Explain objectives of HRM.

Human Resource Management

- Human resources management (HRM) is a management function concerned with hiring, motivating and maintaining people in an organization. It focuses on people in organizations.
- Human resource management is designing management systems to ensure that human talent is used effectively and efficiently to accomplish organizational goals.

Objectives of HRM

- **Human capital:** assisting the organization in obtaining the right number and types of employees to fulfill its strategic and operational goals
- **Developing organizational climate:** helping to create a climate in which employees are encouraged to develop and utilize their skills to the fullest and to employ the skills and abilities of the workforce efficiently
- Helping to maintain performance standards and increase productivity through effective job design; providing adequate orientation, training and development;

providing performance-related feedback; and ensuring effective two-way communication.

- Helping to establish and maintain a harmonious employer/employee relationship
- Helping to create and maintain a safe and healthy work environment
- Developing programs to meet the economic, psychological, and social needs of the employees and helping the organization to retain the productive employees
- Ensuring that the organization is in compliance with provincial/territorial and federal laws affecting the workplace (such as human rights, employment equity, occupational health and safety, employment standards, and labor relations legislation). To help the organization to reach its goals
- To provide organization with well-trained and well-motivated employees
- To increase the employees satisfaction and self-actualization
- To develop and maintain the quality of work life
- To communicate HR policies to all employees.
- To help maintain ethical polices and behavior.

Explain manpower planning process.

- Manpower Planning which is also called as Human Resource Planning consists of putting right number of people, right kind of people at the right place, right time, doing the right things for which they are suited for the achievement of goals of the organization.
- Human Resource Planning has got an important place in the arena of industrialization.
- Human Resource Planning has to be a systems approach and is carried out in a set procedure.
- The procedure is as follows:
 - 1) Analyzing the current manpower inventory
 - 2) Making future manpower forecasts
 - 3) Developing employment programs
 - 4) Design training programs

Analyzing the current manpower inventory:

- Before a manager makes forecast of future manpower, the current manpower status has to be analyzed. For this the following things have to be noted-
 - ✓ Type of organization
 - ✓ Number of departments
 - ✓ Number and quantity of such departments
 - ✓ Employees in these work units
- Once these factors are registered by a manager, he goes for the future forecasting.

Making future manpower forecasts:

- Once the factors affecting the future manpower forecasts are known, planning can be done for the future manpower requirements in several work units.
- The Manpower forecasting techniques commonly employed by the organizations are as follows:

- Expert Forecasts: This includes informal decisions, formal expert surveys and Delphi technique.
- Trend Analysis: Manpower needs can be projected through extrapolation (projecting past trends), indexation (using base year as basis), and statistical analysis (central tendency measure).
- Work Load Analysis: It is dependent upon the nature of work load in a department, in a branch or in a division.
- Work Force Analysis: Whenever production and time period has to be analyzed, due allowances have to be made for getting net manpower requirements.
- Other methods: Several Mathematical models, with the aid of computers are used to forecast manpower needs, like budget and planning analysis, regression, new venture analysis.

Developing employment programs:

- Once the current inventory is compared with future forecasts, the employment programs can be framed and developed accordingly, which will include recruitment, selection procedures and placement plans.

Design training programs:

- These will be based upon extent of diversification, expansion plans, development programs etc. Training programs depend upon the extent of improvement in technology and advancement to take place. It is also done to improve upon the skills, capabilities, knowledge of the workers.

List and explain sources of recruitment.

Internal sources of Recruitment:

- **Present Permanent Employees :** Organizations consider the candidates from this source for higher level of jobs due to availability of most suitable candidates for jobs relatively or equally to external sources, to meet the trade union demands and due to the policy of the organization to motivate the present employees.
- **Present temporary/casual Employees:** Organizations find this source to fill the vacancies relatively at the lower level owing to the availability of suitable candidates or trade union pressures or in order to motivate them on present job.
- **Retrenched or Retired Employees:** Employees retrenched due to lack of work are given employment by the organization due to obligation, trade union pressure etc. Sometimes they are re-employed by the organization as a token of their loyalty to the organization or to postpone some interpersonal conflicts for promotion.
- **Dependents of Deceased, Disabled, retired and present employees:** Some organizations function with a view to developing the commitment and loyalty of not only the employee but also his family members.
- **Employee Referrals:** Present employees are well aware of the qualifications, attitudes, experience and emotions of their friends and relatives. They are also aware of the job requirements and organizational culture of their company. As such

they can make preliminary judgment regarding the match between the job and their friends and relatives.

External Sources of Recruitment

- **Campus Recruitment:** These candidates are directly recruited by the Company from their college/educational institution. They are inexperienced as far as work experience is concerned.
- **Private Employment Agencies/Consultants:** Public employment agencies or consultants like ABC Consultants in India perform recruitment functions on behalf of a client company by charging fees. Line managers are relieved from recruitment functions and can concentrate on operational activities.
- **Public Employment Exchanges:** The Government set up Public Employment Exchanges in the country to provide information about vacancies to the candidates and to help the organization in finding out suitable candidates. As per the Employment Exchange act 1959, makes it obligatory for public sector and private sector enterprises in India to fill certain types of vacancies through public employment exchanges.
- **Professional Organizations:** Professional organizations or associations maintain complete bio-data of their members and provide the same to various organizations on requisition. They act as an exchange between their members and recruiting firm.
- **Data Banks:** The management can collect the bio-data of the candidates from different sources like Employment Exchange, Educational Training Institutes, candidates etc and feed them in the computer. It will become another source and the co can get the particulars as and when required.
- **Casual Applicants:** Depending on the image of the organization its prompt response participation of the organization in the local activities, level of unemployment, candidates apply casually for jobs through mail or handover the application in the Personnel dept. This would be a suitable source for temporary and lower level jobs.
- **Similar Organizations:** Generally experienced candidates are available in organizations producing similar products or are engaged in similar business. The Management can get potential candidates from this source.
- **Trade Unions:** Generally unemployed or underemployed persons or employees seeking change in employment put a word to the trade union leaders with a view to getting suitable employment due to latter rapport with the management.
- **Walk In:** The busy organization and rapid changing companies do not find time to perform various functions of recruitment. Therefore they advise the potential candidates to attend for an interview directly and without a prior application on a specified date, time and at a specified place.
- **Consult In:** the busy and dynamic companies encourage the potential job seekers to approach them personally and consult them regarding the jobs. The companies select the suitable candidates and advise the company regarding the filling up of the positions. Head hunters are also called search consultants.

- **Body Shopping:** Professional organizations and the hi-tech training develop the pool of human resource for the possible employment. The prospective employers contact these organizations to recruit the candidates. Otherwise the organizations themselves approach the prospective employers to place their human resources. These professional and training institutions are called body shoppers and these activities are known as body shopping. The body shopping is used mostly for computer professionals. Body shopping is also known as employee leasing activity.
- **Mergers and Acquisitions:** Business alliances like acquisitions, mergers and take over help in getting human resources. In addition the companies do also alliances in sharing their human resource on adhoc basis.
- **E-recruitment:** The technological revolution in telecommunications helped the organizations to use internet as a source of recruitment. Organizations advertise the job vacancies through the World Wide Web (www). The job seekers send their applications through e-mail using the internet.
- **Outsourcing:** Some organizations recently started developing human resource pool by employing the candidates for them. These organizations do not utilize the human resources; instead they supply HRs to various companies based on their needs on temporary or ad-hoc basis.

Explain process (steps) of selection.

Process or steps of selection

- **Identify vacancy:** In this step company will find out the number of vacancies and evaluate it.
 - **Develop position description:** Find out the description of each and every vacancy. It is used to develop interview questions, interview evaluations and reference check questions.
 - **Develop recruitment plan:** Make a plan for the recruitment process such as date of interview, time, venue of interview etc...
 - **Select search committee:** Find out the source of candidate and collect data of candidate from that source.
 - **Post position and implement recruitment plan:** Make an advertisement in newspaper, website etc. and make a recruitment plan.
 - **Review applicants and develop short list:** Go through the list of candidates and make a list of candidate as per our requirement and qualification and experience.
 - **Conduct interviews:** Arrange interview for the selected candidate as per the recruitment plan.
 - **Select candidate:** Select the right candidate as per our requirement.
 - **Finalize recruitment:** Finalize the recruitment after selecting the entire rights candidate and finalize them with package and other facilities.
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Define Corporate Social Responsibility (CSR).

Corporate Social Responsibility (CSR)

- Corporate Social Responsibility is a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders.
- CSR is generally understood as being the way through which a company achieves a balance of economic, environmental and social imperatives while at the same time addressing the expectations of shareholders and stakeholders.

Explain characteristics (nature) Corporate Social Responsibility (CSR).

Characteristics (nature) Corporate Social Responsibility (CSR)

1. **Concerned with social prestige:** Business is an activity connected with the production, sale or distribution of a commodity or services with a view to satisfy diverse needs of the society. The more effectively a business unit caters to the needs of society, the greater will be its social prestige.
2. **Applicable to both private and public sector:** The concept of social responsibility of business is universal in its applicability. Every business unit has certain social obligations to discharge. Whether it functions in the private sector or in the public sector. The public sector units are not immune from social responsibility. In fact, public sector lies come into being out of the belief and experience that the private enterprise are neglecting their social responsibilities. Therefore public sector has greater responsibilities as compared to the private sector.
3. **Balance between individual and social interests:** The basis of the concept of social responsibility is the realization of the fact that business unit has to strike a balance between its own interests and those of the society. A business house that concentrates only on personal gains at the cost of social interests cannot survive for long. Similarly a firm that gives too much importance to social interests at the cost of personal gains cannot flourish and must close down sooner or later.
4. **Continuous process:** Social responsibility is a continuous process. So long as business functions, it must discharge its obligations to the society. It has to provide society with the commodity or services continuously. It has to maintain the quality of its product for ever. It has to maintain the prices of its product at its legitimate level. It has to pursue welfare — oriented activities continuously. Any disturbance in this continuous process would jeopardize not only the social prestige. But the very existence of the business unit.
5. **Two—way process:** Just as a business house has to discharge obligations to the various sections of the society, similarly the society has to fulfill some obligations to the business too, it is the responsibility of the society to create and maintain an atmosphere which is conducive to the functioning and growth of business. How can a business firm fulfill its obligations to society? unless it earns enough profits
6. **Spirit of trusteeship:** The idea of trusteeship was propounded by Tolstoy, Ruskin and Mahatma Gandhi. According to this principle, the managers of business are only the

trustees of their property and it is their moral duty to use and manage all of their property for the welfare of the society. No individual has any right to hold any property for personal gain only and to use it against the interests of society. All resources must be fully utilized for production of goods and services. Keeping in view the needs of the society. As far back as in 1927, a top industrialist had remarked, "We consider ourselves to be the trustees of our wealth, which is to be managed only for the benefits of workers and consumers"

7. **Essential for the growth of business:** A business firm that neglects the expectations of the society cannot prosper. A sympathetic attitude of various sections of the society is essential for the success of business. The co-operation of the workers. Good wishes of the local population and attachment of the consumers are essential to the growth of business unit. Therefore, the manager of business must not neglect their duty towards all these sections of society.

Explain advantages (importance) of Corporate Social Responsibility (CSR).

Advantages (importance) of Corporate Social Responsibility (CSR)

1. **Satisfied Employees:** Employees want to feel proud of the organization they work for. An employee with a positive attitude towards the company is less likely to look for a job elsewhere. It is also likely that you will receive more job applications because people want to work for you.
2. **Commitment with Stakeholders:** CSR requires engagement with internal and external stakeholders so it enables enterprises to anticipate better and take advantage of fast changing expectations in society as well as operating conditions. This means it can also act as a driver for the development of new markets and create real opportunities for growth.
3. **Creating long-term employee, Consumer and citizen Trust:** By addressing their social responsibility, enterprises can build long-term employee, consumer and citizen trust as a basis for sustainable business models. This helps to create an environment in which enterprises can innovate and grow. The economic crisis and its social consequences have to some extent damaged the levels of trust in business and have focused public attention on the social and ethical performance of enterprises, including on issues such as bonuses and executive pay.
4. **Costs Reductions:** Companies can reduce the recurring and non-recurring costs by hiring the right person at the right job with effective retention strategies. Because retention cost is lesser than recruitment cost. Organizations can also implement energy savings programs through energy audits. Effective CSR can assist the companies in managing potential risks and liabilities very effectively. These all together will create good-will for the company with very minimum investment in advertising.
5. **Win New Business Opportunities for Sustainable Future :** The business must be in a constant dialogue with customers, suppliers and other parties that affect the organization. Because of continuous interaction with other parties, your business will be the first to know about new business opportunities.

6. **Reducing the social effects of the crisis:** CSR also helps to reduce the social effects of the crisis, including job losses, is part of the social responsibility of enterprises. CSR offers a set of values on which we have to build an organized society and to look for sustainable economic system. Commission aims to create conditions favorable to sustainable growth, responsible business behavior and lasting job creation for the medium and long-term through CSR.

Define Ethics and advantages (importance) of ethics.

Ethics

- Management ethics is the ethical (proper/right) treatment of employees, stockholders, owners and the public by a company.
- A company, while needing to make a profit, should have good ethics.
- Employees should be treated well, whether they are employed here or overseas.
- By being respectful of the environment in the community a compound ethics, and good, honest records also show respect to stockholders and owners.
- Ethics and ethical behaviors are the essential parts of healthy management.
- From a management perspective, behaving ethically is an integral part of long-term career success.

Advantages (importance) of ethics

1. **Satisfying Basic Human Needs:** Being fair, honest and ethical is one the basic human needs. Every employee desires to be such himself and to work for an organization that is fair and ethical in its practices.
2. **Creating Credibility:** An organization that is believed to be driven by moral values is respected in the society even by those who may have no information about the working and the businesses or an organization. Infosys, for example is perceived as an organization for good corporate governance and social responsibility initiatives. This perception is held far and wide even by those who do not even know what business the organization is into.
3. **Uniting People and Leadership:** An organization driven by values is revered by its employees also. They are the common thread that brings the employees and the decision makers on a common platform. This goes a long way in aligning behaviors within the organization towards achievement of one common goal or mission.
4. **Improving Decision Making:** A man's destiny is the sums total of all the decisions that he/she takes in course of his life. The same holds true for organizations. Decisions are driven by values. For example an organization that does not value competition will be fiercer in its operations aiming to wipe out its competitors and establish a monopoly in the market.
5. **Long Term Gains:** Organizations guided by ethics and values are profitable in the long run, though in the short run they may seem to lose money. Tata group, one of the largest business conglomerates in India was seen on the verge of decline at the beginning of 1990's, which soon turned out to be otherwise. The same company's Tata

NANO car was predicted as a failure, and failed to do well but the same is picking up fast now.

6. **Securing the Society:** Often ethics succeeds law in safeguarding the society. The law machinery is often found acting as a mute spectator, unable to save the society and the environment. Technology, for example is growing at such a fast pace that by the time law comes up with a regulation we have a newer technology with new threats replacing the older one. Lawyers and public interest litigations may not help a great deal but ethics can.