Chapter 1
Introduction to Economics

1.1 Introduction to Economics

1.1.1 History of Economics (GTU – Nov. 2017; May 2018; Nov. 2018)

The word '*Economics*' is derived from a Greek word '*okionomia*'. It means '*management of house affairs*' *i.e.,* how people earn income (or avail resources) and how they spend them on family members' necessities, comforts and luxuries. Many decisions have to be taken for allocation of income for the necessities, comforts or luxuries of family members such as which bike is to be purchased for elder son, in which college younger son has to be admitted etc. & many more. In short, the household must allocate its *scarce resources* among family members, considering necessities, comforts or luxuries of each one. Always it is not possible to satisfy the demand of each family member.

Similar to household affairs management, many facets has to be managed for society. For example, who will do which kind of job, who will grow food, who will make clothing's, who will treat the patients etc. Once the role of members have been decided, it is necessary to provide resource to them and also it is more important to provide their output whom so ever it is required. Similar to the household, in the society everyone can't get what he/she aspire since resources are scares and from the available resources each of the society member has to be satisfied.

With the passage of time, the word '*okionomia*' was used for an economy as whole in the sense that how a nation takes steps to fulfill its desires and preferences with the help of scarce means and it was termed as '*Political* Economics'. In generalization, the term 'Economics' can be summarized as follows:

> ***Economics is a study of the ways in which people use resources to satisfy their wants.***

1.1.2 Definitions of Economics (GTU – May 2019)

Many economists have defined economics in many ways. Following are some of the definitions by economics experts:

Economy in general is the art of providing for all the wants of a family, so as the science of political economy seeks to secure a certain fund of subsistence for all the inhabitants, to obviate every circumstance which may render it precarious; to provide everything necessary for supplying the

wants of the society, and to employ the inhabitants in such manner as naturally to create reciprocal relations and dependencies between them, so as to supply one another with reciprocal wants. ***- James Steuar***

Economics is the study of mankind in the ordinary business of life; it examines that part of individual and social action which is most close connected with the attainment and with the use of the material requisit of wellbeing. Thus it is on one side a study of wealth; and on the other, a more important side, a part of the study of man ***- Alfred Marsh***

Economics is a science which studies human behaviour a relationship between ends and scarce means which have alternative u ***- Lionel Robl***

Consumption is the sole end and purpose of all production; and the int of the producer ought to be attended to, only so far as it may be nece for promoting that of the consumer. ***- Adam S***

So, based on all these definitions, Economics can be defined as follow

> ***Economics is the social science that examines how people choose to use limited or scarce resources in attempting to satisfy their unlimited wants.***

1.1.3 Scope of Economics (GTU – Nov. 2016; Nov. 2017; Ma

The horizon of economics is gradually expanding. It does not deal with only production and consumption. However, the basic ta maximize the utilization of available resources for maximum welf society. Following are the widened scope of economics:

(1) Development economics

After the Second World War, many countries got freedom from the colonial rule. Their economics required different reformation for development and hence the branch of development economics was evolved.

(2) Microeconomics

It is the branch of economics which studies the economic behavior of the individual unit, may be a person, a particular household, or a particular firm. It is a study of one particular unit rather than all the units combined together.

(3) Macroeconomics

It is the branch of economics which studies the economic behavior of not only one particular unit, but of all the units combined together. It aggregates all and study as a single unit. So, it is also called as *'aggregative economics'*.

(4) International economics

Due to globalization, every country is trading with other countries. The boundaries of Economics has been expanded and it is known as *international economics*.

(5) Environmental economics

Unchecked emphasis on economic growth without considering its effect on natural resources and ecological balance is impossible. Now, economic growth is facing a new challenge from the environmental side. Therefore, Environmental economics has emerged as one of the major branches of economics that is considered significant for sustainable development.

(6) Urban and rural economics

Location plays critical for economic attainments. There is also much debate on urban-rural divide. Therefore, economists have realized that there should be specific focus on urban areas and rural areas. Therefore, there is expansion of branches like urban economics and rural economics.

Above types of economics are few economics but it has wide scope of growth, which deals with energy economics, transportation economics, labor economics, and many more. So, it can be concluded that economics has very wide scope in the society.

1.1.4 Difference between Macro and Microeconomics

[GTU, Dec. 2014; Dec. 2015; May 2016; May 2018]

Microeconomics	Macroeconomics
Microeconomics is the study of economics at a smaller scale.	Macroeconomics is the study of large-scale economic issue.
It is the study of economics at an individual, group or company level.	It is the study of a national economy as a whole.
It focuses on issues that affect individuals and companies such as supply and demand for a specific product, the production that an individual or business is capable of, or the effects of regulations on a business.	It focuses on issues that affect the economy as a whole For example, it include unemployment rates, the gross domestic product of an economy, and the effects of exports and imports.

1.1.5 Nature of Economics

Again, considering the definition, economics has to deal with the limited resources to satisfy the wants of the society. The word *'want'* does not mean only basic needs (shelter, food and clothing) but many more than that. Even wealthy nations do not have enough resources to satisfy the needs of all persons. So, it is necessary to reduce the gap between more wants and limited resources. There are two ways to reduce the gaps either reduce the wants or increase the resources availability. Economist does not prefer to reduce the wants but they believe to increase the availability of resources.

Since many things such as zeal to work, potential to work, mental ability can't be exchanged with others. Economics limits its field up to exchangeable goods and these goods are called *economic goods.* All other goods are called *non-economic goods.* However, most people seem to prefer some combination of economic goods and noneconomic goods, economics limits its study up to economic goods.

Further, these resources are of two classes, human and natural. Human beings apply physical strength and intelligence to the natural resources. This process of creating something which satisfies human needs is called *production.*

Each step, including the final sale of the product or service to the consumer, is part of the process of production. If resources were so ample or wants so few that we could not have economics, but this happy situation can never happen. Resources are always scarce relative to the wants for the goods and services produced by using resources. Hence, in every society, critical decisions have to be made such as what to produce, how much to

produce, how to produce, when to produce and who gets it, how much producer gets from production. There must be some arrangement which can decide about all these parameters.

The arrangements used to enforce these decisions in any society constitute the economic organization, or economic system, of that society having nature of providing scare resources to satisfy maximum needs of the society.

1.2 Theory of Demand and Supply (GTU – May 2017)

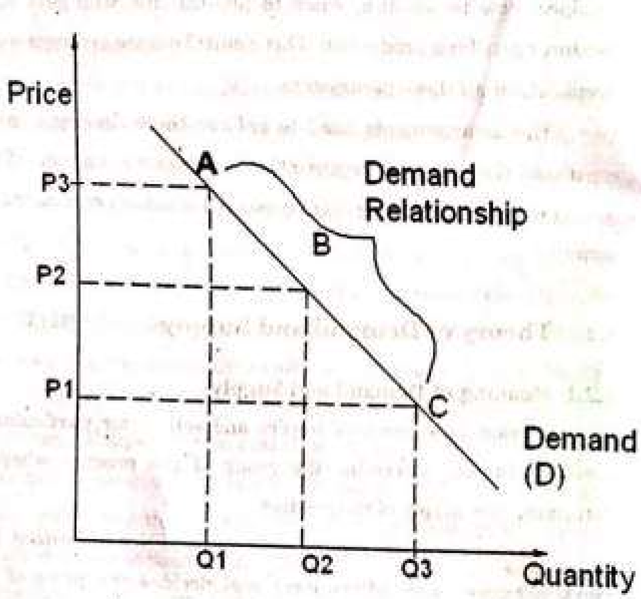
1.2.1 Meaning of Demand and Supply

Market is a group of buyers and sellers for particular goods and services. Buyers determine the group of the product where as sellers determine the supply of the product.

Market are of two types: Organized and Non-organized. In organized market, buyers and sellers meet and decides the price of the product whereas in non-organized markets they do not meet and buyers buy as per his ability and willingness to buy at fixed price.

Demand quantity is the amount of the goods that buyers are willing and able to purchase. There are many determinants which decides the quantity of demand, but one of the most important factor is ***price.*** If the price of the goods increase than the demanded quantities will obviously reduce. This followed pattern is termed as ***law of demand*** which can mentioned as follows: **[GTU, Dec. 2015; May 2016]**

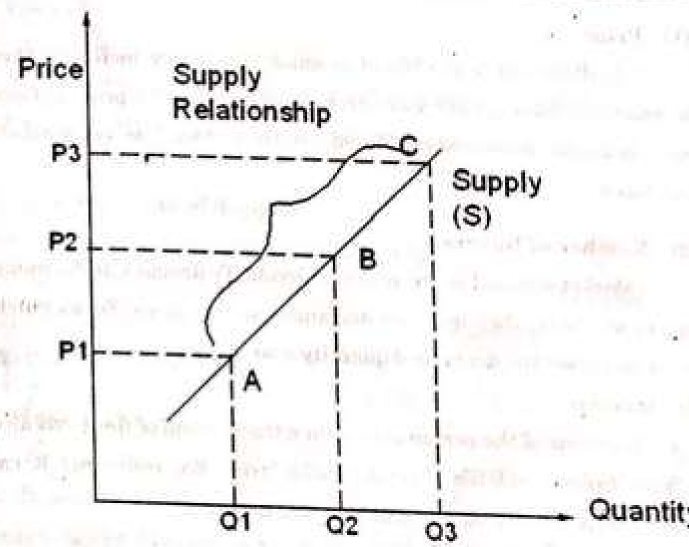
Claiming other things equal, the quantity demanded of goods falls when the price of the goods increases.



As shown in the diagram, suppose Q_2 is the demand at particular price (P_2). Demand shifts to Q_3 with decrease in price to P_1 whereas demand shifts to Q_1 with increase in price to P_3.

Supply quantity is the amount of the goods that sellers are willing and able to sell. There are many determinants which decides the quantity of supply, but again ***price*** of the goods is most important factor. If the price of the goods increased than the profit will increase and hence the sellers will supply more amount of goods. This followed pattern is termed as ***law of supply*** which can mentioned as follows:

Claiming other things equal, the quantity supplied of goods rises when the price of the goods increases.



As shown in the diagram, suppose Q_2 is the supply at particular price P_2. Supply increases to Q_3 with increase in price to P_3 whereas supply decreases to Q_1 with decrease in price to P_1.

1.2.2 Determinants of Demand and Supply

(A) Determinants of Demand

Following are the determinants of demand in the market:

(1) Price
(2) Number of buyers
(3) Income
(4) Future Expectations
(5) Price of relative goods
(6) Tastes

(1) Price

As discussed in the law of demand, if the price increases, then the demand will decrease and vice versa. So, it is clear that price and demand have negative relationship. Based on these fact law of demand was developed.

(2) Number of Buyers

Market demand is the sum of individual's demand. If the number of buyers are more, then quantity demanded will be more. So, as number of buyer increases the demanded quantity also increase.

(3) Income

If income of the person is low, then the demand of the goods also will be low. Inverse relationship also holds true. So, from this it can be concluded that lower income will have low demand.

(4) Future Expectations

Future expectation affects the purchase for a goods or services today. If you save money for tomorrow, you will reduce your expectations today. So, you will cut your today's expenditure. It can be concluded that more the future expectations, lesser the today's expenditure.

(5) Price of relative goods

Suppose the price of product X is reduced. So, as per the law of demand, the demand of that product X will increase. On the other hand, the demand of product Y having same characteristics would decrease. Such items are called substitutes of each other. This can be reversed also. So, the rise or fall of relative price of goods significantly affects the demand of the products.

(6) Tastes

As tastes is personal psychological parameter, inclination towards the product will be high if the taste of product is more. So, taste has positive co-relationship with demand of the quantity.

(B) Determinants of Supply

Following are the determinants of supply in the market:

(1) Selling Price
(2) Number of Sellers
(3) Price of raw material
(4) Future Expectations
(5) Technology

(1) Selling Price

Selling price is decided after adding certain amount of profit in the cost. If selling price is increased, the profit will also increases. This increases the profit of the seller, which motivates to supply more quantity. So, increase in selling price increase the supply of goods.

(2) Number of Sellers

Supply of products in the market is the sum of individual's seller's supply. If the number of sellers are more, then quantity supplied will be more. So, as the number of quantity supplied in the market increases, the price of the goods decreases.

(3) Price of Raw materials

Price of raw materials directly effects the quantity supplied in the market. Keeping the selling price constant, if the prices of raw materials required to produce the goods increases, the seller will produce less amount of goods. So, this reduces the quantity of supplied goods.

(4) Future Expectations

Future expectation affects the supply for a goods or services today. If supplier anticipate the increase in price in near future, he stores the goods right now to get more price tomorrow. So, the supplied quantity would decrease at present.

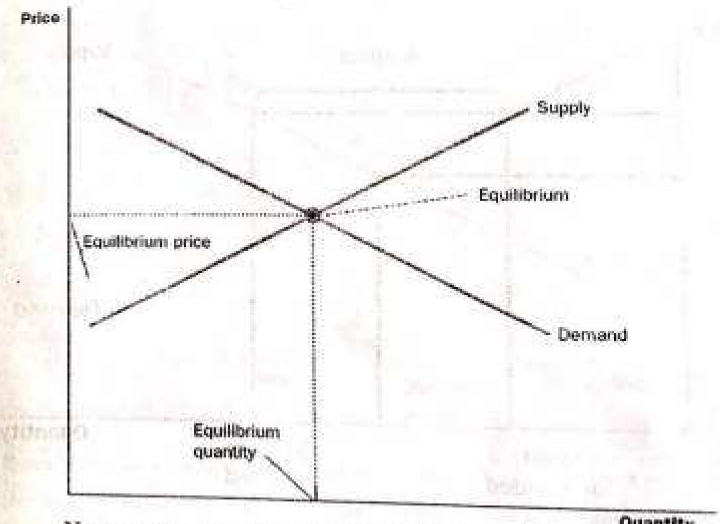
(5) Technology

In the era of technology, rate production of goods is significantly increased. This has reduced the labor cost significantly and hence the input cost is also reduced. So, sellers are able to supply more amount of goods in the market at lower rate than the previous era.

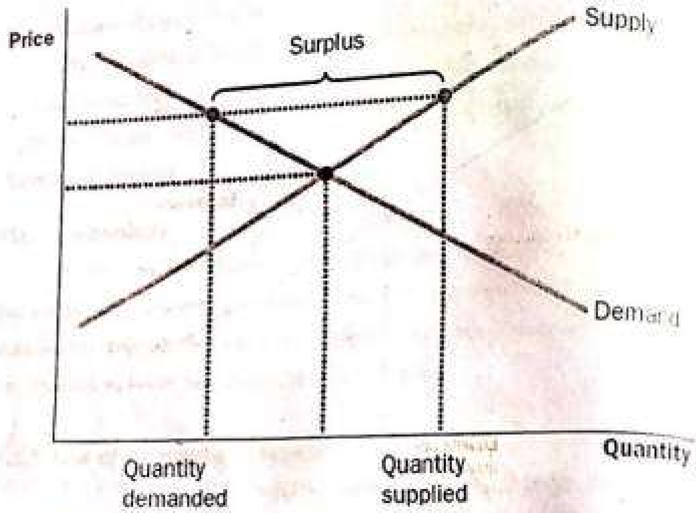
1.2.3 Law of Demand and Supply

(GTU – Nov. 2017; Nov. 2018; May 2019)

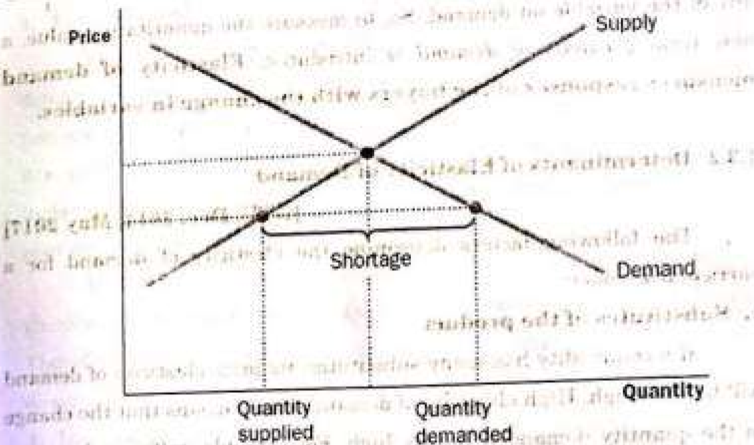
Previous section discussed about the demand and supply separately. When both, demand and supply are combined it gives the equilibrium status in the market. If curves of both demand and supply are plotted on the same graph, than both graphs will intersect at one point and this point is termed as *equilibrium* as shown in the diagram below. At this point, the quantity of goods that buyers are willing to buy is exactly same as the sellers are willing to sell. The corresponding quantity and price is known as *equilibrium quantity and price* respectively. At this point buyers are equally satisfied as the sellers.



Now, suppose there is market price of goods is above equilibrium price. So, the sellers will be motivated to supply more quantity of goods than the quantity demanded. So, the quantity supplied is more than the quantity demanded. This excess of goods is termed as ***surplus***. Here, the sellers will try to sell at more price, because with increase in price, the quantity demanded by the buyer will reduce. So, the price will reduce and market will bring price to equilibrium price.



Now, suppose there is market price of goods is below equilibrium price. So, the buyers will be motivated to buy more quantity of goods than the quantity demanded. So, the quantity demanded is more than the quantity supplied. This deficiency of goods is termed as ***shortage***. Here, the buyers will try to buy more quantity at low price, so the sellers will rise the price till the equilibrium is achieved and hence the price of the quantity demanded will increase. So, the price will increase again and market will bring price to equilibrium price.



From both cases, it can be concluded that supply and demand both brings the price in control and attains equilibrium. A law of supply and demand was derived as follows:

> ***Price of good adjusts to bring the quantity supplied and the quantity demanded for that good into balance.***

1.3 Elasticity [GTU, Nov. 2017; Nov. 2018]

1.3.1 Elasticity of Demand [GTU, Dec. 2015; May 2016]

As in the previous sections, many determinants which affects the demand of the product are discussed. As per discussion, consumers usually buy more goods when the price is decreased, income is increased, prices of substitutes are higher, or when the price of complements is reduced. Here, there is no quantitative measure which represents the effect of change in any of the variable on demand. So, to measure the quantitative value a new term *elasticity of demand* is introduced. **Elasticity of demand measures responses of the buyers with the change in variables.**

1.3.2 Determinants of Elasticity of Demand

[GTU, Dec. 2014; May 2017]

The following factors determine the elasticity of demand for a particular product:

1. Substitutes of the product

If a commodity has many substitutes, its price elasticity of demand will be very high. High elasticity of demand simply means that the change in the quantity demanded is very high. For example, coffee and tea are substitutes. If the price of coffee falls, the demand for it will naturally increase. Note that some people who currently consume tea also start buying coffee because of its current low price. Therefore, the quantity demanded for coffee increases tremendously.

2. Complementary products

In case of complementary products, elasticity of demand of one commodity is closely associated with that of another commodity. For instance, fuel and car are complementary products. In this case, the elasticity of demand of fuel is closely associated with that of car.

Importance of a commodity also plays a vital role in determining the elasticity of demand. If a commodity is less important, then its elasticity of demand will be low or inelastic.

If a commodity has many uses, its elasticity of demand will be very *high*.

3. Type of goods

Type of a product is an important determinant of elasticity of demand. Generally, luxury goods have high elasticity of demand and necessities are price inelastic. There are some exceptional cases such a demand for tobacco or alcohol. Demand for these commodities is generally inelastic. It means that though their prices increase, there will not be significant reduction in the quantity demanded.

In the long-run, the elasticity of demand tends to be high because there will be too many substitutes for the commodity under consideration. Therefore, the period under consideration is an important determinant of demand elasticity.

4. Income of consumer

If the consumer's income is low, the elasticity of demand tends to be high.

1.3.3 Price, Income and Cross Elasticity of Demand

[GTU, May 2015]

Elasticity of demand are of three types:

(1) Price elasticity of demand

(2) Income elasticity of demand and

(3) Cross elasticity of demand.

(1) Price Elasticity of Demand

It is defined as the ratio of percentage change in the quantity demanded to the percentage change in the price.

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

For example, 15% decrement in the price of the product increases the quantity demand by 25%. So, the price elasticity of demand is,

$$\text{Price Elasticity of Demand} = \frac{25}{15} = \frac{5}{3}$$

(2) Income Elasticity of Demand

It is defined as the ratio of percentage change in the quantity demanded to the percentage change in the income of buyer.

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

For example, 10% increase in the income of the buyer increases the quantity demand by 20%. So, the income elasticity of demand is,

$$\text{Income Elasticity of Demand} = \frac{20}{10} = 2$$

(3) Cross Elasticity of Demand

It is defined as the ratio of percentage change in the quantity demanded of one good to a change in the price of another good.

$$\text{Cross Elasticity of Demand} = \frac{\text{\% Change in the Quantity Demanded of good 1}}{\text{\% Change in the Price of good 2}}$$

Cross price elasticity may be negative or positive depends on the type of good. If the goods are substitute, value of cross price elasticity is positive. For complements, cross elasticity of good is negative.

Short Questions

1. Define the term 'Economics'. **(GTU – May 2016)**

Economics is the social science that examines how people choose to use limited or scarce resources in attempting to satisfy their unlimited wants.

2. What is Microeconomics? **(GTU – Nov. 2016)**

It is the branch of economics which studies the economic behavior of the individual unit, may be a person, a particular household, or a particular firm. It is a study of one particular unit rather than all the units combined together.

3. What is Macroeconomics? **(GTU – May 2016)**

It is the branch of economics which studies the economic behavior of not only one particular unit, but of all the units combined together. It aggregates all and study as a single unit. So, it is also called as 'aggregative economics'.

4. Define Demand. **(GTU – May 2016)**

Demand quantity is the amount of the goods that buyers are willing and able to purchase.

5. State the law of demand.

Claiming other things equal, the quantity demanded of goods falls when the price of the goods increases.

6. How demand is proportional to price change?

With increase in price, the demand will decrease and vice versa.

7. How demand is proportional to number of buyers?

As the number of buyers' increases, demand quantity will increase.

8. How price of relative goods effects the demand of any good?

For any good, if the price of relative goods increases than the demand of the goods increases and vice versa.

9. Define Supply. **(GTU – May 2016**

Supply quantity is the amount of the goods that sellers are willing and able t sell.

10. State the law of supply.

Claiming other things equal, the quantity supplied of goods rises when the price of the goods increases.

11. How supply is proportional to price change?

With increase in price, the supply of goods will increase and vice versa.

12. How supply is proportional to number of sellers?

As the number of suppliers' increases, supply of quantity will increase and hence price will decrease.

13. What is equilibrium quantity for demand and supply?

The quantity of goods that buyers are willing to buy and sellers are willing to sell at one particular price is called equilibrium quantity.

14. Explain: Surplus and Shortage

When the quantity of available goods is more than the demand of goods, is called "Surplus" and when the quantity of demand is more than the supply of goods, shortage is developed.

15. What is "Elasticity of Demand"? **[GTU – Nov. 2016]**

Elasticity of demand measures responses of the buyers with the change in variables.

16. What is "Price Elasticity of Demand"?

It is defined as the ratio of percentage change in the quantity demanded to the percentage change in the price.

17. What is "Income Elasticity of Demand"?

It is defined as the ratio of percentage change in the quantity demanded to the percentage change in the income of buyer.

18. What is "Cross Elasticity of Demand"?

It is defined as the ratio of percentage change in the quantity demanded of one good to a change in the price of another good.

19. What is independent variable in law of demand? Demand or Price?

Price

[GTU – May 2016]

Question Bank

1) Define 'Economics'. What is the scope of economics?
2) Define Micro and Macroeconomics. Differentiate between 'Micro-economics' and 'Macro-economics'.
3) Discuss the nature of Economics.
4) What do you mean by 'demand'? Explain the law of demand.
5) What do you mean by 'supply'? Explain the law of supply.
6) Explain the determinants of demand.
7) Explain the determinants of supply.
8) Explain the law of demand and supply with diagram.
9) Explain the concept of Elasticity of demand.
10) Explain the determinants of elasticity of demand.
11) Define and Explain:
    (i) Price Elasticity of demand
    (ii) Income Elasticity of demand
    (iii) Cross Elasticity of demand

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Chapter 2
Theory of Production and Cost

2.1 Meaning and Factors of Production

In day to day life, we came across many products. These products are manufactured by using men, machine and materials. **The organized process of transformation of raw materials into final products using *men* and *machines* is termed as 'Production'.** Production transforms the tangible or intangible input into goods or services. Through this process value is added into the raw materials and finally it is sold to the customers.

Production is affected by following four factors as follows:

[GTU, May 2015; Dec. 2015; May 2016]

(1) Land

(2) Labor

(3) Capital

(4) Entrepreneurship

(1) Land

Availability of land is very important factor for the production. Land does not only refer to soil, it includes other facilities of natural resources. 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. Due to following characteristics of land, land has to be chosen very carefully.

→ Land is not freely available as its area is limited and hence investment has to be done for acquiring it for developing buildings for production.

→ Land lacks mobility and so, selection of land is very crucial factor for site selection of production.

(2) Labor

Labor represents the human capital available to transform raw material into consumer goods. Human capital includes all individuals who are 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 capability can also be improved through training or educating workers to complete technical functions or business tasks when working with other economic resources.

(3) Capital

Capital has two economic definitions as a factor of production. Capital represents the major physical assets individuals and companies use while producing goods or services. These assets include buildings, production facilities, equipment, vehicles and other similar items.

Capital also represent the monetary resources companies use to purchase natural resources, land and other capital goods. Monetary resources flow through economy as individuals buy and sell resources to individuals and businesses.

(4) Entrepreneurship

Entrepreneurship is considered one of the important factor of production because economic resources can exist in an economy but is not directly 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 of gathering, allocating and distributing economic resources or consumer products to individuals and other businesses in the economy.

2.2 Laws of Production (GTU – Nov. 2016)

Production is governed by mainly two types of laws.

(1) Law of variable proportions and

(2) Law of returns to scale.

2.2.1 Law of Variable Proportions

Law of variable proportions deals with the concept of increasing productivity using change in production units within limits of existing fixed cost. Law of variable proportion is written as follows:

"In a given state of technology, when the units of variable factor of production are increased within the units of other fixed factors, the marginal productivity increases at increasing rate up to certain point, than after this point it will decrease."

This law is based on following assumptions:

(i) The technique of production remains same.

(ii) This law is adopted for short run only.

(iii) Labor and raw material are variable factors.

(iv) Other inputs must be kept constant.

(v) All factors are not kept rigidly fixed proportions but the law is based upon the possibility of varying proportions such electricity consumption. So, this law is also called the law of proportionality.

(vi) Units produced during production are homogeneous in amount and quality.

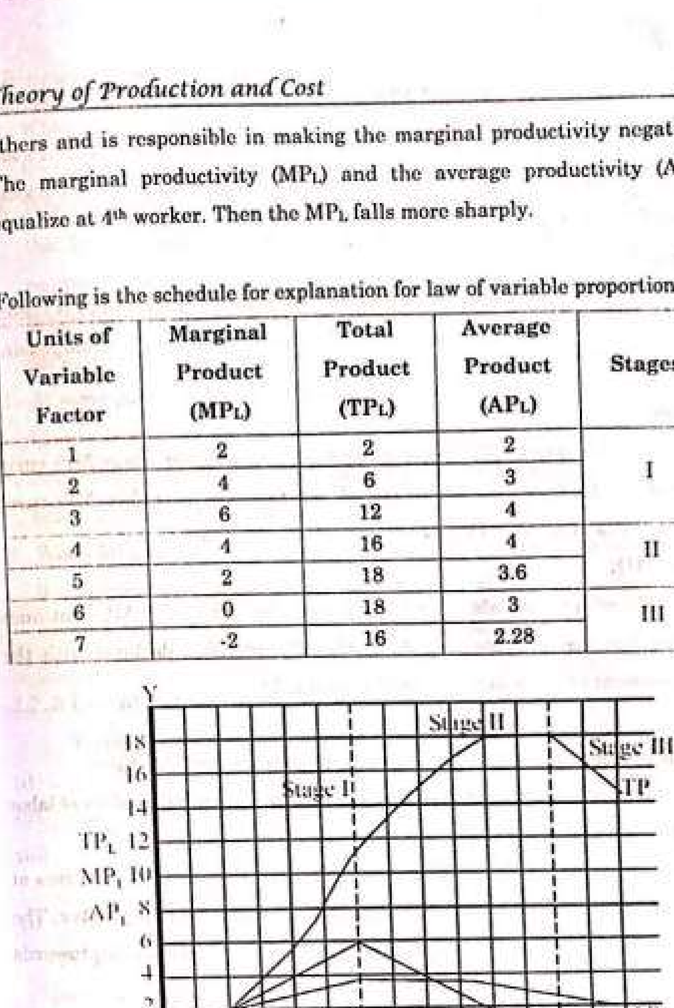
Example:

In the given schedule, units of variable factor (labor) are employed with other fixed factors of production. The marginal productivity of labor goes on increasing up to the 3rd worker. This is so because the proportion of workers to other fixed factors was at first insufficient. After 3rd worker the marginal productivity goes on falling onwards till it drops down to zero at the 6th unit of labor. The 7th worker is only a cause of obstruction to the

others and is responsible in making the marginal productivity negative. The marginal productivity (MP_L) and the average productivity (AP_L) equalize at 4th worker. Then the MP_L falls more sharply.

Following is the schedule for explanation for law of variable proportion:

Units of Variable Factor	Marginal Product (MP_L)	Total Product (TP_L)	Average Product (AP_L)	Stages
1	2	2	2	I
2	4	6	3	
3	6	12	4	
4	4	16	4	II
5	2	18	3.6	
6	0	18	3	III
7	-2	16	2.28	



The number of workers are measured on X-axis while TP_L, AP_L and MP_L on Y-axis. The above diagram shows the three stages also obtained from the schedule.

Stage I:

At this stage MP_L increases up to 3rd worker and its curve is higher than the average product, so that total product is increasing at increasing rate.

Stage II:

At this stage, MP_L decreases up to 6th unit of labor where MP_L curve intersects the X-axis. At 4th unit of labor $MP_L = AP_L$ after this, MP_L curve is lower than the AP_L. TP_L increases at decreasing rate.

Stage III:

At 6th unit of labor the MP_L becomes negative, the AP_L continues falling but remains positive. After the 6th unit, TP_L declines with the employment of more units of variable factor (L).

Relationship among Total, Average and Marginal Product:

The relationship among total, average and marginal product of labor in the light of the law of variable proportion is explained as under:

1. The marginal productivity of labor increases, the TP_L also increases at increasing rate. It is shown in the schedule up till 3rd unit of labor. The MP_L curve has positive slope and TP_L curve has rising tendency towards Y-axis.
2. When the MP_L decreases onwards till it drops to zero, the TP_L increases at decreasing rate as shown in the stage II and the TP_L curve has positive slope but has rising tendency towards X-axis.

3. When the MP_L is equal to zero, the TP_L is maximum as shown on the 6th unit of labor.
4. When the MP_L becomes negative, the MP_L curves falls below the X-axis, the TP_L declines from its maximum position and its slope becomes negative as shown in the stage III in the above diagram.
5. When the MP_L increases, The AP_L also increases but at slow rate. The MP_L curve becomes above the AP_L curve. Both have positive slopes.
6. At some point, $MP_L = AP_L$. At this point, MP_L curve intersects the AP_L curve as shown at the 4th unit of labor in the above diagram.
7. After intersecting point, MP_L falls sharply. The MP_L curve becomes below the AP_L curve. Both curves have negative slope.
8. When MP_L becomes negative, the AP_L never becomes negative because it is calculated from the TP_L. So MP_L curve is below the X-axis but AP_L curve is above the X-axis, having negative slope.

2.2..2 Law of Returns to Scale

Following are the three laws of returns to scale:

(i) Law of Increasing Returns

(ii) Law of Constant Returns

(iii) Law of Diminishing Returns

(i) Law of Increasing Returns

"In a given state of technology when the units of variable factors are increased with the units of other fixed factors, the marginal productivity increases, it is called law of increasing returns."

This law is based on following assumptions:

(i) There is a scope of further improvement in the techn production.

(ii) At least one factor (such as land available) of production is assum to be indivisible.

(iii) Some factors (labor and capital) are assumed to be divisible.

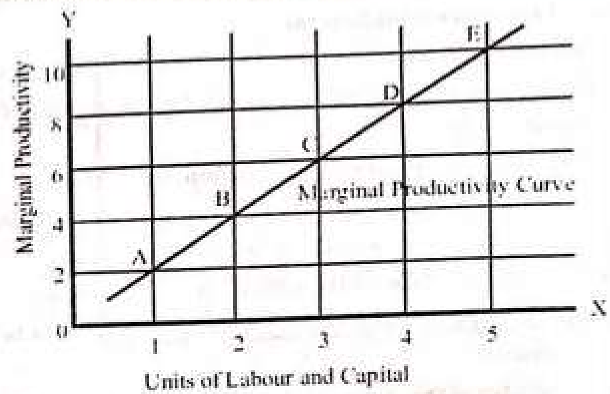
(iv) There is no change in the prices of factors of production.

(v) All units of variable factors are equally efficient.

Example:

In the given schedule, the units of variable factors (labor and capita are employed with fixed 10 units of land. The producer goes on expandin his business by investing successive units of inputs, and then margina productivity goes on increasing up to the 5th unit of the variable inputs. A the 5th unit, the plant is working to its full capacity and it is not possibl further to reap the economies of large scale of production. Thus, the tota productivity increases at increasing rate.

Fixed Factor (Land)	Units of Variable Factor (Labor & Capital)	Marginal Product (MP)	Total Product (TP)
10 units	1	2	2
10 units	2	4	6
10 units	3	6	12
10 units	4	8	20
10 units	5	10	30



Application of the Law:

The law of increasing return operates in such manufacturing industries where:

→ Factors of production are combined and substituted up to some extent.

→ The law is also applicable in that unit which is producing below its capacity. The increase in marginal returns continues till the plant begins to produce to its full capacity.

→ The principle of specialization is applicable in industrial units. The marginal productivity increases due to specialization.

→ In industrial sector human factors are more involved than natural factors. Due to this reason natural obstacles are less effective.

→ An industry is expanded by getting the internal and external economies of large scale of production.

Therefore, the law of increasing returns operates in an industry to increase its output and the price of the product falls.

(ii) Law of Constant Returns

"When the units of variable factors are increased with the units of ... fixed factors, the marginal productivity remains constant. It is ... constant return."

This law is based on following assumptions:

(i) Some factors (labor and capital) are assumed to be variable.

(ii) There is no increase in the price of raw materials.

(iii) There is no change in the price of factors of production.

(iv) The supply of various factors for an industry should be perf... elastic.

(v) All units of variable factors of production are equally efficient.

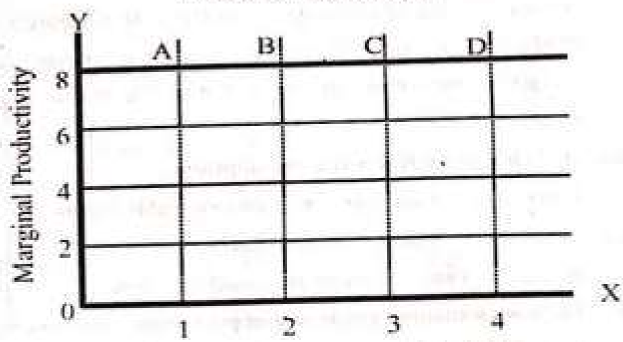
Example:

In the given schedule, at the optimum level of production ... managerial productivity of the variable factors remains constant with ... increased units of these factors are shown in the below schedule.

Fixed Factor (Land)	Units of Variable Factor (Labor & Capital)	Marginal Product (MP)	Total Produ... (TP)
10 units	1	8	8
10 units	2	8	16
10 units	3	8	24
10 units	4	8	32

With the further application of the units of labor and capital, the marginal productivity remains constant i.e., 8 units. Then the total productivity of the product increases with the proportionate increments. In

Marginal Productivity Curve



terms of cost, the law of constant returns means, the constant marginal cost as the industry expanded. So, by constant returns, we are on the path of the optimum business unit.

Application of the Law:

For the application of this law, the following points are very important:

→ This law is applicable in those sectors where human and natural factors play their role, for example, in industry making blankets, pure natural wool is used while blankets are prepared in the presence of human factors.

→ Such factors where economies of human and natural factors are presented which counter balanced each other and productivity is provided with constant rate.

→ This law is more applicable in such sectors where labor's role is greater than other factors of production. The law of constant returns operates by increasing the units of labor force.

(iii) Law of Diminishing Returns

"In a given state of technology when the units of variable factors of production are increased with the units of other fixed factor, the marginal productivity decreases it is called law of diminishing returns."

This law is based on following assumptions:

(i) Units of capital and labor are used as variable factors.

(ii) The prices of the factors do not change.

(iii) All units of variable factors are equally efficient.

(iv) There is no change in technique of production.

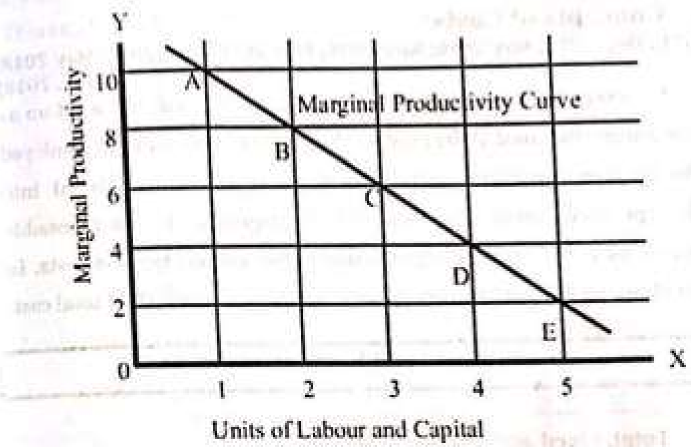
(v) Best combination of factors of production has crossed the level of optimum point.

(vi) There is no change in the fixed factor of production.

Example:

In the given schedule, at the optimum level of production, the marginal rate of return is at its maximum *i.e.* 10 tons. When an additional unit of labor and capital is employed, the marginal productivity comes down from 10 tons to 8 tons and so on decreasing. This tendency of marginal productivity to decrease as successive units of variable factors are employed to fixed factor is called the law of diminishing returns.

Fixed Factor (Land)	Units of Variable Factor	Marginal Product (MP)	Total Product (TP)
10 units	1	10	10
10 units	2	8	18
10 units	3	6	24
10 units	4	4	28



Applications:

The law of diminishing returns has its wide application, but is especially applicable to agricultural sector. In this sector, there is the supremacy of nature plays in production corresponds to diminishing returns. Due to the many reasons, the agricultural sector is subject to law of diminishing returns.

1. The natural factors have more role than human factors in agricultural sector and marginal productivity decreases.
2. The sector has very wide area and supervision cannot be very effective.
3. Scope of specialized machinery is limited.
4. There are other limitations of seasonal nature e.g. rain, climate changes etc.
5. The fertility land also declines with time.

2.3 Concepts of Costs

[GTU, Dec. 2014; May 2016; Nov. 2016; May 2017; Nov. 2017; May 2018; Nov. 2018]

For every business organization, it is essential to install a set up as per the nature and need of the product. Number of employees are employed in the business organization for transforming the raw material into finished products using machines. Set up requirement is not possible without money. So, business organization incurs various types of costs. In order to have profit, business has to generate more revenue than total cost.

So, Profit = Total Revenue – Total Costs

2.3.1 Total, Fixed and Variable Costs

Total costs consists of two parts: Fixed cost and variable cost.

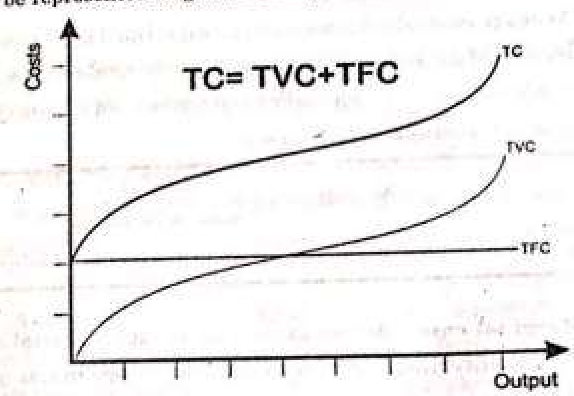
Fixed cost is the cost which do not vary with number of units produced. It incurs even if the organization does not produce a single unit of product. Fixed costs are expenses that have to be paid by the organization independent of any business activity. Rent, advertising, insurance and office supplies, cost of machine installation, salaries of employees, minimum electricity bill etc. are examples of fixed cost.

On the other hand, **variable cost** is the cost which varies with number of units produced. It increases with increase in number of units produced and vice versa. So, variable costs depends on number of units produced. Raw material consumption, electricity bill, extra labor hours etc. are examples of variable costs.

Total cost is summation of fixed cost and variable cost. So, mathematically,

Total Cost = Fixed cost + Variable cost

This can be represented diagrammatically as follows:



Total cost curve

2.3.2 Direct and Indirect Costs

A price that can be completely attributed to the production of specific goods or services is termed as direct cost. **Direct costs** refer to materials, labor and expenses related to the production of a product. Direct cost varies with number of units produced.

Expenses which are not specific to any product or good, but these type of costs are incurred in combined for the business are termed as **indirect costs.** For example, rent, advertising, maintenance, security, supervision incurs as joint usage, etc. and, therefore, it is difficult to assign to or identify with a specific cost object or cost center and hence these costs are grouped under the head of fixed costs. Indirect costs are usually constant irrespective of production units.

2.3.3 Average and Marginal Cost

Average cost (also known as unit cost) is equal to total cost divided by the number of units of goods produced. Since the total cost is sum of fixed and variable costs, the average cost can be represented as sum of average fixed cost and average variable cost.

$$\text{Average cost} = \frac{\text{Total Cost}}{\text{Quantity Produced}}$$

$$\text{Average cost} = \text{Average fixed cost} + \text{Average variable cost}$$

Marginal cost is defined as the ratio of change of total cost to the change in quantity produced. It represents the change in cost of one unit production. The purpose of analyzing marginal cost is to determine at which point an organization can achieve economies of scale.

$$\text{Marginal cost} = \frac{\text{Change in Total Cost}}{\text{Change in Quantity Produced}} = \frac{\Delta\, TC}{\Delta\, Q}$$

2.3.4 Incremental Cost

Incremental cost is the cost associated with increasing productive by one unit. The incremental cost total is always made up of purely variable costs. It represents the added costs that would not exist if the extra unit was not made. That means that many fixed costs such as rent on a factory or buying a machine are not usually represented.

For example, if a company spends a set sum on machines each year, this cost will be represented in the average cost of each unit produced on those machines. It will not be included in the incremental cost because producing one extra unit does not require any more spending on buying machines.

Due to this reason, in most of the cases, marginal cost of a unit will be higher than the incremental cost.

2.3.5 Recurring and Non- recurring Cost

Regular cost incurred repeatedly, or for each item produced or each service performed is termed as **recurring cost**. Insurance premium, electricity bill are its examples.

A one-time charge incurred as a result of rare event or activity, such as purchase of machine, building construction, design, development, and investment costs, and fire or theft losses, lawsuit payments, losses on sale of assets is termed as **non-recurring cost**. This cost is charged against earnings in the year it occurs.

2.3.6 Sunk Cost

A **sunk cost** is a retrospective (past) cost that has already been incurred and cannot be recovered. Sunk costs are independent of any event that may occur in the future. This cost is irrelevant for future decision making. *For example, oil industry where the decision to abandon or operate an oil well is made on the basis of its expected cash flows and not on how much money was spent in drilling it.*

2.3.7 Implicit Cost

An **implicit cost**, also called an imputed cost, implied cost, notional cost, is the opportunity cost equal to what a firm must give u order to use factors which it neither purchases nor hires. It is the opposite of an explicit cost, which is borne directly.

Implicit costs can also be thought of as intangible costs that are not easily accounted for. *For example, the time and effort that an owner puts into the maintenance of the company, rather than working on expansion, can be viewed as an implicit cost of running the business.*

Implicit costs also represent the divergence between economic profit (total revenues minus total costs, where total costs are the sum of implicit and explicit costs) and accounting profit (total revenues minus only explicit costs). Since economic profit includes these extra opportunity costs, it will always be less than or equal to accounting profit.

2.3.8 Opportunity Cost (GTU – May 2016)

When any of the option is selected out of available options, other options are not selected. Hence, selector sacrifices all other options. So, the value which is forgone for selecting the mutually exclusive alternatives is termed as **opportunity cost.** Assuming the best choice is made, it is the "cost" incurred by not enjoying the benefit that would be had by taking the second best choice available. Opportunity costs is not restricted to monetary or financial cost but it includes the real cost of output forgone, lost time, pleasure or any other benefit that provides utility should also be considered opportunity costs.

2.3.9 Cash Cost

Cash costs are costs that businesses pay for when using cash, or a check, but not credit. On a cash accounting basis, the costs paid for by using credit would not be recorded in the general ledger until the actual cash has

been paid. This is the main reason why firms moved away from the cash accounting method to the accrual method, as the accrual method will recognize credit transactions as well as cash transactions.

2.3.10 Short run and Long run cost

Many type of costs are related to time horizon. For example, if we consider that any company is installing a plant for manufacturing a product. For certain period of time, company cannot adjust the number or size of plants. By hiring more workers only number of products manufactured can be increased. So, fixed cost incurred in installing the plant cannot be varied during certain period of time. So, the cost which cannot be varied in short period of time, is termed as **short run** cost.

After several years, company can either expand the existing plant or increase the number of plants. So, in long run cost of plants can be varied and hence it is termed as **long run** cost.

As many decisions are fixed in the short run but variable in the long run, a firm's long-run cost curves differ from its short-run cost curves.

2.4 Break Even Analysis – BEP

[GTU, Dec. 2015; May 2016; Nov. 2016; May 2017; Nov. 2017; May 2018; May 2019]

To earn profit is the main aim of any business. Business can only earn profit when it recovers its incurred cost. Profit is governed by cost of the production, amount of output and revenue generated through sales. To generate more profit it is very essential to keep total costs low as much as possible and increase the sales volume.

As fixed cost cannot be varied, but fixed cost per unit can be red... by increasing the number of units produced. With increase in numb... units produced, variable cost will increase. So, it is essential to deter... the point at which the total cost is recovered and company starts to ea... profit. The point at which the company starts to earn profit is termed... **Break Even Point (BEP)** and its analysis is termed as Break Ev... Analysis (BEA). In other words, BEP is the minimum level of sales wh... ensure the company will not experience los. Mathematically, it can b... written as,

Sales Revenue = All variable and Fixed Cost

BEA is also termed as Cost – volume - profit (CVP) analysis. It look... at how profit changes when there are changes in variable costs, sales pric... fixed costs and quantity.

2.4.1 Assumptions of BEP: [GTU, Dec. 2014; May 201...

1. Price of the products will remain fixed.
2. Variable cost rate will also remain fixed.
3. Total fixed costs will remain fixed up to maximum manufacturing capacity of the firm.
4. Whatever the amount of quantity is produced is sold.
5. Costs can be classified accurately as either fixed or variable.
6. All units produced are sold.

2.4.2 Method to find out BEP:

BEP is determined in two terms as follows:

(i) BEP in Physical Quantity Produced

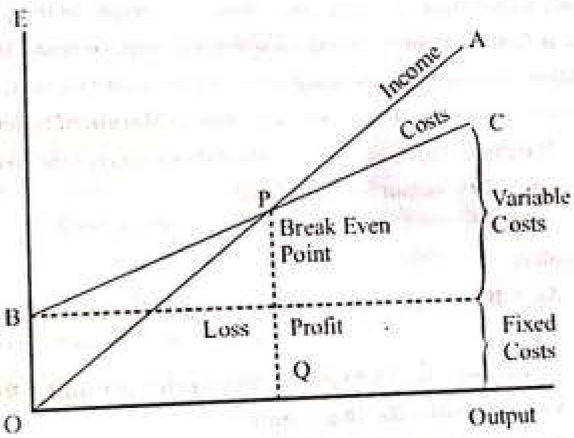
(ii) BEP in terms of Sales Volume

(i) BEP in Physical Quantity Produced

BEP is defined as the ratio of total fixed cost to the contribution per unit. Here, contribution is defined as the difference between revenue generated and variable cost incurred.

$$\text{So, BEP} = \frac{\text{Total Fixed Cost}}{\text{Contribution per unit}} = \frac{FC}{SP - VC} = \frac{FC}{C}$$

Where, Contribution (C) = Revenue – Variable cost



(ii) BEP in terms of Sales Volume

BEP is defined as the ratio of fixed cost to the contribution ratio. Contribution ratio is the ratio of total contribution to the total sales. This contribution ratio is also indicates the profit per unit volume sold. So, contribution ratio is also known as **P/V ratio.**

$$\text{So, BEP} = \frac{\text{Fixed Cost}}{\text{Contribution Ratio}} = \frac{FC}{CR}$$

$$\text{Where, CR} = \frac{\text{Total Sales} - \text{Total Variable Costs}}{\text{Total Sales}}$$

As shown in the figure, point P is the break-even point, *i.e.*, it is the point at which sales revenue is equal to total costs. In the region below point P, company will not make profit of a single rupee. Above point P, company will start to earn profit. If company wants to earn high profit, output must be very higher than the break even volume. On graph, as the production point is farthest from the break even volume point, company is in safer condition that even if there is reduction in the production unit, company will not be in loss. So, this distance is termed as **Margin of Safety.**

***Margin of Safety** is defined as the distance between the break-even point and the output being produced.*

Examples:

(1) An ABC co. Ltd. has given following information for current year.

Fixed cost = Rs. 12,00,000 **Sales price per unit = Rs. 200**

Variable cost = Rs. 50 per unit

Estimated sales = Rs. 500,00,000

Calculate:

(i) Break Even Point (BEP)

(ii) Contribution and Profit, if likely sales in the next year is expected to Rs. 45,00,000.

(iii) Sales turnover if profit is targeted is Rs. 15,00,000.

Solution:

As per given data,

FC = Rs. 12,00,000 S = Rs. 500,00,000

VC = Rs. 50 per unit SP = Rs. 200

So, calculating the contribution per unit, C = SP – VC = 200 – 50 = Rs. 150

(i) $$\text{BEP} = \frac{\text{Total Fixed Cost}}{\text{Contribution per unit}} = \frac{12,00,000}{150} = 8000 \text{ units}$$

(ii) If next year sales is Rs. **45,00,000**, then number of units sold,

$$= \frac{45,00,000}{200} = \mathbf{22,500 \text{ units}}$$

Total Contribution = 22,500 X 150 = Rs. 33,75,000.

Profit = Total Revenue – Total Cost

= Total Revenue – (Fixed Cost + Total Variable Cost)

= Rs. 45,00,000 – (12,00,000 + 50 X 22,500)

= Rs. 21,75,000.

(iii) Targeted profit = Rs. 15,00,000.

Target Profit = Total Revenue – Total Cost

15,00,000 = 200 x – (12,00,000 + 50 x)

$\Rightarrow$ x = 18000 units

$\Rightarrow$ Sales Revenue = Rs. 36,00,000.

(2) An XYZ co. Ltd. has given following information for current year.

Sales price per unit = Rs. 60 **Sales volume = 1500**

Variable Cost per unit = Rs. 40 **Profit per unit = Rs. 12**

Calculate:

(i) P/V ratio

(ii) Fixed Cost

(iii) Break Even Point (BEP)

Answer:

As per given data,

SP = Rs. 60 Profit = Rs. 12

VC = Rs. 40 per unit Sales Volume = 1500

So, calculating the contribution per unit, C = SP – VC = 60 – 40 = Rs. 20

(i) Here, $CR = \frac{\text{Total Sales} - \text{Total Variable Costs}}{\text{Total Sales}}$

$= \frac{1500 \times 60 - 1500 \times 40}{1500 \times 60} = \frac{1}{3}$

(ii) FC = Total Sales – Total Variable Cost – Total Profit

= 1500 X 60 – 1500 X 40 – 1500 X 12 = Rs. 12000

(iii) $BEP = \frac{\text{Fixed Cost}}{\text{Contribution Ratio}} = \frac{12000}{1/3}$ = **Rs. 36000** = 600 units

2.4.3 Limitations of BEP: [GTU, Dec. 2014]

Following are the limitations of BEP analysis:

1. Many costs and their components do not fall into neatly compartmentalized fixed or variable cost categories as they possess the characteristics of both types.

2. If company sells several products, the financial manager has to prepare and evaluate a number of profit-graphs covering integrated segments of independent activities.
3. A break-even chart represents a short-run static relationship of costs and output and become obsolete very quickly.
4. The relations indicated in the break-even chart do not help for all levels of operations. Costs tend to be higher than shown on the static break-even chart when the plant's operation approaches 100 percent of its capacity.
5. The frequent changes happening in the selling price of the product affect the reliability of the break even analysis.

The cost of securing funds to expand is disregarded in break-even chart.

Short Questions

1. **What do mean by 'production'?**

   It is the organized process of transformation of raw materials into products using *men* and *machines* is termed as '**Production**'.

2. **Which factors are affecting the 'Production'?**

   Land, Labor, Capital and Entrepreneurship.

3. **Availability of Labor is important factor for Plant Layout or Plant Location?**

   For Plant Location, availability of labor is very important factor.

4. **Define law of "Variable Proportions".**

   In a given state of technology, when the units of variable factor of production are increased within the units of other fixed factors, the marginal productivity increases at increasing rate up to certain point, than after that point it will decrease.

5. **Define law of "Law of increasing returns".**

   In a given state of technology when the units of variable factors are increased with the units of other fixed factors, the marginal productivity increases is called law of increasing returns.

6. **Define law of "Law of constant returns".**

   When the units of variable factors are increased with the units of other fixed factors, the marginal productivity remains constant. It is called constant return.

7. **Define law of "Law of diminishing returns".**

   In a given state of technology when the units of variable factors of production are increased with the units of other fixed factor, the marginal productivity decreases it is called law of diminishing returns.

8. **Define fixed cost.**

   Fixed cost is the cost which do not vary with number of units produced.

9. **Define variable cost.** **(GTU – May 2016)**

   Variable cost is the cost which varies with number of units produced. It increases with increase in number of units produced and vice versa. So, variable costs depends on number of units produced.

10. **How total cost is related to fixed and variable cost?**

    Total cost is summation of fixed cost and variable cost. So, mathematically,

    Total Cost = Fixed cost + Variable cost

11. **Define: Direct cost**

    A price that can be completely attributed to the production of specific goods or services is termed as direct cost.

12. **Define: Indirect cost**

    Expenses which are not specific to any product or good, but these type of costs are incurred in combined for the business are termed as **indirect costs.** For example, rent, advertising, maintenance, security, supervision incurs as joint usage, etc.

13. **Define: Average cost (Unit Cost)**

    Average cost (also known as unit cost) is equal to total cost divided by the number of units of goods produced.

14. **Define: Marginal cost** **[GTU – Nov. 2016]**

    Marginal cost is defined as the ratio of change of total cost to the change in quantity produced. It represents the change in cost of one unit production.

15. **Define: Incremental cost**

    Incremental cost is defined as the cost which is associated with increasing production by one unit.

16. **Define: Recurring Cost**

Regular cost incurred repeatedly, or for each item produced or each service performed is termed as **recurring cost.**

17. **Define: Sunk Cost**

A sunk cost is a **retrospective (past) cost** that has already been incurred and cannot be recovered.

18. **Define: Implicit Cost**

An implicit cost is the opportunity cost that a firm must give up in order to use factors which it neither purchases nor hires. It is the opposite of an explicit cost, which is borne directly.

19. **Define: Break Even Point (BEP)** **(GTU – May 2016)**

The point at which the company starts to earn profit is termed as Break Even Point (BEP).

20. **Define: Margin of Safety**

Margin of Safety is defined as the distance between the break-even point and the output being produced.

21. **Define: P/V Ratio**

P/V ratio is the ratio of total contribution to the total sales, which indicates the profit per unit volume sold.

Question Bank

1) What do you mean by 'Production'? Which factors are affecting the production?
2) Explain the law of variable proportions for production.
3) Explain relationship among total, average and marginal product based on law of variable proportions.
4) Explain the law of increasing return of production.
5) Explain the law of constant return of production.
6) Explain the law of diminishing return of production.
7) Explain the types of cost briefly.
8) Explain the relationship between total, fixed and variable costs.
9) What do you understand by direct and indirect cost? Explain with suitable example.
10) What is average cost?
11) What does marginal cost mean? Explain.
12) What is incremental cost? How it differs from marginal cost?
13) Explain following types of costs:
    (a) Recurring and non-recurring cost
    (b) Sunk cost
    (c) Implicit cost
14) Explain short run and long run costs.
15) What do you mean by break-even point? What does it indicates?
16) Define P/V ratio.
17) What do you mean by contribution? How it differs from contribution ratio?
18) Explain different methods of calculating break-even points.

19) Explain the assumptions and limitations of BEP.
20) Explain break even analysis.

Chapter 3
Concepts of Markets and National Income

Section – A

3.1 Various Types of Market

Market provides the common platform to buyers and suppliers. Suppliers come in the market with goods and offers at market price. If any supplier tries to sale the good at above market price then the buyers will search for the other supplier from where the same goods will be available at market price and completes the transaction.

Now suppose, instead of having many suppliers, if there is only one supplier, than the buyers have to buy from him only at the price determined by the supplier anyhow, if they are really in need of the goods.

Now consider that there are few (say four) sellers who sells only one particular good. If the group of these sellers have made one group (so called *cartel*) to determine the price and not to change it, then again the buyer has no choice to buy at the same predetermined price.

These three situations has led to emergence of different types of three markets, which are discussed in the following sections.

3.2 Perfect Competitive Market and its Price Determination [GTU, Dec. 2015; May 2016; Nov. 2017; Nov. 2018]

For the first type of market, there are many buyers and many suppliers are available for completing the transactions. There is no scope for increasing or decreasing the price which is determined by the market and hence the suppliers are forced to sell at predetermined market price. This makes the market as **competitive market.**

So, ***competitive market*** *is defined as the market in which a large numbers of suppliers compete with each other to satisfy the wants and needs of a large number of consumers at competitive price.*

A market is said to be under perfect competition when following conditions are fulfilled:

(i) There are many buyers and sellers in the market.

(ii) Market has low entry barriers to the sellers. So, any sellers can enter in the market.

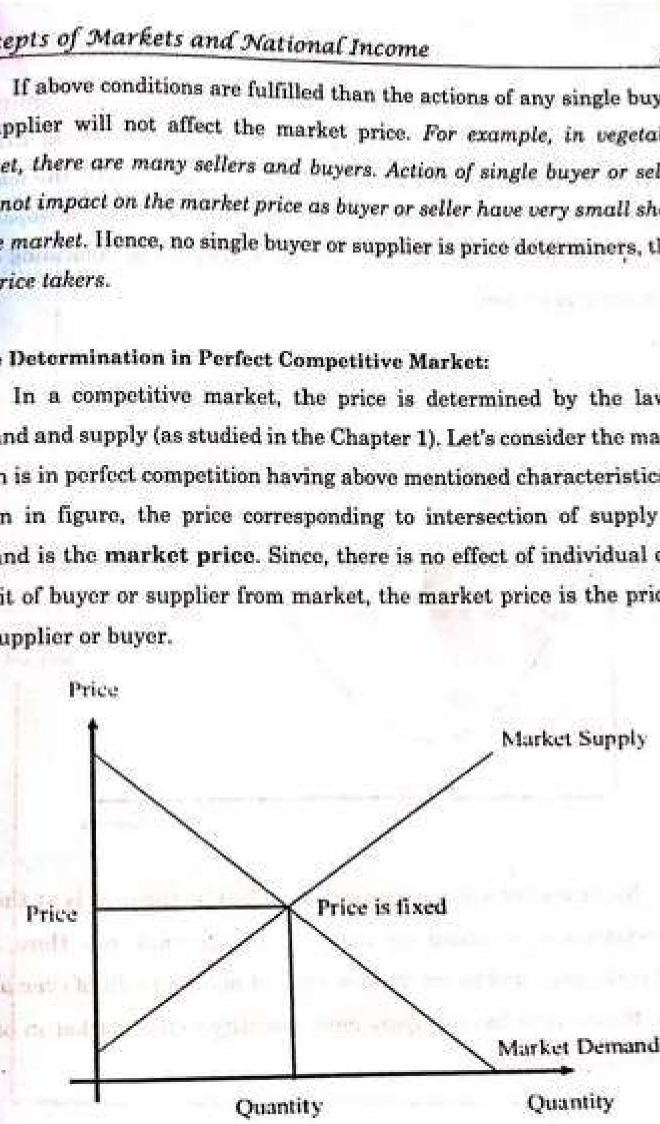
(iii) Costs of goods producing is almost same for all sellers.

(iv) The goods offered by the various sellers are largely the same.

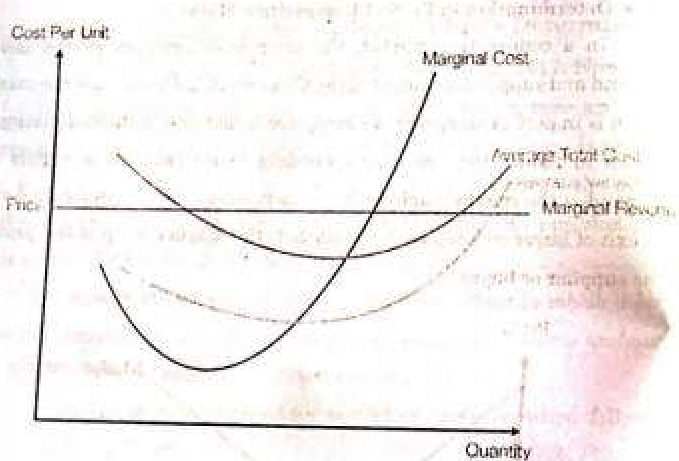
If above conditions are fulfilled than the actions of any single buyer or supplier will not affect the market price. *For example, in vegetable market, there are many sellers and buyers. Action of single buyer or seller have not impact on the market price as buyer or seller have very small share in the market.* Hence, no single buyer or supplier is price determiners, they are *price takers.*

Price Determination in Perfect Competitive Market:

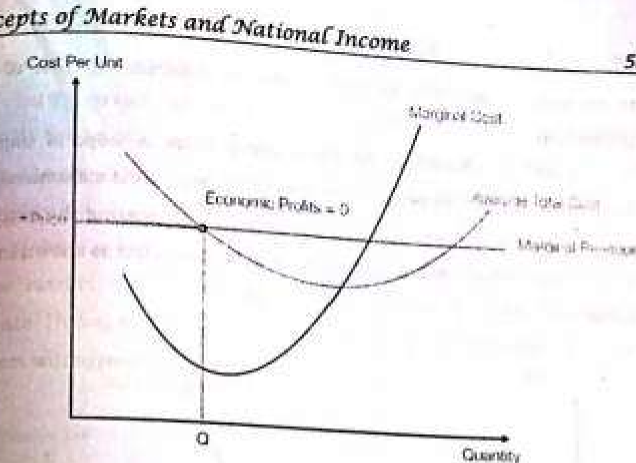
In a competitive market, the price is determined by the law of demand and supply (as studied in the Chapter 1). Let's consider the market which is in perfect competition having above mentioned characteristics. As shown in figure, the price corresponding to intersection of supply and demand is the **market price**. Since, there is no effect of individual entry or exit of buyer or supplier from market, the market price is the price for the supplier or buyer.



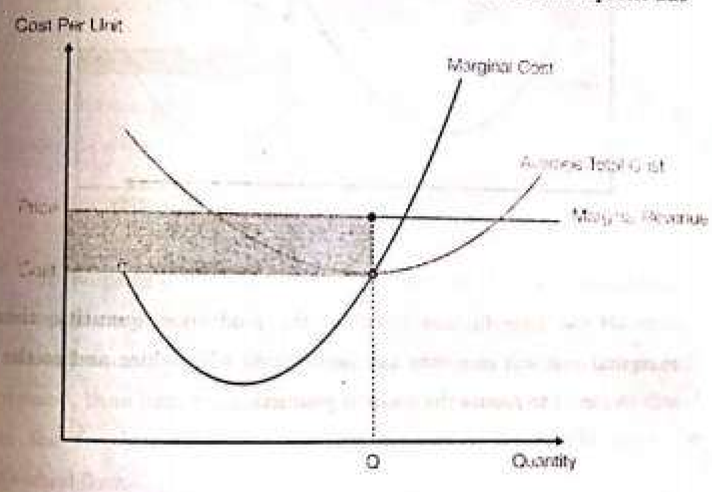
Now, consider the effect of market price on the firm's quantity to be produced as well on the economic profit. For any individual firm, the behavior different types of cost is as shown in figure. Here, the marginal cost curve has initial downward slope and then it hs upward slope. Since the price is fixed, marginal revenue line is stright line coinciding on the horizontal price line.



Now consider that the quantity supplied by the firm is at the point of intersection of marginal revenue and average total cost. Here, cost is equal to the price and hence the firm will not make a profit of even a single rupee. Hence, firm has to supply more quantity to the market in order to earn the profit.

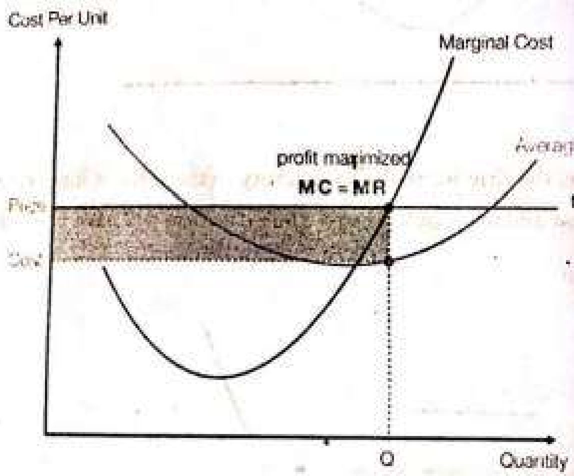


Suppose, the firm increases its quantity to the point of intersection of marginal cost and average total cost. Here, the firm will earn profit due



to increase in quantity as well as due to reduction in cost of goods production.

Carefully observing the above curve, there is scope of improving some amount profit as per rule of economics that profit is maximized where marginal revenue is equal to marginal cost. So, increasing the production of goods up to that quantity, the profit will be maximum as shown in figure below:

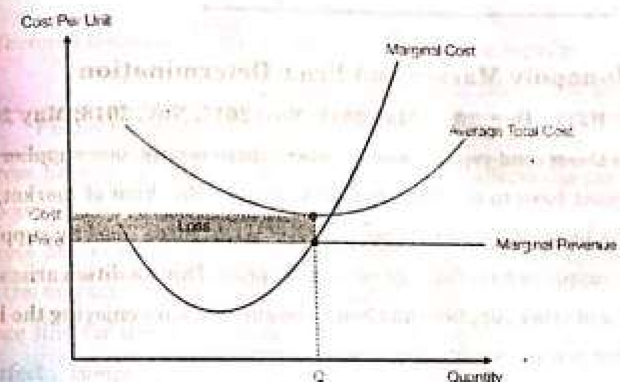


If the firm further increases the production quantity, then its marginal cost will increases and hence profit will reduce and so the firm will be forced to reduce the goods of production.

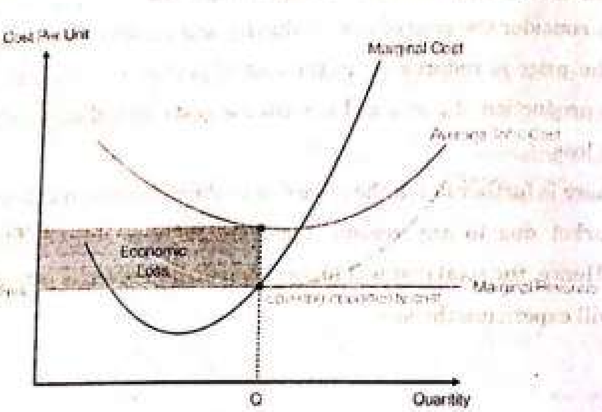
Change in price and its effect on economic profit:

Let's consider the case of price reduction and its effect on economic profit. If the price is reduced up to the cost of production, the firm will reduce the production of goods and will cut the costs such that it will not experience loss.

If there is further fall in the price due to abundant amount of supply in the market due to any reason, the marginal revenue will further decrease. Hence, the total cost will higher compared to revenue generated. So, firm will experience the loss.



If the price (marginal revenue) is reduced further which is equal to the average variable cost at any quantity of goods, than that point is termed as shut down point. This point indicates that if the production is still continued, than firm will covering opportunity cost. So, it can be concluded that the firm's marginal cost curve represents the supply curve for individual firm.



3.3 Monopoly Market and Price Determination

[GTU, Dec. 2014; May 2015; Nov. 2017; Nov. 2018; May 2019]

In the second type of market, where there is only one supplier and buyers must have to buy from him only, than in this kind of market, the customers have no power to effect the price of the goods fixed by suppliers and only suppliers have full control over the price. This condition arises due to absence of other suppliers and hence the suppliers are enjoying the huge profit. This market condition is termed as *monopoly*.

For example, *if any pharmaceutical company has the drug for any incurable disease. Then on patenting the drug that company has only rights the sell the drugs. So, company is the sole seller and they are in position to determine the price of the product. Buyers who wants to buy that product has to pay the price decided by the company.* So, **monopoly market** is *defined as the market in which firm is the sole seller of a product without close substitute.*

Monopoly in the market is created due to two ways. First is the ability of achieving economies of scales and second is the unfair advantage gained due to having natural or intangible resources.

Characteristics of Monopoly market:

Following are the characteristics of monopoly market:

(i) There is only one seller and others are buyers. Hence, the demand of the industry will be the demand of the firm.

(ii) Since the monopoly resources are impossible or difficult to get, the entry barrier is high for the competitors.

(iii) Buyers have no control over the price of the product.

Difference between Perfect competition and Monopoly:

[GTU, Dec. 2014; May 2015; May 2017]

Perfect Competition	Monopoly
Firms have no power to influence the price to its output.	Firm output affects the price of the product.
Firms are price taker determined by the market.	Firm is price maker, not price taker.
Price line for the demand curve of perfect competition market is straight. It is also perfectly elastic.	For monopoly market, demand curve slopes downward.
Perfect competitive market are fully utilizing their resources. So, this market is most efficient market.	Monopoly market firm is not fully utilizing their resources. So, this market is most inefficient market. There is scope of improving the resources utilization.

Price Determination in the Monopoly Market:

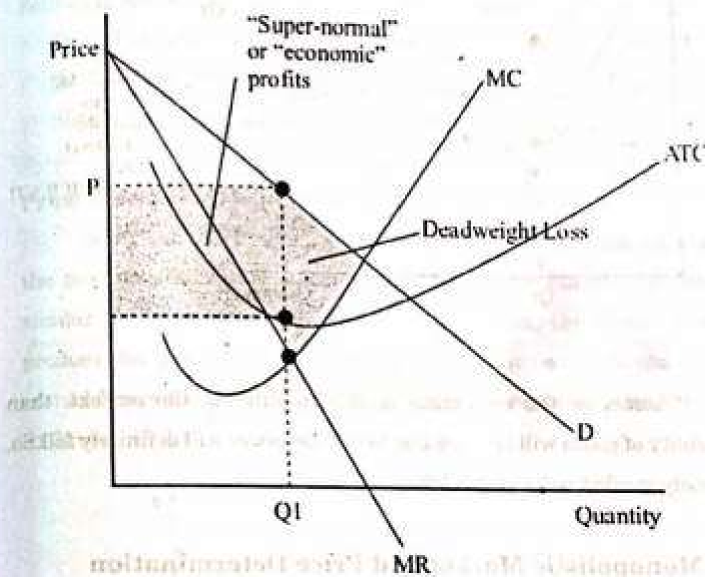
Let's consider the example of firm having monopoly for any one good. Following table shows the demand and corresponding price of the good.

Quantity	1	2	3	4	5	6
Price	60	50	40	30	20	10

Now, if the graph of price v/s quantity is produced than, it will slope downward. In order to understand the price determination, it is necessary to understand the revenue generation as shown in the table below. From clear that the demand curve is sloping downward. Further, revenue generated with selling of only one quantity of good is equal to the selling of identical six quantity of good. So, to increase the production is not wise way of earning the profit in this type of market. Also, the Marginal revenue increases up to certain quantity of production and then after decreases. So, it is necessary for the firm to decide the quantity to be produced as well as corresponding price.

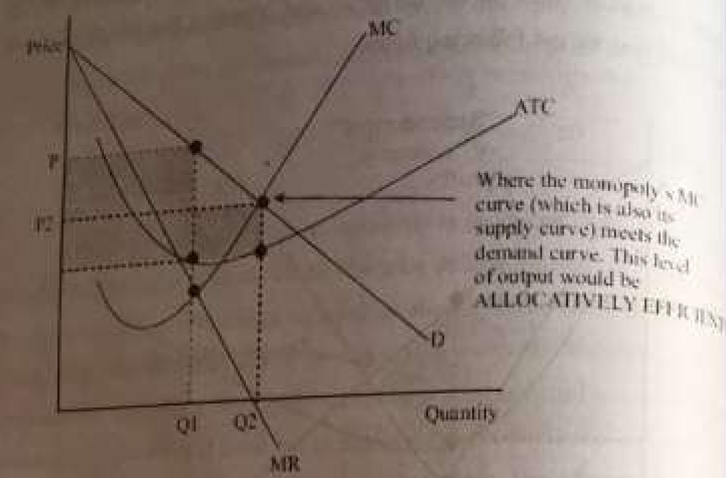
Quantity Produced	Price	Total Revenue	Avg. Revenue	Marginal Revenue
1	60	60	60	60
2	50	100	50	40
3	40	120	40	20
4	30	120	30	0
5	20	100	20	-20
6	10	60	10	-40

As per the rule of economics, the profit is maximized where the marginal cost is equal to the marginal cost. Plotting the graph of above table and cost we get following figure.



It is clear from figure that the firm gets maximum profit when the the marginal cost is equal to the marginal cost. Here, one triangle ara is shown labled "deadweight loss". This area indicates that firm is not utilising this resources and production is less which is loss to the socieity. So, it is called "deadweight loss".

Further if we consider that if the firm wishes to increaes the production up to Q_2 quanitty, as showin in figure, its profit will be P_2 and at this level the firm is able to outputs allocate efficiently.



If somehow the competitor is able to enter in the marekt, the availablity of goods will be more and hence the prices will definitely fall. So monopoly market will not last long.

3.4 Monopolistic Market and Price Determination

(GTU – May 2016)

There is existence of one market in between perfect competitive market and complete monopoly market. *For example, if you went to theater to watch movie. Many movies are running in the theater. On one hand movies are competing in between due to different actors and attracts the customers. On the other hand, each movie has unique characteristics. So thus kind of market where the despite having unique characteristics products are competing with each other. In other words, a market structure*

in which many firms sell products that are similar but not identical is called ***monopolistic market.***

Characteristics of Monopoly market:

Following are the characteristics of monopoly market:

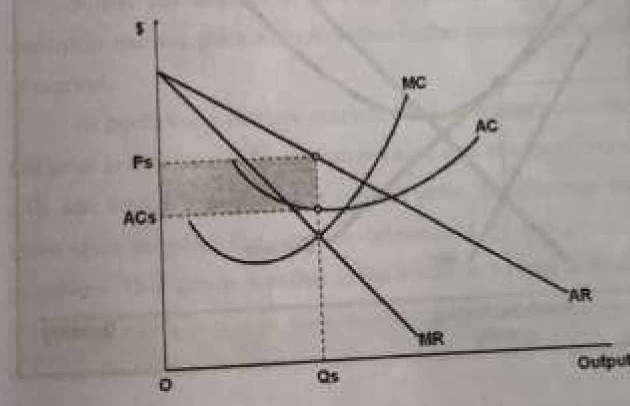
(i) Products sell by firms are similar but not identical.

(ii) Number of sellers are more compared to monopoly market.

(iii) There is no barrier to entry or exit in the market.

Price Determination in the Monopolistic Market:

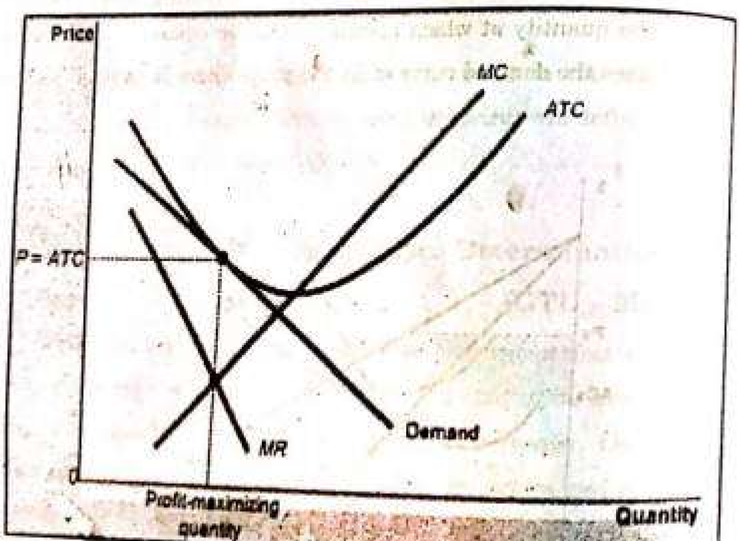
Since there are few suppliers in the market, the demand curve for the monopolistic market is similar to the monopoly market. In shrot run, similar to the monopoly market, in this marekt, the firms chooses to produce the quantity at which marginal revenue equals to the marginal cost and uses the demand curve to fix the price where it can sell as shown in figure.



In short run, it can be observed that firms are making profit and hence in long run, new firms enters in the market to earn profit. They fetch certain market of the firm and hence, the demand curve shifts downward for individual firms. So, the profit of individual firm decreases.

Conversely, when firms are making losses, firms in the market have an incentive to exit. As firms exit, customer have fewer options for choice and hence, shifts the demand curve to upward. So, again the sustaining firm makes profit. This process of entr and exit continous till the market attains the equiilibrium at zero economic profit.

By this kind of up and down shift the price is determined by the entry or exit of the firms.



3.5 Oligopoly Market and Price Determination

[GTU – May 2019]

In the third case, when number of suppliers are more compared to monopoly market for same product, new type of market is developed which neither competitive nor monopoly. Here, there will be competition among suppliers for same product but there will not be stiff competition such as in case of perfect competitive market due to less number of suppliers. This type of market is termed as *oligopoly* market. Oligopoly market is a mix of perfect competition market as well as monopoly market.

In oligopoly market, since there are few suppliers for a particular product, the product price is fixed by forming a cartel. So, buyers have to accept the price which is determined by the suppliers and hence buyers are *price takers*.

Price Determination in the Oligopolistic Market:

Since, the market is mixing of perfect competitive market and monopoly market, price determination is also combination of both this kind of market.

In perfect competitive market, there are many suppliers and hence the price is determined by the competition and in case of monopoly market, only one supplier governs the market price. In oligopoly market, due to more than supplier the price is determined by the group made by the suppliers. This group is called *cartel* which is formed in order to regulate the price which can give maximum profit to all suppliers. Cartel takes collective decision of price as well as production which can maximize the profit of all suppliers. Decided production level may not fully utilize the resources but in order to maximize the profit quantity is fixed.

Mostly decision taken such type of cartel is violated in long run due to greed and breach of commitment. For example, if two suppliers are ruling the market and they decided to produce low production in order to keep the price high. If both go for less production, then both will earn high profit due to shortage of product.

But on the other hand, since, the one of the supplier has unused capacity, he is aspired to product more production than commitment. So, he is able to earn more profit compared to other supplier. This kind of behavior can also be observed in the other supplier. So, ultimately high production of both suppliers lead to availability of more product in the market and hence price is reduced. So, the profit is significantly reduced. So, price determination requires perfect collusion of the suppliers in the market.

Section - B

3.6 National Income – Concept and definitions

[GTU, Dec. 2015; May 2016]

National income is the result of all economic activities of the nation in terms of money. It is the most important macroeconomic variable which determines the business level and environment of a country. The level of national income determines the level of aggregate demand for goods and services. The trend in national income indicates the trends in aggregate demand. Therefore, business decision makers need to keep an eye on aspects of the national income, especially those having long-run implications.

Economic activities include all human activities which create goods and services that can be valued at market price. It include production by farmers, production by firms in the industrial sector, production of goods and services by the government enterprises, and services produced by business intermediaries, banks and other financial organizations, universities, colleges and hospitals, etc.

On the other hand, non-economic activities are those which produce goods and services that do not have any economic value. Non-economic activities include spiritual, psychological, social and political services.

National income can be defined in terms of money flows. As economic activities generate flow of goods and services, on the one hand, they generate money flows, in the form of factor payments—wages, interest, rent, profits, and earnings of self-employed on the other hand. Thus, national income may also be obtained by adding the factor earnings and adjusting the sum for indirect taxes and subsidies. The national income thus obtained is known as national income at factor cost. It is related to money income flows.

Different economists have defined national income in many ways. Following are few of them:

"The labor and capital of a country, acting on its natural resources, produce annually a certain net aggregate of commodities, material and immaterial, including services of all kinds.....and net income due on account of foreign investments must be added in. This is the true net National income or Revenue of the country or the national dividend."

-Alfred Marshall

"The national dividend or income consists solely of services as received by the ultimate consumers, whether from their material or from human environments. Thus, a piano or an overcoat made for me this year is not a part of this year's income, but an addition to capital. Only the services rendered to me during this year by these things are income."

- Irving Fisher

3.7 Stock and Flow Concept

If every month Rs. 1000 is deposited into emergency fund account, at the end of year, balance would be Rs. 12,000 which helps in managing any emergency needs. The monthly deposits are flows and the year-end balance is a stock which accumulates the flows. In other words, monthly deposits saving is termed as **'flows'** and the year-end savings balance is termed as **'stocks'**. If the emergency fund is tapped, these expenses are flows out of the account. At the end of the year, the balance should reflect the difference between the inflows and outflows.

In economics, when inflows exceed outflows, a positive balance (surplus) builds up. When outflows exceed inflows, a negative balance

(deficit) results. If the deficit is covered by borrowing, the negative balance becomes a debt. Thus, deficit flows add to the debt stock.

Stocks and flows are inter-linked because inflows are not instantly perishable. If all flows are instantly perishable, there would be no stocks. Thus, the stocks at any one point of time are what are left over from past inflows at various stages of depreciation. For example, GDP is a flow because it is the sum of all the flows during a year. Some of the flows occurring in January might well have perished by the end of the year. What we see at the end of the year are physical objects that have not perished during the year. So GDP refers to the sum of what occurs over a year and not what is left over at the end of year. In macroeconomics, flows and stocks have following elements.

Flows		Stocks	
GDP	Investment	Debt	Infrastructure
Consumption	Saving	Library	Databases
Trade deficit and surplus	Aggregate demand & supply.	Buildings	Antiques
Budget deficit and surplus		Cars	Garages

Stocks are important because they are the infrastructures for living and producing. Rich countries are blessed with large stocks accumulated over time. Low inflows and outflows can keep the stocks constant. But large inflows and outflows are needed to keep the vintage of the stocks young as inflows bring along more up-dated technology and outflows get rid of obsolete technology.

3.8 Valuation Approaches for National Income (GTU – Nov. 2016)

Valuation of national income is done on two basis: Current Price and constant price as discussed below:

3.8.1 National Income at Current Price

When goods and services produced by normal residents of a country in a given year are estimated at current prices, it is called *national income at current prices*. Current prices refer to the prices prevailing during the year for which estimates are made. Thus it is estimation of goods and services produced during a year on the basis of the prices of the same year. For national income at current prices, we use same year's output and same year's market prices. Such data reflect the state of economic affairs of that year but does not show real change in national income because prices keep on changing.

3.8.2 National Income at Constant Price

When goods and services produce by normal residents of a country during a year are valued at fixed prices, *i.e.* prices of the base year, it is called *national income at constant prices*. Constant prices refer to the prices prevailing in the base year. Every country measures national income both at current prices and constant prices but it is the latter which indicates real change in national income.

3.9 Terminologies related to National Income

(GTU – Nov. 2017; May 2018; Nov. 2018; May 2019)

3.9.1 Gross National Product (GNP)

GNP is the most important and widely used measure of national income. It is the most comprehensive measure of the nation's productive activities. The GNP is defined as the value of all final goods and services produced during a specific period, usually one year, plus incomes earned abroad by the nationals minus incomes earned locally by the foreigners.

GNP at market price is sum total of all the goods and services produced in a country during a year and net income from abroad. GNP is the sum of Gross Domestic Product at Market Price and Net Factor Income from abroad.

Gross Domestic Product @ Market Price + Net Income from Abroad = Gross National Product @ Market Price

The GNP so defined is identical to the concept of gross national income (GNI). Thus, GNP = GNI. The difference between the two is only of procedural nature, while GNP is estimated on the basis of product-flows, the GNI is estimated on the basis of money income flows, (*i.e.*, wages, profits, rent, interest, etc.).

3.9.2 Gross Domestic Product (GDP)

The Gross Domestic Product (GDP) is defined as the market value of all final goods and services produced in the domestic economy during a period of one year, plus income earned locally by the foreigners minus incomes earned abroad by the nationals.

Market Value of all Final Goods and Services Produced in Domestic Territory + Income Earned Locally by foreigners - Income Earned Locally by foreigners = Gross Domestic Product, Market...

The concept of GDP is similar to that of GNP with a significant procedural difference. In case of GNP the incomes earned by the nationals in foreign countries are added and incomes earned locally by the foreigners are deducted from the market value of domestically produced goods and services. In case of GDP, the process is reverse – incomes earned locally by foreigners are added and incomes earned abroad by the nationals are deducted from the total value of domestically produced goods and services.

3.9.3 Net National Product

It is the GNP minus depreciation of the stock of the country. Here, depreciation is the wear and tear on the economy's stock of equipments and structures with the passage of time.

NNP = GNP - Depreciation

3.9.4 Net Domestic Product

The net domestic product (NDP) equals the gross domestic product (GDP) minus depreciation on a country's capital goods.

NDP = GDP – Depreciation

3.9.5 Personal Income

[GTU – Nov. 2016]

Personal income refers to an individual's total earnings from wages, investment enterprises, and other ventures. It is the sum of all the incomes actually received by all the individuals or household during a given period.

Personal income is that income which is actually received by the individuals or households in a country during the year from all sources.

3.9.6 Disposable Income

It is the income which individuals have left after satisfying all other Government obligations. So, disposable income is equal to personal income minus personal taxes and certain nontax payments.

Short Questions

1. **What do you mean by 'Competitive Market'?**

When there are many buyers and many suppliers are in the market, there is no scope for increasing or decreasing the price which is determined by the market and hence the suppliers are forced to sell at predetermined market price. This makes the market as **competitive market.**

2. **Which law determines the price in competitive market?**

In a competitive market, the price is determined by the law of demand and supply.

3. **What do you mean by 'Monopoly Market'?**

When there is only one supplier and buyers must have to buy from him only than in this kind of market, the customers have no power to effect the price of the goods fixed by suppliers and only suppliers have full control over the price. This condition arises due to absence of other suppliers and hence the suppliers are enjoying the huge profit. This market condition is termed as monopoly.

4. **In which time of market firm has no power to influence the price by its output?**

In perfect competitive market, firms have no power to influence the price by its output.

5. **Which market is more efficient, perfect competitive or monopoly? Why?**

Since in perfect competitive market, resources are fully utilized, it is more competitive market.

6. **What do you mean by 'Monopolistic Market'?**

A market where the products are similar but not identical and despite having unique characteristics for each product, products are competing with each other. Such market condition is called **monopolistic** market.

7. **What do you mean by 'Oligopoly Market'?** **[GTU – Nov. 2016]**

When number of suppliers are more compared to monopoly market for same product, new type of market is developed which neither competitive nor monopoly. In this type of market, there will be competition among suppliers for same product but that competition will not be stiff competition such as in case of perfect competitive market due to less number of suppliers. This type of market is termed as **oligopoly market.**

8. **Which market is best for healthy competition?**

Perfect competitive market is best for healthy competition.

9. **What is the significance of 'National Income'?**

Since National income is the result of all economic activities of the nation in terms of money, it is the most important macroeconomic variable which determines the business level and financial environment of a country. Level of national income determines the level of aggregate demand for goods and services. The trend in national income indicates the trends in aggregate demand.

10. **Name the approaches for valuation of 'National Income'?**

- National Income at Current Price
- National Income at Constant Price

11. **Define GNP.**

GNP at market price is sum total of all the goods and services produced in a country during a year and net income from abroad. GNP is the sum of Gross Domestic Product at Market Price and Net Factor Income from abroad.

Chapter 4

Basic Economics' Problems

Section – A (Poverty)

Section – B (Unemployment)

Section – C (Inflation)

Economics has to deal with satisfying the needs of the people through available limited resources. When economy is not able to fulfill this objective, problems occurs in the economy of the country as well as of the world. Problems related to

Section – A (Poverty)

4.1 Introduction to Poverty

Food, clothes and shelter are three basic needs of any person. Even today many people are not getting these three things. Such kind of condition is termed as 'poverty'.

As per the United Nations, *"poverty is fundamentally a denial of choices and opportunities, and a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having a school or clinic to go to, not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibility to violence, and it often implies living on marginal or fragile environments, without access to clean water or sanitation". (UN – 1998).*

Poverty is a socio-economic issue. Socio-economic issues are factors that have negative influence on an individuals' economic activity including: lack of education, cultural and religious discrimination, overpopulation, unemployment and corruption. Possessing little money, little education, few skills for the marketplace and a multitude of health problems, nearly half of all the people in the world live in poverty, without much opportunity to improve their lives. Many people in different countries live in poverty, especially in developing areas of Africa, Latin America and some parts Asia.

Poverty line

To measure the poverty, a central indicator in income and consumption is defined, which is known as the poverty line. It is the critical value below which an individual or household is determined to be poor.

Poverty measures based on an international poverty line attempt to hold the real value of the poverty line constant across countries, as is done when making comparisons over time. However, countries set their poverty lines at different thresholds, making consistent international comparisons of poverty difficult. International poverty estimates are available for low and middle income countries only. Some high income countries also report poverty indicators, but a dollar – a day poverty line is not relevant, thus not applicable for high - income countries. Such a poverty line corresponds to the value of the poverty lines used in some of the poorest countries.

In order to compare poverty across countries, a consistent international poverty line must be used to measure poverty. Such a universal line is generally not suitable for the analysis of poverty within a country. For that purpose, a country-specific poverty line needs to be constructed, and the poverty line may need to be adjusted for different locations within a country.

Some of the statistical facts on poverty:

- Almost half the world — over 3 billion people — live on less than $2.5 a day.
- Nearly a billion people entered the 21st century unable to read a book sign their names.

- The GDP (Gross Domestic Product) of the 41 Heavily Indebted Poor Countries (567 million people) is less than the wealth of the world's 7 richest people combined.
- Less than 1% of what the world spent every year on weapons was needed to put every child into school by the year 2000 and yet it didn't happen.
- 1 billion children live in poverty (1 in 2 children in the world). 640 million live without adequate shelter, 400 million have no access to safe water, and 270 million have no access to health services. 10.6 million died in 2003 before they reached the age of 5 (or roughly 29,000 children per day).

4.2 Absolute Poverty and Relative Poverty

[GTU, Dec. 2015; May 2016; Nov. 2016; Nov. 2017]

Poverty is generally of two types: (1) Absolute Poverty and (2) Relative poverty.

Absolute poverty is synonymous with destitution and occurs when people cannot obtain adequate resources (measured in terms of calories or nutrition) to support a minimum level of physical health. When people do not have enough money to meet the basic threshold that is needed for survival is termed as **Absolute Poverty**. People below poverty line are facing absolute poverty and do not have enough money to buy food, shelter, clothing etc. that is needed for survival.

Relative Poverty is the poverty when people are compared to others around them, but may still have enough money to survive. It is based on the cultural environment around them, not on a basic amount necessary for all humans to survive. According to relative poverty, if you live in an expensive neighborhood, and you have everything you need to get by, but do not own luxurious things, you could still be said to be in poverty when compared to the people around you, even though you have everything you need.

Absolute poverty stays the same, and this could be problematic for economy, whereas, relative poverty changes more often and adjusts to the changes in society (food and housing becoming more expensive in certain areas, more jobs etc.) and furthermore when you compare cross-nationally.

4.3 Causes of Poverty [GTU, May 2015; May 2018; May 2019]

There are many causes which increases the poverty in the country. Following are few of the causes which are responsible for poverty.

1) Unemployment

Unemployment (or joblessness) occurs when people are without work and actively seeking work. The unemployment rate is a measure of the prevalence of unemployment and it is calculated as a percentage by dividing the number of unemployed individuals by all individuals currently in the labor force. During periods of recession, an economy usually experiences a relatively high unemployment rate. According to International Labor Organization report, more than 197 million people globally are out of work or 6% of the world's workforce were without a job in 2012. This ultimately leads to high level of poverty in the country. So, unemployment has to be reduced to control the poverty.

2) Corruption

Corruption in India is a major issue that adversely affects its economy. A study conducted by Transparency International in year 2005 found that more than 62% of Indians had firsthand experience of paying bribes or influence peddling to get jobs done in public offices successfully. In its study conducted in year 2008, Transparency International reports about 40% of Indians had firsthand experience of paying bribes or using a contact to get a job done in public office. In 2012, India has ranked 94th out of 176 countries in Transparency International's Corruption Perceptions Index (CPI), tied with Benin, Colombia, Djibouti, Greece, Moldova, Mongolia, and Senegal. Corruption leads to influence the people who are not deserving the entities and hence poverty in the country is increasing.

3) High population growth

Fast growing population has reduced the per capita income of our country. Hence the standard of living has also fallen considerably. If the country is overpopulated a large part of the income is spent on consumption and very little is saved for developmental activities.

4) Inflation

The income earned by the poor people is insufficient to buy them the basic necessities of life and get them even two meals a day. Due to the lack of nutrition they are unable to do any physical work and hence they remain poor. The prices of basic food items are so high due to high rate of inflation that the little income earned by them is just insufficient.

5) Land inequality and social justice

The fact is that for each village, a few land owners have most of the land which they rent to other people to work on, at ridiculously high prices. They prevent any real growth from happening and just pull all the money - which they don't reinvest since they don't care all that much about the land itself. Not only is the situation stuck because of this, but land inequalities also reflect the huge imbalance of power carved in the rural society.

6) Landowners and powerful pressure groups

In fact there's another great hurdle: landowners. Ever since India's independence, land reforms have been on and off the political agenda and every time successfully thwarted by the efforts of landowners, although sometimes rightfully as the state had plans to strip them of their land without any compensation.

Then again local officials, working hand in hand with property developers, have often achieved to expel countless poor farmers of their house without compensation, or pay, or notice. It just happened overnight. But doing that to richer farmers would of course upset the power structure in the society, which remains one the causes of poverty in India by creating systemic discrimination.

7) Less priority to agriculture sector by Government

Government should give priority to the overhauled the agricultural sector. China gave priority to agriculture sector in 1990s to elevate people from the poverty, India has to give priority to agricultural sector. But in the past decades Governments gave priority to the services sector (notably banking, insurance, finance, real estate and IT services) rather than agriculture sector and so slowdown the process of economic development.

8) Neglecting the poor once

Manufacturing sector can literally provide hundreds of millions of jobs to workers coming from the rural areas. However the manufacturing sector is finally growing, so there are good prospects to reduce the massive unemployment and hence tackle one of the causes of poverty in India. But people of rural areas are left to face the problem of poverty. In our country rural area has been left to develop their own. So, poor once are becoming poorer.

9) Lack of decent housing

On the one hand, as manufacturing develops, better facilities such good infrastructure, transports, and personal services are available. Also the services sector has a much greater positive impact on poverty than manufacturing, so its growth and expansion is but good news for tackling the causes of poverty in India (unemployment, quality job and income in this case).

Despite that and the development of real estate sector, hundreds of millions still lack a decent home so there should be incentives for the market to cater to the needs of the poor with social housing so that the country gets a chance to solve the problem of its gigantic slums.

10) Market liberalization and globalization

Growth and liberalization have contributed to the causes of poverty in India. They have exacerbated inequalities within the population and reduced the role of the state which was directly needed to develop the country. In this sense, growth itself risks stirring some tensions within a country between those who got rich and those who were left out.

11) Health among the main causes of poverty in India

Diseases are one of the main causes of poverty in India, creating a major public safety disaster in India that contributes to keep and make millions fall into poverty. According to CBS News report, it is estimated that the cost of health care pushes some 39 million people back into poverty each year".

Thus many experts have argued that to make the most out of economic growth, the government at all levels should have invested in protecting the people, that is to say invest in public services, for instance in health care.

4.4 Measures to Reduce Poverty

Though it is very tough task to eliminate poverty from society, but it can be reduced to certain extents by taking following measures:

1) Employment opportunities

Poverty can be eliminated if the poor people are given the jobs according to their needs and talents. Self-employment can also be provided to them. Government can set up institutions which trains them in some practices and skills.

2) Uplift of Agriculture

Agriculture is the backbone of our country. It provides income to vast number of people. Hence the government should also concentrate on it and not only on the industries.

3) Education

Government should take steps to spread awareness for education so that the people do not have to depend on others for their income. They can also protect themselves from exploitation by the greedy traders.

4) Establishment of Small Scale Industries

Government should develop cottage, handicrafts and other small scale industries to in the backward regions of our country. Moreover this will transfer resources from the areas of surplus to the deficit solving the problem of urbanization.

5) **Reduce Inflation**

Inflation tends to make poor poorer and rich richer. There should be a stability in the price level of the country. Government should also reduce the burden of tax on the poor and charge more on the richer class. Rationing should be promoted so that the poor people get the basic necessities of life at lower price level.

6) **Check Population growth**

Much of the problem of poverty can be solved if the population of the country can be reduced to an average level. This will make development plans successful and the poor people will have a greater share in the funds of the government.

7) **Proper Utilization of Resources**

Resources of the country should be utilized properly so that we can have the benefits of those free gifts of nature.

Section – B (Unemployment)

4.5 Introduction to Unemployment

[GTU, Nov. 2018; May 2019]

When a person is actively searching for employment, but unable to find the job, is called unemployment. Unemployment is often used as a measure of the health of the economy. It is measured by unemployment rate. Unemployment rate is the number of unemployed persons divided by the number of people in the labor force. For many of us the notion of unemployment is one of those who do not have a job or, are paid no salary. This is partly correct but not wholly. Such a notion would apply largely to the educated people who are not able to find work or to those in urban areas who come to seek employment. So, unemployment is very serious problem to society which increases the poverty in the country.

4.6 Types of Unemployment

[GTU, Dec. 2015; May 2016; May 2017; Nov. 2017; May 20

Following are different types of unemployment in the country:

1) **Causal Unemployment**

Cyclical unemployment is based on a greater availability of wor than there are jobs for workers. It is usually directly tied to the state o economy. Lower demand for products due to lack of consumer confid disinterest, or reduction in consumer spending results in the worl cutting back on production. Since production is reduced, companie retail such products may also cut back on workforce, creating yet cyclical unemployment.

2) Disguised Unemployment

There are many instances where too many people working when many are not required. In agriculture, all members of the family work. It is possible that 3-4 people can do a given work in the farm, but we find the whole family of say 10 people doing the job. This may be because the excess people are not able to find employment elsewhere, so rather than remain unemployed they prefer to do the work along with others. This is known as **disguised unemployment.** This occurs when more than the necessary numbers of people are employed for the specified work. Disguised unemployment is found in agriculture because of the lack of employment opportunities elsewhere. Similarly disguised unemployment can be found in industry and offices as well.

3) Seasonal Unemployment

Normally people are supposed to work throughout the year. But this may not possible for all. In agriculture, work is seasonal even though agricultural activities are performed throughout the year. During the peak agricultural seasons (when the crop is ready for harvesting) more people are required for work. Similarly, in the sowing, weeding and transplantation period more labor is required. Employment therefore increases at this time. In fact, there is hardly any unemployment in rural areas during these peak agricultural seasons. However, once these seasons are over the agricultural workers, especially those who do not own land or whose land is not sufficient to meet their basic requirement and they remain unemployed. This type of unemployment is known as seasonal unemployment.

4) Voluntary Unemployment

People who are unwilling to work at prevailing wage rate and people who get a continuous flow of income from their property or any other sources and need not to work, such people are voluntarily unemployed.

4.7 Causes of Unemployment (GTU – Nov. 2017)

There are many causes which causes unemployment, but following are the major causes of unemployment:

1) Illiteracy

It is the most important and primary reason for unemployment in our country. Moreover we do not have adequate educational facilities in rural areas. Poor parents are not willing to send their children to school as they think that they are a source of income for their family. A greater stress is laid on general education than vocational training. This type of education is neither job oriented nor skill oriented. Thus the country has a large number of educated unemployed.

2) Technology

Technology is also a major cause of unemployment especially in agricultural sector. Machines can perform the job of many persons in a short span of time and in a better way. A large number of people became unemployed when computers were introduced in our country by Rajiv Gandhi. It lead to wide scale protests from all over the country.

3) Population Growth

The employment growth in our country could not keep up pace up with the population growth. It has also resulted in underutilization of our resources. Eventually, investments and savings in our country has reduced considerably. Thus, the major sectors have failed to provide job to all the people.

4) Social and Cultural factors

It has generally been seen that people do not want to leave their family and work at distant places. In a joint family, individuals have a tendency to neglect work as they want to spend their life on the income of other family members.

4.8 Remedies to Unemployment (GTU – Nov. 2017)

Though it is difficult to reduce unemployment due to present education system, it can be reduced by many ways:

1) Reform in the education system

There should be vocationalization of education. Efforts should be made to shape the skills of the individuals so that they can be put to practical use.

2) Population control

India has to put a check on its rising population if it want to solve most of her problem. It is essential so that the additional jobs created do not fall short of new entrants to the labor market.

3) Self-Employment schemes

In India, more than half of the population is self-employed in trade, transport, cottage industries, etc. Hence government should take some measures to develop self-help centers.

4) Policy towards Seasonal unemployment

In India, most of the people are engaged in agriculture which is a highly seasonal work. Hence they become unemployed during the rest of the year. Hence steps should be taken to promote allied activities like animal husbandry, dairy farming, horticulture etc. Cottage industries should be developed to help them during non-seasonal periods.

5) Rapid Industrialization

More industries should be set up to generate employment opportunities.

Section – C (Inflation)

4.9 Meaning of Inflation (GTU – Nov. 2016; May 2018)

Inflation is a sustained increase in the general price level of goods and services in an economy over a period of time. When the price level rises, each unit of currency buys fewer goods and services. So, inflation reflects a reduction in the purchasing power per unit of money – a loss of real value in the medium of exchange and unit of account within the economy.

Inflation occurs due to an imbalance between demand and supply of money, changes in production and distribution cost or increase in taxes on products. It has its worst impact on consumers. High prices of day-to-day goods make it difficult for consumers to afford even the basic commodities in life. This leaves them with no choice but to ask for higher incomes.

Price inflation is measured by the inflation rate, which is calculated on periodical basis.

4.10 Types of Inflation (GTU – Nov. 2016)

Following are four different types of inflation:

1) Demand-Pull (or Excess demand inflation)

It is the most important type of inflation. It occurs when the total demand for goods and services in an economy exceeds the available supply, so the prices for them rise in a market economy. It is the most common and serious type of. Every war produces this type of inflation because demand for war materials and manpower grows rapidly without comparable shrinkage elsewhere. Other types of inflation occur more readily in conjunction with demand-pull inflation.

2) Cost-Push inflation

As the name suggests the costs of production rise, for one reason or another, and force up the prices of finished goods and services. Often a rise in wages in excess of any gains in labor productivity is what raises unit costs of production and thus raises prices. This is less common than demand-pull, but can occur independently as well as in conjunction with it.

3) Pricing Power inflation (Administrated Price inflation)

It occurs whenever businesses in general decide to boost their prices to increase their profit margins. This does not occur normally in recessions but when the economy is booming and sales are strong. It might be called oligopolistic inflation, because it is oligopolies that have the power to set their own prices and raise them when they decide the time is ripe. An oligopolistic firm often realizes that if it raises its prices, the other major firms in the industry will likely see that as a good time to widen their profit margins too without suffering much from price competition from the few other firms in the industry.

4) Sectorial inflation

The fourth type is called sectorial inflation. The term applies whenever any of the other three factors hits a basic industry causing inflation. Since the industry in which inflation has occurred is a major supplier to many other industries, the prices of their products also increases and hence inflation also occurs in that industry. So, it can be said that though inflation was started in one sector, it has been propagated to other sectors. This type of inflation is called sectorial inflation. For example, if there is price hike in steel or gas, the consumer sectors of steel and gas will have to increase the price of the product as the raw material prices are increased.

4.11 Causes of Inflation

[GTU, Dec. 2015; May 2016; Nov. 2016; May 2017; May 2018; May 2019]

Following are the different causes of inflation:

1) Unfavorable agricultural production

Indian agriculture is largely dependent on monsoon. In case of drought or famine the agricultural production is adversely affected. Due to this, price of agricultural as well as agro-based industrial products increases.

2) Hoarding

Most of the wholesalers and businessmen practices hoarding of commodities which leads to inflation.

3) Deficit financing

If the government resorts to deficit financing in order to meet its developmental expenditure, then it makes available funds for the growth of economy. But huge deficit financing leads to inflation. So, increase in the government expenditure in the economy.

4) Population and black money

Rapid growth of population causes inflation. Tax is the most significant and major source of public revenue. But, most of the people practices tax evasion. It turns into black money which is responsible for inflation. It is a very important cause of rise in the basic food prices in a developing country like India.

5) Upward revision of administered prices

Commodities produced in the public sector have government administration of price level. The government keeps on raising prices in order to compensate the losses. This leads to inflation.

6) Increase in indirect taxes

Increase in indirect taxes like sales tax, VAT, service tax etc. increases the cost of production for the producers. Hence they raise the prices of their manufactured items.

7) Increase in wage rates

It causes the producers to raise the prices of their goods to balance their profits.

4.12 Remedies of Inflation

[GTU, Nov. 2018; May 2019]

To control inflation measures from Government has to be taken through their fiscal and monetary policies in following manners:

1) Monetary Measures

Monetary measures are taken by the Government in order to control inflation. In India, it is implemented by Reserve Bank of India. Main tools of monetary measures of credit control include Bank Rate policy, Open Market Operations, Cash Reserve Ratio. These measures are used to achieve full employment, to maintain a fairly stable exchange rate, to achieve rapid economic growth and promote economic equality. Also, it reduces the pressure of demand. Monetary measures to control inflation includes:

i. Higher bank rate.
ii. Sale of government securities in the open market.
iii. Increase in reserve requirements.
iv. Selective credit control measures like Consumer Credit Control, Rationing

All these measures lead to fall in money supply that takes away the extra purchasing power of the people. Hence aggregate demand falls and prices of the commodities also falls.

2) Fiscal Measures

Fiscal measures relates to public revenue and public expenditure and matters related thereto. Important tools of fiscal measures are Public revenue and Public expenditure. The major sources from where public revenue is generated include income tax, wealth tax, excise duty and sales tax. Public expenditure refers to the expenditure by the government on productive as well as non-productive activities. Productive expenditure includes expenditure on infrastructure development, development of industries like iron and steel, chemicals, heavy engineering, etc. Non-development expenditure includes expenditure on administrative machinery, law and order, defenses, etc. To control the inflation measures taken are namely:

i. A reduction in government spending.
ii. Increase in tax rates.
iii. Increase in public borrowings.

3) Other Measures

Other measures may be short term or long term. Short term concerns with the distribution of essential commodities on ration cards at reasonable

price. Long term includes population and economic planning. Population planning is used to aware the people about family planning. Economic planning is used to accelerate the economic growth and development of country.

Short Questions

1. **Define Poverty.**

   Poverty is fundamentally a denial of choices and opportunities, and a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having a school or clinic to go to, not having the land on which to grow one's food or a job to earn one's living, not having access to credit.

2. **Define Absolute Poverty.**

   When people do not have enough money to meet the basic threshold that is needed for survival is termed as Absolute Poverty.

3. **Define Relative Poverty.**

   Relative Poverty is the poverty when people are compared to others around them, but may still have enough money to survive.

4. **Absolute and Relative terms uses for which economic problem?**

   [GTU – May 2016]

   Poverty

5. **What are the main causes of poverty?**

   i. Unemployment
   ii. Corruption
   iii. High population growth
   iv. Inflation

6. **What are the measure to reduce poverty?**

   i. Development of Employment opportunities
   ii. Uplift of Agriculture
   iii. Establishment of Small Scale Industries

   iv. Reduce Inflation
   v. Proper Utilization of Resources

7. **Define Unemployment.**

   When a person is actively searching for employment, but unable to find the job, is called unemployment.

8. **What are the types of Unemployment?**

   i. Causal Unemployment
   ii. Disguised Unemployment
   iii. Seasonal Unemployment
   iv. Voluntary Unemployment

9. **What are the Causes of Unemployment?**

   i. Illiteracy
   ii. Technology
   iii. Population Growth
   iv. Social and Cultural factors

10. **What are the remedies for Unemployment?**

    i. Reform in the education system
    ii. Population control
    iii. Self-Employment schemes
    iv. Policy towards Seasonal unemployment
    v. Rapid Industrialization

11. **Define Inflation.**

    Inflation is a sustained increase in the general price level of goods and services in an economy over a period of time. When the price level rises, each unit of currency buys fewer goods and services. So, inflation reflects a reduction in the purchasing power per unit of money.

12. Inflation belongs to which category of economic problem, micro or macro? [GTU – May 2018]

Macro

13. What is demand pull type Inflation?

Demand pull type inflation occurs when the total demand for goods and services in an economy exceeds the available supply, so the prices for them rise in a market economy.

14. What is cost push type Inflation?

When the costs of production rise, for one reason or another which force up the prices of finished goods and services is called cost push type inflation. Often a rise in wages in excess of any gains in labor productivity is what raises unit costs of production and thus raises prices.

15. What is Pricing Power inflation?

Whenever businesses in general decide to boost their prices to increase their profit margins, pricing power inflation is developed. When the economy is booming and sales are strong, pricing power inflation occurs.

16. What are the causes of inflation?

i. Unfavorable agricultural production
ii. Deficit financing
iii. Hoarding
iv. Population and black money
v. Upward revision of administered prices
vi. Increase in indirect taxes
vii. Increase in wage rates

Question Bank

1) Explain the concept of poverty. Also explain poverty line.
2) What do you understand by absolute poverty and relative poverty?
3) What are the causes of poverty? Explain.
4) Discuss poverty with its types.
5) What are the measures should be taken to reduce poverty?
6) Explain the concept of unemployment. What are different types of unemployment?
7) What are the causes of unemployment?
8) What remedies can be adopted to reduce unemployment?
9) Explain the concept of 'inflation'. What are the different types of inflation?
10) What are the major causes of inflation?
11) What are the remedies to reduce inflation?

Chapter 5
Money and Banking

Section - A (Money)

5.1 Meaning of Money

As discussed in the beginning of economics, a medium of exchange was developed to pay or accept any goods or services, is termed as 'money'. Since money is standard for the whole country, it thereby avoids the inefficiencies of a barter system. It is either in the form of coins or cash. Level of money with a person indicates the wealth of the person. Each country has its own money, or currency, that is used as a medium of exchange within that country. The currency of one country can be exchanged for the currency of another via a currency exchange. The current exchange rate determines how much of one currency must be used to purchase a specified amount of the other currency.

5.2 Functions of Money

[GTU, Dec. 2014; May 2015; Dec. 2015; May 2016; Nov. 2017; May 2018]

Following are basic functions of money serves four basic functions:

1) Money is a Unit of Account

Money is a unit of account because everything in the economy is quoted in terms of it. Whatever commodity or services are rendered, money functions as a unit of account, which is the foundation of every transaction taking place around us.

2) Money is a Medium of Exchange

Money is a medium of exchange because it can be used it to buy goods and services in an attempt to satisfy unlimited needs and wants. For any goods or services, money works as the medium of exchange, which

empowers people to purchase goods and services in an attempt to satisfy their unlimited needs and wants.

3) Money is a Store of Value

Money is a store of value because by saved money anyone can purchase the goods or services in the future. Unfortunately, inflation prevents most of the money in existence today from serving as a pure store of value, because the money loses a significant portion of its purchasing power over time. However, if there were no inflation, then money would serve as a near-perfect store of value.

4) Money acts as Standard of Deferred Payment

Whatever is the debt today, can be settled in the future by exchanging the money and hence money acts as standard of deferred payment in the future.

5.3 Types of Money (GTU – Nov. 2016)

Following are four types of money:

1) Commercial Money

Commercial money is the claim against financial institutions that can be used for the purchase of goods and services. Any savings account holder can withdraw credited amount any time from the bank without any prior notice. Demand deposit withdrawals can be performed in person, via cheques or bank drafts, using automatic teller machines (ATMs), or through online banking. There are also various other types of money like the credit money, electronic money, coin and paper money, fractional money and representative money.

2) Commodity Money

It is the simplest kind of money which is used in barter system where the valuable resources fulfill the functions of money. The value of this kind of money comes from the value of resource used for the purpose. It is only limited by the scarcity of the resources and hence such money have intrinsic value. Whenever any commodity is used for the exchange purposes, the commodity becomes equivalent to the money and is called commodity money. There are certain types of commodity such as gold coins, beads, shells, pearls, stones, tea, sugar, metal, which are used as the commodity money.

3) Fiat Money

Fiat money is the kind of money which don't have any intrinsic value and it can't converted into valuable resource. Paper money and coins are the examples of fiat money. The value of fiat money is determined by government order which makes it a legal instrument for all transaction purposes. Fiat money is the basis of all the modern money system. The real value of fiat money is determined by the market forces of demand and supply.

4) Fiduciary Money

Whenever, any bank assures the customers to pay in different types of money and when the customer can sell the promise or transfer it to somebody else, it is called the fiduciary money. Fiduciary money is generally paid in gold, silver or paper money. There are cheques and bank notes, which are the examples of fiduciary money because both are some kind of token which are used as money and carry the same value.

5.4 Monetary Policy (GTU – May 2016)

5.4.1 Meaning of Monetary Policy

Monetary policy is the process by which the monetary authority of a country controls the supply of money in the market. To control the supply of money, interest rates are altered. The purpose for change in rates is to promote the economic growth and stability through controlling the money supply. The official goals usually include relatively stable prices and low unemployment.

Monetary policy is referred to as either being expansionary or contractionary, where an expansionary policy increases the total supply of money in the economy more rapidly than usual, and contractionary policy expands the money supply more slowly than usual or even shrinks it. Expansionary policy is traditionally used to try to combat unemployment in a recession by lowering interest rates in the hope that easy credit will entice businesses into expanding. Contractionary policy is intended to slow inflation in order to avoid the resulting distortions and deterioration of asset values.

5.4.2 Objectives of Monetary Policy

Every central bank of nation tries to achieve following objectiv[e] through monetary policy. In India, RBI wants to achieve the sam[e] objectives as follows:

1) Price Stability

Price instability harms the economy. By controlling the interest ra[te] the price stability tries to keep the value of the money stable by reduc[ing] the income and wealth inequalities. When there is inflatory situation reduce the money supply tight monetary policy has to be adopted and vice versa.

2) Rapid Economic Growth

It is the most important objective of a monetary policy. The monetary policy influence the economic growth by controlling real interest rate and its resultant impact on the investment. If RBI adopts liberal credit policy by reducing interest rates, the investment level in the economy can be encouraged. This will speed up the economic growth.

3) Balance of Payments Equilibrium

Developing countries mostly faces the problem of BOP. RBI tries to maintain equilibrium through monetary policy. The Bop has two aspects, 'BOP surplus and 'BOP deficit'. The 'BOP surplus' reflects an excess money supply in domestic economy while the 'BOP deficit' stands for stringency of money. If the monetary policy succeeds in maintain monetary equilibrium, the BOP equilibrium can be achieved.

4) Full Employment

Full employment refers to a situation in which everybody who wants jobs to get jobs. However, it does not mean that there is a zero unemployment. Monetary policy tries to attain the full employment. Through effective control full employment can be achieved.

5) Equal income Distribution

Economists believe that monetary policy helps in achieving equal income distribution. Effective control through monetary policy, equal income distribution can be achieved.

6) Exchange rate Stability

Exchange rate is the price at which home country's currency is exchanged with the currency of other country. If there is high volatility in the exchange value, foreign country loses its faith and hence through maintaining money supply exchange rates are stabilized.

5.4.3 Tools of Monetary Policy

Monetary policy uses three main tools for achieving monetary stability:

Control on Supply of Money

The first tool is to manage the control of money supply. This mainly involves buying government bonds (expanding the money supply) or selling them (contracting the money supply). When the central bank disburses or collects payment for these bonds, it alters the amount of money in the economy while simultaneously affecting the price (and thereby the yield) of short-term government bonds. The change in the amount of money in the economy in turn affects interbank interest rates.

Control on Demand of Money

The second tool is to control the demand of money. Demand for money, like demand for most things, is sensitive to price. For money, the price is the interest rates charged to borrowers. Ordinarily, a central bank conducts monetary policy by raising or lowering its interest rate target for the interbank interest rate. If the nominal interest rate is at or very near zero, the central bank cannot lower it further. Such a situation, called a liquidity trap, can occur, for example, during deflation or when inflation is very low.

Managing the risk in banking

The third tool is to manage the risk within the banking system. Banking systems use fractional reserve banking to encourage the use of money for investment and expanding economic activity. Banks must keep banking reserves on hand to handle actual cash needs, but they can lend an amount equal to several times their actual reserves. The money lent out by banks increases the money supply, and too much money (whether lent or printed) will lead to inflation. Central banks manage systemic risks by maintaining a balance between expansionary economic activity through bank lending and control of inflation through reserve requirements.

These "standard" supply, demand, and risk management tools keep market interest rates and inflation at specified target values by balancing the banking system's supply of money against the demands of the aggregate market.

5.5 Fiscal Policy (GTU – May 2016; Nov. 2016)

5.5.1 Meaning of Fiscal Policy

Fiscal policy is widely known as 'Budgetary Policy'. It is concerned with the government expenditure and government revenue. It decides the size and pattern of flow of expenditure from the government to the economy and from the economy back to the government. So, in broad term fiscal policy refers to "that segment of national economic policy which is primarily concerned with the receipts and expenditure of central government."

The importance of fiscal policy is high in underdeveloped democratic countries since there are no direct methods of collecting the revenue is available to the Government. So, the Government has to depend on the state Governments.

5.5.2 Objectives of Fiscal Policy

(GTU – May 2017; Nov. 2018; May 2019)

Following are the objectives of adopting the fiscal policy:

1) Mobilization of Resources

The principal objective of fiscal policy is to ensure rapid economic growth and development through mobilization of financial resources. The central and the state governments in India have used fiscal policy to mobilize resources. Financial resources are mobilized through taxation (direct and indirect), public savings and private savings.

2) Effective allocation of Financial Resources

The central and state governments have tries to make efficient allocation of financial resources in development activities such as railways, infrastructure, etc. as well as in non-development activities includes such as defense, interest payments, subsidies, etc. Fiscal policy also should ensure that the allocated resources are socially desirable to ensure production for generation of goods and services.

3) Attempt to Reduce Inequality

Through direct taxes such as income tax, rich people are charged high taxes to the rich people as well as through indirect on semi-luxury or luxury items which are mostly consumed by rich people. In this way fiscal policy tries to reduce the inequality.

4) Control the inflation

By introducing tax savings schemes, productive use of financial resources, etc. Government tries to reduce fiscal deficits. In this way Government tries to control the inflation.

5) Employment Generation

The government is making every possible effort to increase employment in the country through effective fiscal measure. Through various employment generation programs, fiscal policy tries to create jobs.

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. In order to increase the rate of capital formation, the fiscal policy must be efficiently designed to encourage savings and discourage and reduce spending.

5.5.3 Tools of Fiscal Policy

The government has two primary fiscal tools to influence the economy. They are revenue tools and spending tools.

Revenue tools

Revenue tools refer to the taxes collected by the government in various forms. The taxes can be direct or indirect. Direct taxes are taxes levied on the income or wealth individuals and firms. This includes income tax, wealth tax, estate tax, corporate tax, capital gains tax, social security tax, etc. Indirect taxes are taxes levied on goods and services. This includes sales tax, value added tax, excise duty, etc.

Taxes help government in meeting their fiscal needs. By levying high indirect taxes, the government can also discourage use of items such as tobacco, and alcohol.

Spending Tools

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

→ Current spending includes expenditure on essential goods and services such as health, education, defense, etc.

→ Capital spending is the public investment in infrastructure such as roads, hospitals, schools, etc. The above two also include subsidy or direct provision of merit goods and public goods, which would otherwise be underprovided.

→ Transfer payments are the redistribution of income from taxpayers to those requiring support, for example, unemployment benefits. It also includes interest payments on government debt.

Spending tools enable services such as defense to benefit everyone in the country and build infrastructure that propels growth. Spending tools also ensure a minimum standard of living for the residents.

Section – B (Banking)

5.6 Meaning of Banking

People need money for day to day life as well as to meet future expenses such as higher education of children, marriage of children, house building and even in the old age. Saving of money is also necessary for old age and ill health when it may not be possible for people to work and earn their living, but there is a risk of theft or loss of money, robbery, and other accidents. So, people a place where money could be saved safely and would be available when required. Banks are such places where people can deposit their savings with the assurance that they will be able to withdraw money from the deposits whenever required. On other hand, if people need money for any above mentioned needs, they can borrow money by taking loans from the banks at reasonable rate of interest.

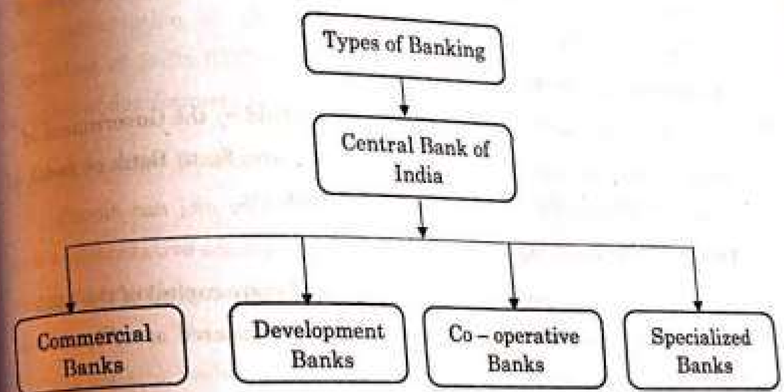
On deposits, banks give interest, which adds to the original amount of deposit. It is a great incentive to the depositor. On the basis of deposits banks also grant loans at higher rate than deposit rates. From that they earn profits and thereby contribute to the economic development of the country and well-being of the people in general.

The activities carried on by banks are called 'banking' activity. It involves acceptance of deposits and lending or investment of money. It facilitates business activities by providing money and certain services that help in exchange of goods and services. Therefore, banking is an important auxiliary to trade. It not only provides money for the production of goods and services but also facilitates their exchange between the buyer and seller.

5.7 Types of Banking

[GTU, May 2015]

There are various types of banks which operate in our country to meet the financial requirements of different categories of people engaged in agriculture, business, profession, etc. On the basis of functions, the banking institutions may be divided into the following types:



A) Central Bank of India (RBI)

A bank which is entrusted with the functions of guiding and regulating the banking system of a country is known as its Central bank. This bank does not deal with the general public. It acts essentially as Government's banker, maintain deposit accounts of all other banks and advances money to other banks, when needed. The Central Bank provides guidance to other banks whenever they face any problem. It is therefore known as the banker's bank.

The RBI is the central bank of our country. Functions of RBI are discussed in the subsequent section.

B) Commercial Banks

Commercial Banks are banking institutions that deal with the general public and accept deposits and grant short-term loans and advances to them. In addition to giving short-term loans, commercial banks also give medium-term and long-term loan to business enterprises as well as home loans to the retail consumers. Following are different types of commercial banks:

Public Sector Banks

These are banks where majority stake is held by the Government of India or RBI. Examples of public sector banks are: State Bank of India, Corporation Bank, Bank of India and Dena Bank, etc.

Private Sectors Banks

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

Examples of private sector banks are: Axis bank, ICICI bank, The Jammu and Kashmir Bank Ltd., Bank of Rajasthan Ltd., Development Credit Bank Ltd, Global Trust Bank, ING Vysya Bank, etc.

Foreign Banks

These banks are registered and have their headquarters in a foreign country but operate their branches in our country. Some of the foreign banks operating in our country are Hong Kong and Shanghai Banking Corporation (HSBC), Citibank, American Express Bank, Standard & Chartered Bank, etc.

C) Development Banks

Business often requires medium and long-term capital for purchase of machinery and equipment, for updating the existing technology, or for expansion and modernization. Such financial assistance is provided by development banks. They also undertake other development measures like subscribing to the shares and debentures issued by companies, in case of under subscription of the issue by the public. Industrial Finance Corporation of India (IFCI) and State Financial Corporations (SFCs) are examples of development banks in India.

D) Co-operative Banks

People can join together for fulfilling their common interest often form a co-operative society under the Co-operative Societies Act. When a co-operative society engages itself in banking business it is called a Co-operative Bank. The society has to obtain a license from the RBI before starting banking business. Any co-operative bank as a society is to function under the overall supervision of the registrar, co-operative societies of the State. As regards banking business, the society must follow the guidelines set and issued by the RBI. Depending on the level of formation, three types of co-operative banks are existing.

E) Specialized Banks

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

Export Import Bank of India (EXIM bank) provides the support to the businessman who want to do the business related to exporting or importing of the products.

For starting small scale business unit or industry, **small Industries Development Bank of India** (SIDBI) provides the loan.

For person who is engaged in agriculture or other activities like handloom weaving, fishing, etc. **National Bank for Agricultural and Rural Development** (NABARD) can provide credit, both short-term and long-term, through regional rural banks.

5.8 Functions of Banking (GTU – Nov. 2016)

Banking functions can be divided into two types, primary functions and secondary functions as discussed below:

Primary Functions of Banks

The primary functions of a bank are also known as banking functions. They are the main functions of a bank.

These primary functions of banks are explained below.

1) Accepting Deposits

The bank collects deposits from the public. These deposits can be of different types, such as:

- **a)** Saving Deposits
- **b)** Fixed Deposits
- **c)** Current Deposits
- **d)** Recurring Deposits

a) Saving Deposits

This type of deposits encourages saving habit among the public. The rate of interest is low. At present it is about 4% p.a. Withdrawals of deposits are allowed subject to certain restrictions. This account is suitable to salary and wage earners. This account can be opened in single name or in joint names.

b) Fixed Deposits

Lump sum amount is deposited at one time for a specific period. Higher rate of interest is paid, which varies with the period of deposit. Withdrawals are not allowed before the expiry of the period. Those who have surplus funds go for fixed deposit.

c) Recurring Deposits

This type of account is operated by salaried persons. 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.

d) Current Deposits

This type of account is operated by businessmen. Withdrawals are freely allowed. No interest is paid. In fact, there are service charges. The account holders can get the benefit of overdraft facility.

2) Granting of Loans and Advances

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. The types of bank loans and advances are:

- **a)** Overdraft
- **b)** Cash Credits
- **c)** Loans
- **d)** Discounting of bill of exchange

a) Overdraft

This type of advances is 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.

b) Cash Credits

The client is allowed cash credit up to a specific limit fixed in advance. It can be given to current account holders as well as to others who do not have an account with bank. Separate cash credit account is maintained. Interest is charged on the amount withdrawn in excess of limit. The cash credit is given against the security of tangible assets and / or guarantees. The advance is given for a longer period and a larger amount of loan is sanctioned than that of overdraft.

c) 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. Interest is charged on the actual amount sanctioned, whether withdrawn or not. 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.

d) Discounting of Bill of Exchange

The bank can advance money by discounting or by purchasing bills of exchange both domestic and foreign bills. The bank pays the bill amount

to the drawer or the beneficiary of the bill by deducting usual discount charges. On maturity, the bill is presented to the drawee or acceptor of the bill and the amount is collected.

Secondary Functions of Banks

The bank performs a number of secondary functions, also called as non-banking functions. These important secondary functions of banks are explained below.

1) Agency Functions

The bank acts as an agent of its customers. The bank performs a number of agency functions which includes:

a) Transfer of Funds
b) Collection of Cheques
c) Periodic Payments
d) Portfolio Management
e) Periodic Collections
f) Other Agency Functions

a) Transfer of Funds

The bank transfer funds from one branch to another or from one place to another.

b) Collection of Cheques

The bank collects the money of the cheques through clearing section of its customers. The bank also collects money of the bills of exchange.

c) Periodic Payments

On standing instructions of the client, the bank makes periodic payments in respect of electricity bills, rent, etc.

d) Portfolio Management

The banks also undertake to purchase and sell the shares and debentures on behalf of the clients and accordingly debits or credits the account. This facility is called portfolio management.

e) Periodic Collections

The bank collects salary, pension, dividend and such other periodic collections on behalf of the client.

f) Other Agency Functions

They act as trustees, executors, advisers and administrators on behalf of its clients. They act as representatives of clients to deal with other banks and institutions.

2) General Utility Functions

The bank also performs general utility functions, such as:

a) Issue of Drafts, Letter of Credits, etc.
b) Locker Facility
c) Underwriting of Shares
d) Dealing in Foreign Exchange
e) Project Reports
f) Social Welfare Programs
g) Other Utility Functions

a) Issue of Drafts and Letter of Credits

Banks issue drafts for transferring money from one place to another. It also issues letter of credit, especially in case of, import trade. It also issues travelers' Cheque.

b) Locker Facility

The bank provides a locker facility for the safe custody of valuable documents, gold ornaments and other valuables.

c) Underwriting of Shares

The bank underwrites shares and debentures through its merchant banking division.

d) Dealing in Foreign Exchange

The commercial banks are allowed by RBI to deal in foreign exchange.

e) Project Reports

The bank may also undertake to prepare project reports on behalf of its clients.

f) Social Welfare Programs

It undertakes social welfare programs, such as adult literacy programs, public welfare campaigns, etc.

g) Other Utility Functions

It acts as a referee to financial standing of customers. It collects creditworthiness information about clients of its customers. It provides market information to its customers, etc. It provides travelers' cheques facility.

5.9 Central Bank of India: RBI – Functions of RBI

The *Reserve Bank of India* is India's Central Banking Institutio[n] which controls the Monetary Policy of the Indian Rupee. On 1st April 19[3…] during the British Rule in accordance with the provisions of the Rese[r…]

Bank of India Act, 1934 it came into existence. Following India's independence, the RBI was nationalized in the year of 1949.

The RBI plays an important part in the development strategy of the Government of India. It is a member bank of the Asian Clearing Union. The general superintendence and direction of the RBI is entrusted with the 21-member Central Board of Directors: The Governor, 4 Deputy Governors, 2 Finance Ministry representatives, 10 government-nominated directors to represent important elements from India's economy, and 4 directors to represent local boards headquartered at Mumbai, Kolkata, Chennai and New Delhi. Each of these local boards consists of 5 members who represent regional interests, as well as the interests of co-operative and indigenous banks. The bank is also active in promoting financial inclusion policy and is a leading member of the Alliance for Financial Inclusion (AFI).

Following are the major functions performed by RBI:

[GTU – Dec. 2015; May 2016; May 2017; Nov. 2017; Nov. 2018]

1) Currency Issuing Authority

Under Section 22 of the RBI Act 1934, the bank has the sole right to issue bank notes of all denominations, except one rupee notes and coins, which were issued by the Ministry of finance.

The distribution of one rupee notes and coins and small coins all over the country is undertaken by the RBI as agent of the Government. The Reserve Bank has a separate issue department which is entrusted with the issue of currency notes. Further, the exchanges or destroys currency notes and coins that are not fit for circulation.

2) Control of Money Supply and Credit

The institution is also the regulator and supervisor of the financial system and prescribes broad parameters of banking operations within which the country's banking and financial system functions. Its objectives are to maintain public confidence in the system, protect depositors' interest and provide cost-effective banking services to the public. The Banking Ombudsman Scheme has been formulated by the RBI for effective addressing of complaints by bank customers. The RBI controls the monetary supply, monitors economic indicators like the gross domestic product and has to decide the design of the rupee banknotes as well as coins.

3) Management of Forex

The central bank manages to reach the goals of the Foreign Exchange Management Act, 1999. The objective is to facilitate external trade and payment and promote orderly development and maintenance of foreign exchange market in India.

4) Banker of Banks

RBI also works as a central bank where commercial banks are account holders and can deposit money. RBI maintains banking accounts of all scheduled banks. Commercial banks create credit. It is the duty of the RBI to control the credit through the CRR, bank rate and open market operations. As banker's bank, the RBI facilitates the clearing of cheques between the commercial banks and helps inter-bank transfer of funds. It can grant financial accommodation to schedule banks. It acts as the lender of the last resort by providing emergency advances to the banks. I supervises the functioning of the commercial banks and take action against it if need arises.

5) Maintenance of Indian Financial Structure

RBI maintains the economic structure of the country so that it can achieve the objective of price stability as well as economic development, because both objectives are diverse in themselves.

6) Banker of the Banks

RBI works as banker's bank since it provides funds at pre-determined rate to the banks when bank requires cash flow. Further, banks can earn interest on their cash by depositing at RBI. So, in this manner RBI is banker of the banks.

7) Supervision of the Banks

Through different rates and ratios and financial audit RBI supervises and controls the activities of the banks.

5.10 Different types of Banking Rates

RBI, the central bank, one of its primary functions is to control the supply as well as the cost of credit, *i.e.*, how much money is available for the industry or the economy and what is the price that the economy has to pay to borrow that money. So, RBI has a role to play to control these two things because eventually these two have an impact on the inflation and growth in the economy. For this, RBI has got some tools available in their hands and these tools are maintaining certain basic ratios or maintaining certain rates.

Following are different rates and ratios which plays an important role in the growth of economy:

1) Cash reserve Ratio (CRR) **(GTU – Nov. 2017)**

CRR is a cash reserve ratio. Under CRR a certain percentage of the total bank deposits has to be kept in the current account with RBI which means banks do not have access to that much amount for any economic activity or commercial activity. Banks can't lend the money to corporates or individual borrowers, banks can't use that money for investment purposes. So, that CRR remains in current account and banks don't earn anything on that. If the central bank decides to increase the CRR, the available amount with the banks comes down. The RBI resorts to CRR tool to drain out excess money out of the system.

2) Bank Rate **(GTU – Nov. 2017)**

Bank Rate is the rate at which RBI lends money to other banks (or financial institutions) without selling or buying any security. The bank rate signals the central bank's long-term outlook on interest rates. If the bank rate moves up, long-term interest rates also tend to move up, and vice-versa.

Banks make a profit by borrowing at a lower rate and lending the same funds at a higher rate of interest. If the RBI hikes the bank rate, the interest that a bank pays for borrowing money (banks borrow money either from each other or from the RBI) increases. It, in turn, hikes its own lending rates to ensure it continues to make a profit.

3) Repo Rate **(GTU – May 2016; Nov. 2017)**

Repo rate is the rate at which the central bank of a country (Reserve Bank of India in case of India) lends money to commercial banks in the event of any shortfall of funds with keeping some securities with the RBI. The buy backs that security at certain predetermined rate.

Repo rate is used by monetary authorities to control inflation. In the event of inflation, central banks increase repo rate as this acts as a disincentive for banks to borrow from the central bank. This ultimately reduces the money supply in the economy and thus helps in arresting inflation.

4) Reverse Repo Rate **(GTU – May 2016; Nov., 2017)**

Reverse Repo rate is the rate at which the RBI borrows money from commercial banks. Banks are always happy to lend money to the RBI since their money are in safe hands with a good interest.

An increase in reverse repo rate can prompt banks to park more funds with the RBI to earn higher returns on idle cash. It is also a tool which can be used by the RBI to drain excess liquidity (money) out of the banking system.

5) Statutory Liquidity Ratio (SLR) **(GTU – Nov. 2017)**

Statutory liquidity ratio is the amount of money that a commercial bank needs to keep in cash, or invested in certain specified securities predominantly central government and state government securities. Once again this percentage is of the percentage of the total bank deposits available as far as the particular bank is concerned. The SLR, the money

goes into investment predominantly in the central government securities and on that amount banks earn some amount of interest.

With the SLR, the RBI can ensure the solvency a commercial bank. It is also helpful to control the expansion of bank credits. By changing the SLR rates, RBI can increase or decrease bank credit expansion. Also through SLR, RBI compels the commercial banks to invest in government securities like government bonds.

Chapter

6

Introduction & History of Management

Section – A (Introduction to Management)

Section – B (History of Management)

Section – A (Introduction to Management)

6.1 Definitions and Concept of Management

(GTU – Nov. 2017)

'Management' is noun word of '*manage*' which has been applied since ancient time. Management practices have been adopted since the beginning of civilization and when people started to live together. So, it is clear that management is not an invention of 20^{th} century.

Since nobody can alone fulfill needs of him as well as of others individually, people are forced to work together to achieve mutual benefits. People works and live together in organized groups and institutions which can serve the purpose of satisfying economic and social needs. Many organizations such as business firm, sports team, school, college, government, army, hospital are working as a team together to achieve mutual goals. To achieve these goals, it is essential to have effective planning, co-ordination, and proper organization by someone who lead and direct the team members. This task of getting results through others by effective co-ordination is termed as a *management.* So, in simple words we can define management as systematic way of accomplishing the objectives and proper utilization of organizational resources.

6.1.1 Definitions of Management (GTU – May 2016)

Many management *gurus* have given definitions of management. Following are some of the definitions which can give clear idea about management:

- Management is that process by which managers create, direct, maintain and operate purposive organization through systematic, coordinated and cooperative human efforts. *- McFarland*

- Management is the development of people not the direction of things. *- Appley*
- Management is guiding human and physical resources into dynamic organizational units which attain their objectives to the satisfaction of those served and with a high degree of morale and sense of attainment on the part of those rendering service. *- American Management Association*
- Management is the art and science of organizing and directing human efforts applied to control the forces and utilize the materials of nature for the benefit of man. *- American Society of Mechanical Engineers*
- Management is the art of knowing what you want to do and then seeing that it is done in the best and cheapest way. *- F. W. Taylor*
- To manage is to forecast and to plan, to organize to command, to coordinate and to control. *- Henry Fayol*
- Management is a multipurpose organ that manage a business and manages Managers and manages Workers and work. *- Peter Drucker*
- Management is a distinct process consisting of planning, organizing, actuating and controlling performed to determine and accomplish the objectives by the use of people and resources. *- G. R. Terry*
- Management is the process by which co-operative group directs actions towards common goals. *- Joseph Massie*

From above definitions, management can be summarized as *organizational process that includes strategic planning, fixing the objectives, managing tangible and intangible resources, deploying the human and financial assets needed to achieve objectives, and measuring results.*

6.1.2 Objectives of Management (GTU – May 2016; Nov. 2016)

Management is the practice of consciously and continually shaping organizations. Every member of the organization has is a part of management and reports to the responsible person as part of their job. These responsible persons are called managers. Managers are the ones who lend the dynamic and life-giving forces to the organization, and harness the organized efforts of the members of an organization towards attaining the objectives.

Objectives of the management can be classified in three groups.

1. Organizational objectives
2. Personal objectives
3. Social objectives

(i) Organizational objectives

Management as a whole is expected to work for the achievement of the objectives of the organization in which it exists. Organizational objectives include:

a) Maximum profits on the capital invested
b) Fair returns to the investors
c) Growth and expansion of the enterprise
d) Sustainability in today's competitive environment
e) Earn goodwill or reputation for the enterprise

(ii) Personal objectives

Organization consists of people and they work in the organization to achieve the organizational goals as well their personal goals. Personal goals include:

a) Security of job
b) Rational remuneration for work performed
c) Unbiased assessment for the promotion
d) Equal opportunities for professional development
e) Acceptable working conditions
f) Opportunity to take part in the growth of organization

(iii) Social objectives

Organization's management is not only responsible for elements of organizations but as they are united part of the society, they are also responsible to the society through their products and services. Following are some of the objectives which are required to be fulfilled by the organization:

a) Quality products at fair price to consumers
b) Honest and prompt payment of taxes to the Government
c) Conservation of environment and natural resources
d) Fair dealings with suppliers, dealers and competitors
e) Preservation of ethical values of the society

6.1.3 Characteristics of Management (GTU – Nov. 2018)

Following are the characteristics of the management:

(i) Management is a continuous Process

In today's ever-changing scenario, it is very essential to change attitude, thoughts, working style as and when it is required. Based on rigid working style it is next to impossible to run the organizations. Since, environment is dynamic and changes are on-going process, management has to change accordingly. The cycle of management continues to operate so long as there is organized action for the achievement of group goals. So, it is justifiable to believe that management is a continuous process.

(ii) Management is an Integrative Force of manpower

Management integrates the force of manpower to achieve the predetermined goals through co-ordination. As we know that synergy effect provides better results than the efforts of individuals, collective efforts of team can give better results than the individual ones. So, the essence of management lies in the integration of human and other resources through effective coordination of individual efforts in to a team.

(iii) Central theme of management is people

Management is done by people, through people and for people. Since management is concerned with interpersonal relationship such as employer-employee, employee-employee, employee-boss, employer – society, it is a social process. Many management gurus have focused on human as an important factor of the management. As discussed in the definitions, Appley considered the development of people as management, but not the development of things. So, human element is inevitable part of the management

(iv) Management is goal-oriented

Any organization is never established without any goal. The goal may be monetary or non-monetary, but goal always exists for every organization. So, the management has to work in a direction which fulfills the goals of organization. The success of management is measured by the extent to which the established goals are achieved. Thus, management is goal-oriented.

(v) Management is multidisciplinary

Management has to deal with many facets including human behaviour, engineering, sociology, psychology, economics, anthropology, ergonomics etc. For effective management of the organization, it is necessary to have derived and practical knowledge of various disciplines. A multidisciplinary approach involves drawing appropriately from multiple disciplines to redefine problems outside of normal boundaries and reach solutions based on a new understanding of complex situations.

(vi) Management is Intangible

Process of managing is unseen or invisible force. Though it is conducted by people according to their ability and higher authority's guidelines, it is considered as intangible asset. Further, ability of management varies from person to person and hence it can't transferred from one person to other. So, management is considered as intangible in nature.

(vii) Management is an Art as well as Science

It contains a systematic body of theoretical knowledge and it also involves the practical application of such knowledge. Management is also a discipline involving specialized training and an ethical code arising out of its social obligations.

6.1.4 Concept of Management

From above objectives, it is clear that management has involved number of approaches. In other words, management is not guided by a single concept but number of concepts are governing the management.

Following are the various concepts which are intertwined as a part of management:

1) **Management as a team**

Management consists of all those who have the responsibility of guiding and coordinating the efforts of other persons. These persons are called as managers who operate at different levels of authority who perform various managerial functions. They integrates the human and physical resources in optimum way to achieve the goals of the organization and works as a team.

2) **Management as an activity**

Like various other activities performed by human beings such as writing, playing, eating, cooking etc. management is also an activity because a manager is one who accomplishes the objectives by directing the efforts of others. According to *Koontz*, "Management is what a manager does". Management as an activity includes -

(i) **Informational activities** - In the functioning of business enterprise, the manager constantly has to receive and give information orally or in written. A communication link has to be maintained with subordinates as well as superiors for effective functioning of an enterprise.

(ii) **Decisional activities** - Practically all types of managerial activities are based on one or the other types of decisions. Therefore, managers are continuously involved in decisions of different kinds since the decision made by one manager becomes the basis of action to be taken by other managers. (e.g. Sales Manager is deciding the media & content of advertising).

(iii) **Inter-personal activities** - Management involves achieving goals through people. Therefore, managers have to interact with superiors as well as the sub-ordinates. They must maintain good relations with them. The inter-personal activities include with the sub-ordinates and taking care of the problem. (e.g. Bonuses to be given to the sub-ordinates).

3) **Management as a process**

As a process, management refers to a series of inter-related functions. It is the process by which management creates, operates and directs purposive organization through systematic, coordinated and co-operated human efforts. According to George R. Terry, "Management is a distinct process consisting of planning, organizing, actuating and controlling, performed to determine and accomplish stated objective by the use of human beings and other resources". As a process, management consists of three aspects:

(i) **Management is a social process** - Since human factor is most important among the other factors, therefore management is concerned with developing relationship among people. It is the duty of management to make interaction between people - productive and useful for obtaining organizational goals.

(ii) **Management is an integrating process** - Management undertakes the job of bringing together human physical and financial resources so as to achieve organizational purpose. Therefore, it is an important function to bring harmony between various factors.

(iii) **Management is a continuous process** - It is a never ending process. It is concerned with constantly identifying the problem and solving them by taking adequate steps. It is an on-going process.

4) **Management as an economic resource**

Like men, machines, money, management is also one of the important factor for the organization. Management occupies the central place in the all other factors since it co-ordinates all these elements and utilizes them to achieve the organization goal. Hence, management is also considered as an element of economic resources.

5) **Management as an academic discipline**

Management as a discipline refers to that branch of knowledge which is connected to study of principles & practices of basic administration. It specifies certain code of conduct to be followed by the manager & also various methods for managing resources efficiently. It as a discipline specifies certain code of conduct for managers & indicates various methods of managing an enterprise.

Management is a course of study which is now formally being taught in the institutes and universities after completing a prescribed course or by obtaining degree or diploma in management, a person can get employment as a manager. To emerge as discipline, the knowledge discipline should be communicated on common platform through research and publications as well as it should be imparted by education and training programs. Since management satisfies both conditions, it qualifies as discipline.

6.2 Management is an Art and Science

(GTU - Nov. 2016; May 2017)

Since long time, there is a debate on the nature of management. One group of people argues that management is a science while the other group argues that management is an art. Following are the views for each of the group.

Management is a science

In science, to acquire the knowledge of any specific field, in depth study is carried out. Also, related cause and effect relationship between two or more variables are developed. Similarly, the management adopts the same methodology for study. Management applies scientific principles, such as objectivity, experimentation and reproducibility of results and develops the knowledge of particular area. Further, it has to deal with human behaviour under different conditions, it is also called social science. Similar to the science, management can best indicate the possibility of occurrence of a particular phenomenon after carefully considering various effecting factors and consequent effect. Following are the similarities between management and science, which supports the argument that management as a science.

(i) **Universally acceptance principles**

Scientific principles represents basic truth about a particular field of enquiry which is true at every place, e.g. - law of gravitation which can be applied in all countries irrespective of the time. Similarly, management also contains some fundamental principles which can be applied universally like the Principle of Unity of Command which is applicable to everywhere.

(ii) Experimentation & Observation

Scientific principles are derived through scientific investigation & researching e.g. the principle that earth goes round the sun has been scientifically proved. Similarly, management principles are also based on scientific enquiry & observation and not only one anyone's view. They have been developed through experiments & practical experiences of large no. of managers. *e.g.* it is observed that fair remuneration to personal helps in creating a satisfied work force.

(iii) Cause & Effect Relationship

Principles of science lay down cause and effect relationship between various variables. *e.g.* when metals are heated, they are expanded. The cause is heating & result is expansion. The same is true for management, therefore it also establishes cause and effect relationship.

(iv) Test of Validity and Predictability

Validity of scientific principles can be tested at any time or any number of times i.e. they stand the test of time. Each time these tests will give same result. Similarly, fundamental of management can also be tested for validity. *e.g.* principle of unity of command can be tested by comparing two persons - one having single boss and one having 2 bosses. The performance of 1st person will be better than 2nd.

It can't be denied that management has a systematic body of knowledge but it is not as exact as that of other physical sciences like biology, physics, and chemistry etc. The main reason for the inexactness of science of management is that it deals with human beings and it is very difficult to predict their behavior accurately. Since it is a social process, therefore it falls in the area of social sciences. It is a flexible science & that is why its theories and principles may produce different results at different times and therefore it is a behavior science.

Management is an art

Art implies application of theoretical knowledge and utilization of skills to achieve desired results. An art may be defined as personalized application of general theoretical principles for achieving best possible results. In case of management, after having theoretical knowledge of any field, it is not essential that each person can manage. It is the skill of the person to manage and hence brilliant managers are easily distinguished from an ordinary one in terms of ability to correctly diagnose the situation, determining the goals, generating alternatives, selecting and implementing the best alternative to get the desired results. Following are the similarities between management and science, which supports the argument that management as a science.

(i) Practical Knowledge

Every art requires practical knowledge, so learning of theories is not sufficient. It is very important to know practical application of theoretical principles. *e.g.* For good painter, the person may not only be knowing different color and brushes but different designs, dimensions, situations etc. to use them appropriately. Similarly, a manager can never be successful just by obtaining degree or diploma in management; he must have also know how to apply various principles in real situations by functioning in capacity of manager.

(ii) Personal Skill

Although theoretical base may be same for 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 one person to another. e.g. there are several qualified painters but *M.F. Hussain* is recognized for his paintings. 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 are successful whereas others are not.

(iii) Creativity

Every artist has an element of creativity in line. That is why he aims at producing something that has never existed before which requires combination of intelligence and imagination. Management is also creative in nature similar to any other art. It combines human and non-human resources in useful way so as to achieve desired results.

(iv) Perfection through practice

'Practice makes a man perfect'. Every artist becomes more and more proficient through constant practice. Similarly managers learn through their experience of many years. So, it an art which requires continuous practice.

Thus, we can say that management is an art and therefore it requires application of certain principles of theories.

Management is a science and an art

Science teaches to 'know' and art teaches to 'do'. e.g. A person can't become a good singer unless he has knowledge about various ragas and he also applies his personal skill in the art of singing. Same way it is not sufficient for manager to first know the principles but he must also apply them in solving various managerial problems that is why.

Management is combination of both an art and a science. The above mentioned points clearly reveals that management combines features of both science as well as 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 application of knowledge and skills.

A manager becomes successful in his profession when he acquires the knowledge of science and the art of applying it. Therefore management is a judicious blend of science as well as an art.

Science and art are not mutually exclusive but they are complementary to each other. So, finally it can be concluded that **management is combination of a science as well as an art.**

6.3 Difference between Management and Administration

[GTU, Dec. 2014; May 2017; Nov. 2017; May 2018; Nov. 2018; May 2019]

There is also controversy in considering the management and administration as same or different. Many experts make no distinction between administration and management and use them as synonyms. Several American writers consider them as two distinct functions.

The management experts like Elbourne, Unwick and Mary Follett regarded 'administration' and 'management' as synonymous and use them interchangeably in their works. On the other hand, Schuze and Sheldon found distinction between these two concepts. According to them the distinction is important to clearly understand the role of people in administrative positions versus those in managerial positions.

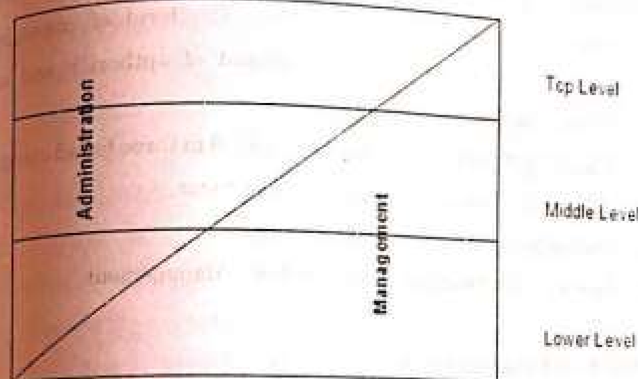
Difference between Management and Administration

Parameter	Management	Administration
Meaning	Management is an art of getting things done through others by directing their efforts towards achievement of pre-determined goals.	It is concerned with formulation of broad objectives, plans & policies.
Process	Management decides who should as it & how should he dot it.	Administration decides what is to be done & when it is to be done.
Nature of function	Management is an executing function.	Administration is a decision-making and thinking function.
Skills Required	Technical and Human skills	Conceptual and Human skills
Applicability	It is applicable to profit-making organization.	It is applicable to non-business concerns also.
Status	Management constitutes the employees of the organization who are paid remuneration (in the form of salaries & wages).	Administration represents owners of the enterprise who earn return on their capital invested & profits in the form of dividend.
Influence	The management decisions are influenced by the values, opinions, beliefs & decisions of the managers.	The administration is influenced by public opinion, govt. policies, religious organizations etc.

According to *Theo Haimann*, "Administration means overall determination of policies, setting of major objectives, the identification of general purposes and laying down of broad programs and projects".

Whereas, management involves conceiving, initiating and bringing together the various elements; coordinating, actuating, integrating the diverse organizational components while sustaining the viability of the organization towards some pre-determined goals. In other words, it is an art of getting things done through & with the people in formally organized groups.

Differences between administration and management based on certain parameters as shown in table.



Practically, there is no difference between management & administration. Every manager is concerned with both - administrative management function and operative management function as shown in the figure. However, the managers who are higher up in the hierarchy devote more time on administrative function & the lower level devote more time on directing and controlling worker's performance i.e. management. The Figure above clearly shows the degree of administration and management performed by the different levels of management.

6.4 Types of Management

[GTU, May 2015; Nov. 2017; May 2018]

Managers are those who are responsible for carrying out basic functions of the management namely planning, organizing, leading and controlling. Each manager is given pre-defined role according to its position and level in the organization. 'Levels of Management' refers to a line of demarcation between various managerial positions in an organization. The number of levels in management increases when the size of the business and work force increases and vice versa. The level of management determines a chain of command, the amount of authority and status enjoyed by any managerial position.

The levels of management can be classified in three broad categories:

1. Top level (Administrative level) Management
2. Middle level (Executory level) Management
3. Lower level (Operative / First-line level) Management

1) Top Level Management

Top level managers are the managers who are at the topmost echelon in any organization and are responsible for setting up the mission and strategies of the organizations. 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 functions. Following functions are performed by top level managers:

(i) Top management lays down the objectives and broad policies of the enterprise along with strategic plans.

(ii) It provides guidance and direction.

(iii) It issues necessary instructions for preparation of department budgets, procedures, schedules etc.

(iv) Top level management appoints middle level managers to carry out planned tasks.

(v) It controls and coordinates the activities of all the departments.

(vi) It is also responsible for maintaining a contact with the outside world.

(vii) The top management is also responsible towards the shareholders for the performance of the enterprise.

2) Middle Level Management

Middle level managers are responsible for taking out work from low level managers and report to the top level managers. So, they are the very important link in the management as they co-ordinate between two level of managers in the management. They devote more time to organizational and directional functions. Following functions are performed by middle level managers:

(i) They execute the plans of the in accordance with the directions of top level management.

(ii) They make plans for the sub-units of the organization.

(iii) They participate in employment & training of lower level management.

(iv) They interpret and explain policies from top level management to lower level.

(v) They are also responsible for inspiring lower level managers towards better performance.

(vi) They are responsible for coordinating the activities within the division or department.

(vii) It also sends important reports and other important data to top level management.

(viii) They evaluate performance of junior managers.

3) Low Level Management

Low level managers are lowest level of managers who report to the middle level managers. They have to take work from operators and workers. They supervise and co-ordinate the activities as per the plan of

the middle level management. They devote more time to supervising their sub-ordinates. Following functions are performed by low level managers:

(i) Assigning of jobs and tasks to various workers.

(ii) Responsible to take out the production from workers.

(iii) They guide and instruct workers for day to day activities.

(iv) They are responsible for the quality as well as quantity of production.

(v) They arrange necessary materials, machines, tools etc. for getting the things done.

(vi) They communicate workers problems, suggestions, and recommendatory appeals etc. to the higher level and higher level goals and objectives to the workers.

(vii) They supervise and guide the sub-ordinates.

(viii) They prepare periodical reports about the performance of the workers.

(ix) They ensure discipline in the enterprise

(x) They motivates the workers.

6.5 Skill and Role of Managers (GTU – May 2017)

6.5.1 Skills of Managers

For carrying out effective work, managers must possess skills. These skills can be grouped in three types of skills.

1. Technical Skills
2. Human Skills
3. Conceptual Skills

1) Technical Skills

Technical skills are the skills which are necessary to carry out the specific kind of work to be performed in an organization. For examples, production supervisor must know alternate methods of manufacturing and its relevant technology. At low level of managers, this skill plays very important role. As the level of management changes, the need of technical skills reduces as at the low level managers are available to carry out day to day operations. It is essential that each and every level of mangers must have basic technical knowledge to keep a control on functioning of the subordinates.

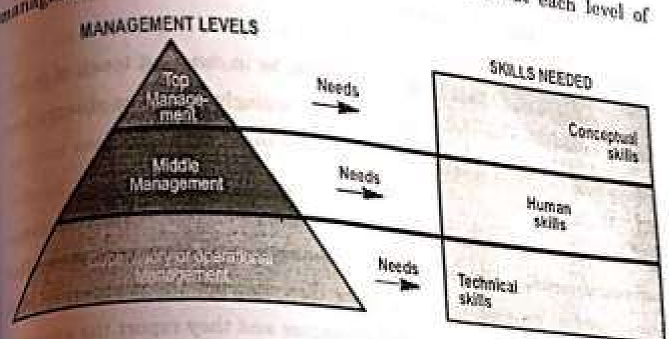
2) Human Skills

As one of the characteristics of management that it is people oriented, managers have to deal with people, outside the organization as well as inside the organizations. Managers must have skills of how to interact with which kind of people. These skills are known as human skills which includes communication, negotiation, leading, motivation. Since all level of managers have to deal with human, all must have equal importance for it.

3) Conceptual Skills

Conceptual skills varies from managers to managers. These skills are developed through vast experience and own ability to think under different conditions. Managers need the capacity to understand the overall working of the organization and its environment, to comprehend how parts of organization fits together. This type of skills is highly essential for top level of mangers since they have to set the goals of the organizations and guides the organization.

Amount of different managerial skills are required at different level of mangers are as shown in figure below. It is to note that the amount of technical skills and conceptual skills varies according to the level of management but human skills are equally important at each level of managers.



6.5.2 Role of Managers

Henry Mintzberg carefully observed day-to-day activities of the mangers through close follow up. On the basis of his observations he concluded that managers play ten types of roles in the capacity of their job which can be divided in to three broad categories as follows:

(2) Interpersonal Roles

- (i) Liaison
- (ii) Leader
- (iii) Figurehead

(3) Informational Roles

- (i) Monitor
- (ii) Disseminator
- (iii) Spokesperson

(4) Decisional Roles

(i) Entrepreneur
(ii) Disturbance Handler
(iii) Resource Allocator
(iv) Navigator

Interpersonal Roles

As it is clear that managers have to be in constant touch of people, inside or outside, they have to play role accordingly. Based on observations, *Mintzberg* classified interpersonal roles into three parts:

(i) Liaison

This role involves to act as communication channel between group, top management and lower level management. Managers are often considered as connecting person since they instruct the decision of high level authorities to the lower level managers and they report the executed work to the higher level authority. In most cases, middle level managers are playing this role.

(ii) Leader

Manager by default has to serve as a leader for allotted group. They are the guide of all the employees working under him. As and when the manager wants his subordinates how to perform, he also has to play accordingly. Further he is assumed to be good motivator and trainer for the employees.

(iii) Figurehead

Figurehead role is ornamental role which manager has to play when he visits plant, handover certificates to the employees or any opening ceremony and other such functions.

Informational Roles

Managers has to take information through various sources as well as he has to provide information to others also. Mangers has to play three types of informational roles as discussed below:

(i) Monitor

As a manager, person is required to focus on the information which is required by him either for his own work or sharing with others. The manager plays this role when he looks for and collects information from various sources. For mangers, it is very essential to have all information related to his area of work. Manager can collect information through internal reports, articles, newspapers, journals, internet, intranets and many other sources. Thus, for mangers to monitor the information is very crucial role to play.

(ii) Disseminator

Manager on the other side, has to disseminate the information to the subordinates or to the other department or organization through oral instructions or written, formally or informally. So, as a disseminator manger has to pass on the relative information based on his best of knowledge as per requirement.

(iii) Spokesperson

Mostly to pass the information to the outsiders (sometimes to insiders of organization also) authenticated person of the top level management acts a spokesperson. He declares any new policy or strategy which is going to be adopted by organization, declares financial results etc.

Decisional Roles

Due to his position, manager has to take number of decisions as a part of daily activities. His role of taking decisions is classified in four ways as follows:

(i) Entrepreneur

As a leader, top level managers have to initiate the new idea which is effective to the business and he has to take decision regarding its implementation. Complete analysis and opportunity identification has to be carried out to justify the decision taken. Hence, the manager also acts as an entrepreneur.

(ii) Disturbance Handler

When there is a group, there is possibility of having conflicts. So, the mangers of each level are required to handle these kind of disturbance either between employees or with outsiders. So, managers has to take appropriate decisions which leads to smooth functioning of the organizations.

(iii) Resource Collector

Third role played by managers is to allocate the resources such that the maximum profit is obtained at minimum cost. This role often requires allocation of scare resources to the many requests for these. Activities such as budgets, predicting the future demand and forecasting involves the decision of resources allocation.

(iv) Negotiator

Mangers have to play the role of negotiator with groups of organization or outside organization. Union contract, agreement with

supplier, employee negotiation are examples of negotiator and these decisions has to be played by middle and top level managers.

Based on all these roles played by the organization managers, the job of manager is not easy. They have to be alert all the time about what is happening around them.

Roles of mangers

Category of Decision	Role	Activities Such as
Interpersonal	Liaison	Coordinator between groups
	Leader	Motivate and lead the team
	Figureheads	Inauguration of new plant
Informational	Monitor	Observe and collect the relati information
	Disseminator	Pass on the relati information
	Spokesperson	Address a press conference
Decisional	Entrepreneur	Develop and implement n ideas
	Disturbance Handler	Tackle the crises
	Resource Allocator	Budget allocation
	Negotiator	Revolving conflicts

Section - B (History of Management)

6.6 Introduction to Ancient Management

From thousands of years, there is an existence of management in the society. Indian civilization is a spectator of history of more than 5000 years and is the oldest civilizations in the world. Today's management is the outcome of endeavors of people of too many years. The *Effiel Tower, the Taj Mahal, the Great Wall of China and the pyramids of Egypt* are examples of ancient management.

In nearby time, the two events are considered as critical for the development of management concepts. First is the contribution of Adam Smith and second is the industrial revolution. Based on his experiment at pin factory, he argued that economic advantage can be achieved through ***division of labor.*** Division of labor breakdown the jobs into narrow and repetitive tasks. Repetition of task makes the workers more efficient and hence the production of pin was raised to 48,000 from 10 pins per day!!!!

Further with substitution of human power by machines lead to industrial revolution which started in the late 18th century. This lead to the emergence of number of approaches to govern the industries. Many management *gurus* have given important contribution to the development of the management theories.

Management after industrial revolution can be viewed on the basis of three principles of the management:

1) Scientific Principles Approach
2) Administrative Principles Approach
3) Behavioral Approach

6.7 Scientific Principles based Management Theories

Main objective of scientific principles based management theories was to improve economic efficiency of the production. It was one of the earliest attempts to apply science to management. The core ideas of scientific management were developed by Frederick Winslow Taylor in the 1880s and 1890s, and scientific management is also called Taylorism. In his first book, on Shop Management and The Principles of Scientific Management, he published related ideas and principles.

Along with, contribution of F. W. Taylor's, contribution of Gilberths is considered as key concept of scientific theory of management.

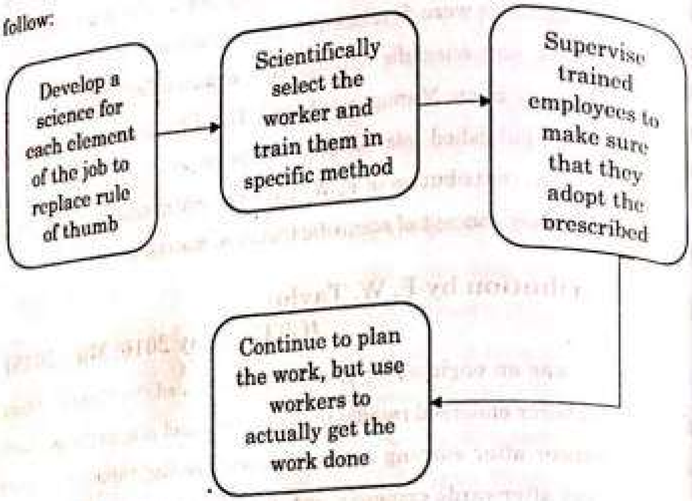
6.7.1 Contribution by F. W. Taylor

(GTU – May 2016; May 2019)

Taylor was an engineer by profession. He joined the Midvale Steel Works as a laborer endorsed rapidly to be foreman and rose to the position of chief engineer after earning a degree in engineering through evening study. He was afterwards employed at the Bethlehem Steel Works, than became a consultant and devoted his life to the propagation of his ideas.

Frederick W. Taylor (1856- 1915) was a pioneer who propounded principles of Scientific Management (1911) come to be recognized as the father of scientific management. Scientific management also called *Taylorism*. Taylor is renowned for his research and work into management thought and scientific management. His suggested principles and features have helped model the scientific approach to management. His main objective was to improve the economic efficiency, through improvement in labor's productivity. He was primarily concerned with efficiency of workers and optimum utilization of machines and other resources in order to bring up a sound enterprise consistent with the interest of entrepreneurs, the laborers and the customer at large.

His principles of management can be represented in diagram as follow:



Further, during his life as a consultant he contributed towards scientific management which can be summarized as follows:

1) Time and motion study

Developed technique by F. W. Taylor, he observed each job carefully using time watch and find out the shortest way of doing it. Thus, he developed the concept of identifying the best of way of doing the job.

2) Differential payment

Efficient worker should be given incentive for doing more amount of work. Hence, he introduced differential payment system.

3) Scientific recruitment and training

Taylor emphasized on identifying the right person for the right job through proper evaluation of skill and knowledge.

4) Need for cooperation between management and workers

He insisted that proper cooperation between management and workers should be there to avoid collusion and interruptions in the work.

5) Scientific approach to work

Using equipments and technologies available, work must be carried which can result in higher efficiency.

Thus, scientific management not only helped to develop a rational approach to solving organizational problems but also contributed a great deal in professionalism in management.

6.7.2 Contribution by Gilberths

Frank and Liilian Gilbreth made their contribution to the scientific management as a husband-wife team. With the knowledge related to psychology, the Gilberths were able to combine the human element of management with the technical observations. They also noticed the need to consider the working conditions and overall environment in which the workers performed their jobs.

They carried out the experiments related to bricklaying work in their business. They carried out strict watch of the every motion performed by the worker. Workers' were experiencing high level of fatigue due to unnecessary movements of the designed work system. They used cameras for examining the motions of the workers. They identified many unwanted motions performed by the worker and suggested to eliminate the same. In order to reduce fatigue, specific movements were suggested for completing their jobs.

Adoption of suggested motion of workers reduced the level of fatigue of the worker and increased the worker's satisfaction. Satisfied workers increased the productivity to unbelievable extent. Results showed that bricklaying ability in a day was increased to 2700 from 1000!!! This brings the era of motion study and trying to identify unwanted motion in the every work carried out.

They developed the concept of "Therbligs" to improve production methods. Therbligs comprise a system for analyzing the motions involved in performing a task. The identification of individual motions, as well as moments of delay in the process, was designed to find unnecessary or inefficient motions and to utilize or eliminate even split-seconds of wasted time.

6.8 Administrative Principles based Management Theories

In development of administrative principles of management, Henri Fayol and Max weber's contribution is significant as discussed below:

6.8.1 Contribution of Henri Fayol

(GTU – Nov. 2016; Nov. 2017; Nov. 2018; May 2019)

Henri Fayol (1841-1925), a French mining engineer and successful manager, developed the theory which is known as ***administrative management theory***. Like Taylor, he was keen to increase the employee productivity, but Taylor was targeting shop-floor whereas Fayol was targeting the higher level managers. He developed a broad analytical

process of administration and concluded 14 principles for governing the management of the organization.

Fayol's 14 Principles of Management

1) Division of labor

Work should be divided among individuals and groups to ensure that effort and attention are focused on special portions of the task. This helps in increasing the speed of the entire operation. Fayol presented work specialization as the best way to use the human resources of the organization.

2) Authority

The concepts of authority and responsibility are closely related. Authority was defined by Fayol as the right to give orders and the power to exact obedience. Responsibility involves being accountable, and is therefore naturally associated with authority. If the manager has assumes responsibility to take out work from worker, he must assume authority.

3) Discipline

Successful organization requires that the workers must obey the command of higher authorities without any arguments. Further, they must follow the rules and regulations of the organization without any freedom.

4) Unity of command

Workers must receive orders from only one manager to avoid confusion and ensure efficient output.

5) Unit of direction

The entire organization should be moving towards a common objective in a common direction.

6) **Subordination of individual interest**

The interests of one person should not take priority over the interests of the organization as a whole.

7) **Remuneration**

Fair remuneration has to be paid to each worker considering many variables, such as cost of living, supply of qualified personnel, individual productivity, general business conditions, and success of the business.

8) **Centralization**

The management must decide the level of decision-making authority to be given to the employees.

9) **Scalar chain**

Managers in hierarchies are part of a chain like authority scale. Each manager, from the first line supervisor to the president, possess 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.

10) **Order**

The management should obtain orderliness in work through suitable organization of men and materials.

11) **Equity**

All employees should be treated as equally as possible. Each employee of same level must be given same amount of opportunity of growth.

12) **Stability and tenure of staff**

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.

13) **Initiative**

Management should take steps to encourage worker's initiative towards the achieving the organization's objectives.

14) **Esprit de corps**

Management should encourage harmony and team spirit among employees which is essential for well-being and survival of any organization. Fayol recommended use of oral communication in clearing doubts and misunderstandings and avoid the policy of 'divide and rule'.

6.8.2 Contribution of Max Weber

Max Weber, a German Sociologist developed the ***bureaucratic model***. He believed that organizations should be managed impersonally and that a formal organizational structure, where specific rules were followed, was important. He thought that organization should not run like a family owned organization. This non-personal, objective form of organization was called a ***bureaucracy***.

Weber believed that all bureaucracies have the following characteristics:

1) **Management by rules**

A bureaucracy follows a consistent set of rules that control the functions of the organization. Management controls the lower levels of the organization's hierarchy by applying established rules in a consistent and predictable manner.

2) Division of labor

Authority and responsibility are clearly defined and officially sanctioned. Job descriptions are specified with responsibilities and line of authority. All employees have thus clearly defined rules in a system of authority and subordination.

3) Formal hierarchical structure

An organization is organized into a hierarchy of authority and follows a clear chain of command. The hierarchical structure effectively delineates the lines of authority and the subordination of the lower levels to the upper levels of the hierarchical structure.

4) Personnel hired on grounds of technical competence

Appointment to a position within the organization is made on the grounds of technical competence. Work is assigned based on the experience and competence of the individual.

5) Managers are salaried officials

A manager is a salaried official and does own the administered unit. All elements of a bureaucracy are defined with clearly defined roles and responsibilities and are managed by trained and experienced specialists.

6) Written documents

All decisions, rules and actions taken by the organization are formulated and recorded in writing. Written documents ensure that there is continuity of the organization's policies and procedures.

Advantages of Weber's Bureaucracy

Weber's bureaucracy is based on logic and rationality which are supported by trained and qualified specialists. The element of a bureaucracy offers a stable and hierarchical model for an organization.

Disadvantages of Weber's Bureaucracy

Nevertheless, Weber's bureaucracy does have its limitations since it is based on the roles and responsibilities of the individuals rather than on the tasks performed by the organization. Its rigidity implies a lack of flexibility to respond to the demands of change in the business environment.

Example

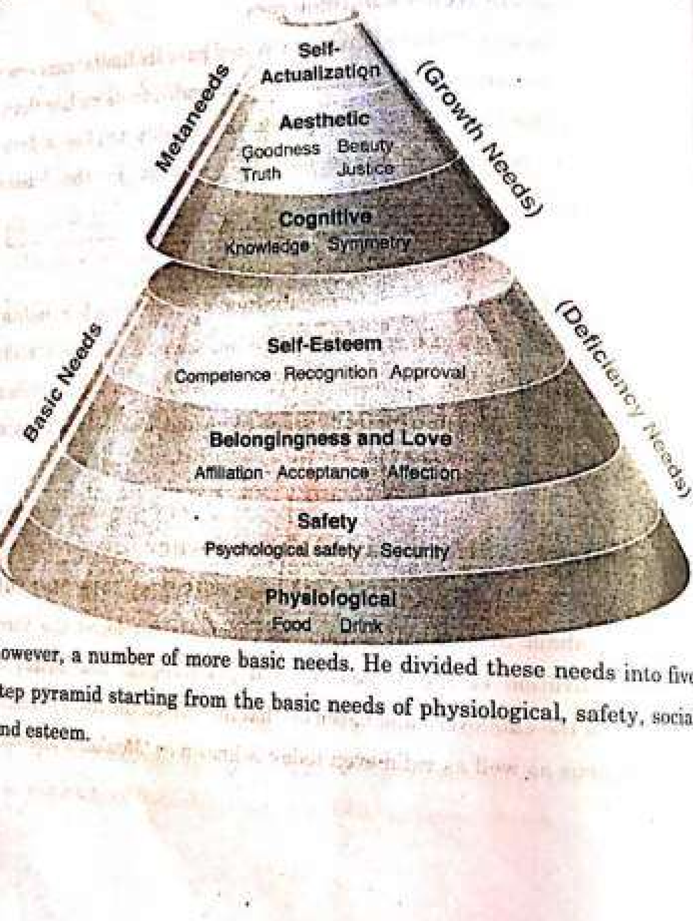
A well-known bureaucratic organization is the modern U.S. military. For this example, let's look at an Army division. An Army division is broken down into brigades. The brigades are broken down further into battalions. Battalions are divided into companies, and companies are broken down into platoons.

6.9 Maslow's Hierarchy of Needs Theory

(GTU – May 2016; Nov. 2017; May 2018; May 2019)

Abraham Maslow, Americana psychologist, developed the theory about motivation of the person. He did psychological and behavioral analysis of the employees and based on that he derived the theory which is most famous as well as valid even today is known as '*Maslow's Hierarchy of Needs*'.

Maslow was much more interested in learning more about what makes people happy and the things that they do to achieve that aim. As a humanist, Maslow believed that people have an inborn desire to be self-actualized, to be all they can be. In order to achieve this ultimate goals,



however, a number of more basic needs. He divided these needs into five step pyramid starting from the basic needs of physiological, safety, social and esteem.

Each of us is motivated by needs. Abraham Maslow's Hierarchy of Needs helps to explain how these needs motivate us all as shown in the diagram.

Types of needs

1) **Physiological Needs:** - Food, water, rest, sleep, shelter
2) **Safety Needs:** - Security of job, safety of life
3) **Belongingness and Love needs:** - Friends, intimate relationship
4) **Esteem Needs:** - Prestige, achievement, feeling of accomplishment
5) **Self- actualization:** - Achieving one's full potential

Maslow's Hierarchy of Needs states that we must satisfy each need in turn, starting with the first, which deals with the most obvious needs for survival itself such as air, water, food and shelter. Second basic need is the safety in terms of life, job etc. Until we are not safe, we are not motivated for doing anything. Both these types of needs are called lower order needs which are predominantly satisfied externally.

Only when the lower order needs of physical and emotional well-being are satisfied are we concerned with the higher order needs of social, esteem and self – actualization. These needs are termed as higher order needs and are predominantly satisfied internally.

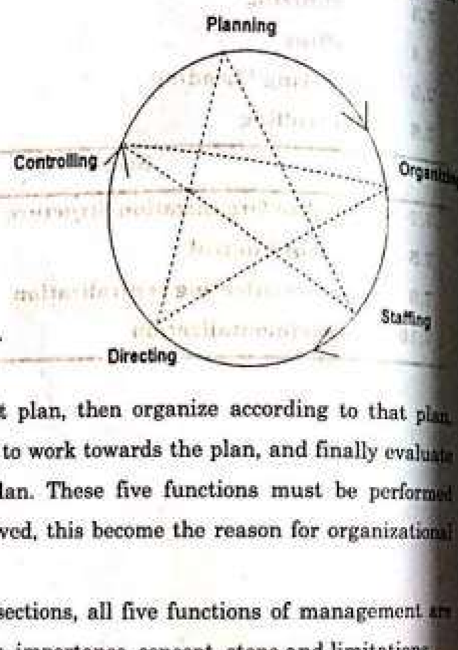
Though this theory is widely accepted and is applicable to us even today, it was criticized due to lack of empirical support.

Chapter 7
Functions of Management and Organizational Structures

SECTION -A

7.1 Functions of Management [GTU – May 2019]

A person who holds a management position inside an organization is required to think strategically and conceptually in order to achieve organizational goals. Management has to carry out different functions in order to accomplish these goals. The major functions that a manager completes can be categorized into five different functions namely ***planning, organizing, staffing, leading,*** and ***controlling.***



Managers must first plan, then organize according to that plan, recruit the staff, lead staff to work towards the plan, and finally evaluate the effectiveness of the plan. These five functions must be performed properly and, goal is achieved, this become the reason for organizational success.

In the sub-sequent sections, all five functions of management are discussed regarding, nature, importance, concept, steps and limitations.

7.2 Planning (GTU – May 2017; Nov. 2017; May 2018)

When organizations fixes the goals, it is essential to plan the steps necessary to achieve it. Although to fix the goal is one of the element of plan, detailed and best procedure is to be developed through which goals can reached. So, deciding in advance what to do, how to do, why to do, where to do and who will be responsible for doing is termed as ***planning***.

Planning provides the basis for the other major functions of management. In MNCs, top management decides the goals of the organizations as long for five years. For achieving these goals, managers of middle level and lower level management plans for short term duration.

For achieving the goals, plans helps organization in following ways:

(1) The organization secures the resources required to accomplish the goals as per the plan.

(2) The organization carry out activities which is consist with the objectives of the organization.

(3) Outcome of activities is monitored and compared with the plan. If it is not as per the plan, then rectifying actions are performed and hence organization is not diverted from the goals.

7.2.1 Importance of Planning

Planning is very important function for effective management. Without proper planning it is impossible to achieve the set objectives. An organization will not have any direction and hence organization will be diverted from the set objectives.

Due to following reasons planning is an essential part of the management:

(i) Focuses on the organizational goals

Planning helps the organizations to focus on organization's goals and objectives. So, actions of the management are always in-line with the set goals. Hence, planning does not allow the organizations to deviate from its goals.

(ii) Provides the direction towards achieving the goals

Planning draws the path for the organizations and hence for organizations' members it is easier to move towards to the right directions of achieving the goals.

(iii) Reduces uncertainty

If planning is properly carried out then hurdles of the path can be easily traced out and hence for organization it is very easy to prepare in advance. Hence planning reduces high level of uncertainty and minimizes the risk.

(iv) Ensures co-ordination

Planning establishes coordinated efforts among the members of the organizations. If proper planning is not done, then activities of departments and organization members will mesh up and lead to failure in the organizations. So, planning ensures co-ordination and hence prevent the organizations from deviating from the objectives.

(v) Reduces overlapping of work

Through effective co-ordination, duplicating of work is significantly reduced and hence avoids the overlapping of work.

(vi) Facilitates control

Since continuous monitoring of the progress enables the organization to keep the activities in accordance with the goals of the organizations. Hence, planning also facilitates the control.

(vii) Leads to success

Effective planning leads to reduction in uncertainty, ensures co-ordination, reduces overlapping of work, focus on targets. So, definitely actions can lead to success in achieving the goals.

7.2.2 Steps of Planning

Following are the steps which are involved in planning:

(i) Set the goals to be achieved

The first step which is essential for planning to set the goals for the organization, which is mostly done by top management. Clearly defined objectives helps the middle and lower level management in planning their actions in advance.

(ii) Establish planning premises

Along with setting the goals of the organizations, certain assumptions about the future is made. Considering the effect of business environment, forecasting the future demand as well other constraints, organizations are selecting their targets and plans accordingly.

(iii) Prepare contingency plan

Assumption made in the previous step may go wrong and hence for organizations, it is mandatory to have contingency plans along with the regular plan. Contingency plan is an emergency plan made up with several alternatives which can be opted if anything goes wrong. So, organizations have to think for contingency plans before assuming all is set for their targets.

(iv) Evaluate and select a course of action

After identifying the possible courses of action, the next step is to evaluate each of the alternates and select the best action which is in range of premises of organizational goals.

(v) Develop derivative plans

Derivative plans is the plan which is derived based on the master plan decided by the top management. This plan break down the year wise plans into month wise plan and so on. Derivative plans give clearer picture compared to master plan and hence realistic picture is visualized.

(vi) Measuring and controlling of the progress

Finally after preparing the plan, organizations have to monitor the progress towards the goals. If there is any change in the direction, corrective actions are taken to control the progress towards goals.

7.2.3 Limitations of Planning

Though planning is necessary and very useful for achieving the goals of the organizations, following are some of the limitations of the planning:

(i) Planning is very time consuming and expensive process.

(ii) Planning sometimes may hinder the functioning of the organization in stable condition. So, organization may lose valuable opportunities.

(iii) Since planning is based on many assumption, it is difficult to adjust due to sudden change in market situations.

(iv) It is difficult to accommodate unseen change and hence planning lacks flexibility.

7.3 Organizing

Once the goals are set by the top management, middle and lower level management has to follow derivative plan. According to it, managers divide the task into many sub-task and allocate activities and resources to the groups having hierarchy. Tasks are allocated with responsibility and authority. This process is called ***organizing.***

Organizing function includes the development of organization structure which can accomplish the task, if such organization is not existing. For accomplishing the targets, group of people may be changed. So, managers must have the ability to identify the ability of different people to accomplish the given set of objectives.

7.3.1 Concept of Organizing

There are two essential concepts regarding with organizing:

(i) Organizing is a Structure of Relationship

Organization involves a large number of groups. which can be referred as the structure of relationship. In fact, under the process of organizing the relationship between departments, groups and individuals are carefully analyzed through the process of communication system with the aim to establish proper coordinating system among them. So, everyone can take initiative for the welfare of enterprise. Thus, it is clear that organization can be considered as a structure of relationship.

(ii) Organizing is Set of Processes

The concept of organizing can be considered as a set of processes because a large number of activities are involved under the process of organizing with-a-view to accomplish the predetermined goals. In fact, organizing involves division of works, determination of activities, grouping of activities, delegation of authority and the establishment of proper co-ordination and balance among various departments of individuals towards the attainment of predetermined goals. On the whole, it is clear that the objectives of business firm cannot be obtained by doing single activity, so organizing is set to be a process.

7.3.2 Principles of Organizing

[GTU, Dec. 2014; Nov. 2016; May 2018]

The organizing process can be done efficiently if the managers have certain guidelines so that they can take decisions and can act. To organize in an effective manner, the following principles of organization can be used by a manager.

1. Principle of Specialization

According to the principle, the whole work should be divided amongst the subordinates on the basis of qualifications, abilities and skills. It is through division of work specialization can be achieved which results in effective organization.

2. Principle of Functional Definition

According to this principle, all the functions should be completely and clearly defined to the managers and subordinates. This can be done by clearly defining the role, responsibilities and authority. Clarifications in

authority- responsibility relationships helps in achieving effective co-ordination.

3. Principles of Span of Control

According to this principle, span of control is a span of supervision which depicts the number of employees are to be controlled effectively by a single manager. According to this principle, a manager should be able to handle what number of employees under him should be decided. This decision can be taken by choosing either from a wide or narrow span. Based on the managerial capabilities, span of control is defined.

4. Principle of Scalar Chain

Scalar chain is a chain of command or authority which flows from top to bottom. With a chain of authority available, wastages of resources are minimized, communication is affected, overlapping of work is avoided and easy organization takes place. A scalar chain of command facilitates work flow in an organization which helps in achievement of effective results. As the authority flows from top to bottom, it clarifies the authority positions to managers at all level and that facilitates effective organization.

5. Principle of Unity of Command

It implies one subordinate-one superior relationship. Every subordinate is answerable and accountable to one boss at one time. This helps in avoiding communication gaps and feedback and response is prompt. Unity of command also helps in easy co- ordination and, therefore, effective organization.

7.3.3 Centralization

Centralization refers to the level up to which the decision making process is centralized in the organization. Mostly top management has always keep the authority regarding taking all decisions with themselves only. If this condition exists than the organization is said to be highly centralized.

Centralized organizational structures rely on one individual to make decisions and provide direction for the company. This condition exists if the organization does not found any person at lower level who is competent to take decisions. Small businesses often use this structure since the owner is responsible for the company's business operations.

Advantages

Centralized organizations can be extremely efficient regarding business decisions. Business owners typically develop the company's mission and vision, and set objectives for managers and employees to follow when achieving these goals.

Disadvantages

Centralized organizations can suffer from the negative effects of several layers of bureaucracy. These businesses often have multiple management layers stretching from the owner down to frontline operations. Business owners responsible for making every decision in the company may require more time to accomplish these tasks, which can result in sluggish business operations.

7.3.4 Decentralization

On the other hand, if the top management has given authority to their sub-ordinated for taking the decision within their domain area, then this is said to be decentralization of authority. Decentralized organizational structures often have several individuals responsible for making business decisions and running the business. Sometimes decentralization of authority may lead to some problems due to poor co-ordination or interfering the others domain area.

Decentralized organizations rely on a team environment at different levels in the business. Individuals at each level in the business may have some autonomy to make business decisions.

No organization is totally centralized or totally decentralized. Departmental decisions are given mostly taken by departmental heads and decisions related to strategies are taken by top level management.

Advantages

Decentralized organizations utilize individuals with a variety of expertise and knowledge for running various business operations. A broad-based management team helps to ensure the company has knowledgeable directors or managers to handle various types of business situations

Disadvantages

Decentralized organizations can struggle with multiple individuals having different opinions on a particular business decision. As such, these businesses can face difficulties trying to get everyone on the same page when making decisions.

Difference between centralization and decentralization is given in the table overleaf.

Centralization V/S Decentralization

Centralization	Decentralization
Top management takes all decisions and has tight control.	Other levels of management are authorized to take decisions.
Centralization is only possible in stable environment.	Under complex environment, decentralization is possible.
Sometimes due to lack of competent people, centralization is adopted.	Authorized people are competent to take decisions.
For small business organization, centralization is adopted.	In MNCs, decentralization is adopted.
In the absence of authority, no decision is taken which may lead to missing of an opportunity.	Since authorized persons are present, opportunities can be grab event at risk.

Factors affecting centralization [GTU, Dec. 2014]

Following are the factors which affects centralization:

1. Size

Size of the organization, terms of sales number, plans, and number of employees affects the decentralization of authority. It is observes that the speed and adequacy of decision making, flexibility and efficiency are enhanced through decentralization of authority in case of very large multi-product, diverse and complex organization. Therefore in larger size of organization, there will be more dispersion of authority

2. History and age

The size of organization, the degree of decentralization depends upon history and ages of organization. If it is organized by an individual then in such kind of organization, there will be centralization of authority. But in

...of business activities when there is merging being done there is decentralization of authority.

3. Philosophy of top management

Decentralization of authority depends upon philosophy of top management. It is seen that in the owners managed enterprise there is delegation of authority but in professionally managed enterprise decentralization of authority is seen

4. Competent personnel

Competent personnel affect decentralization of authority. More personnel at lower level more policy of decentralization of authority.

5. Strategy and organization environment

Strategy and organization environment influences market, technological environment, competition. It is the basis of determining decentralization of authority and centralization of authority.

6. Nature and management function

The degree of decentralization of authority is influenced by nature and management functions. Generally functions like production and sales are more decentralized and finance, personnel, research and development are highly centralized.

7. Control techniques

Decentralization of authority is more when control technique is good. When control system is reliable, there is better and higher decentralization of authority to the lower level.

8. Dispersion of organizational plans

Decentralization of authority also depends upon dispersion of organizational plans of the organization. Organization has officer of different types located at different places. That's why decentralization of authority becomes necessary.

7.4 Staffing (GTU – Nov. 2016)

Men is one of the important elements of 4 M's necessary for organization. Without sufficient and efficient manpower, it is impossible to run the business. Organization must recruit those employees who are able to meet the need of the organization's goals. So, recruitment of appropriate person as well as his training is considered as critical for the growth of organization. Further, retention of the employee is very important since trained people can lead to set back to the growth of the organization. So, management of human resources is considered as ***staffing.***

7.4.1 Importance of Staffing

Staffing is very important function of the organization. Since without right employee at right place it is impossible to extract targeted work from the machine. Importance of staffing can be summarized as follows:

(i) It increase production by putting right person at right place.

(ii) Through staffing, it is possible to identify the talents of employee.

(iii) It prevents underutilization of human resources.

(iv) It helps to identify various sources of recruitment and selection.

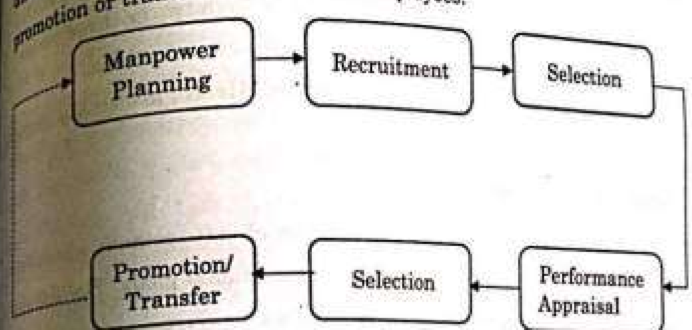
(v) It brings fresh blood having updated knowledge of technology.

(vi) It avoids the selection of wrong employee.

7.4.2 Process of Staffing

As shown in figure, manpower planning is the base of identifying the need of specified people. As the manpower planning identifies the

requirement, advertisement is given on organization's website or in newspaper in order to bring the pull of data for selecting the employee. Through appropriate technical and psychological tests, out of pull data required number of candidates are selected. Once they are selected, familiarization with organization and training period is started for the employee. Subsequently, job is allocated according to the ability of the employee. HR department tracks the employee's performance through directly or indirectly. Based on his performance increment in the salary, promotion or transfer is given to the employees.



7.5 Directing / Leading [GTU, May 2015; May 2017]

Once effective plan is prepared, proper organizing of activities is done through compatible and trained staff, manager has to lead the team towards the organizational goals. The function of leading the people on the path through which organization goals can be achieved is termed as ***leading. Mullins*** defined leadership as the essential relationship through which one person can influences the behavior and/or actions of other people. This role also involves the role of motivator who has the capability of completing the work but lacks the motivation.

Directing is defined as the issuance of an orders, and leading and motivating to execute the orders. It includes to direct the organization towards the new goals through his vision. Directing capacity mainly depends on the manager's experience.

Nature of Leading

1) It is an inter-personal process in which a manager influence and guide the workers to achieve the goals.
2) Leader has qualities namely intelligence, maturity and personality.
3) Leading process involves a group, *i.e.,* more than two or three people.
4) Aim of leader is to reach the objectives of the organizations.
5) No particular style of leadership is defined. Hence, leadership changes from time to time.

Importance of Leading

Leadership is very important function of management which helps to maximize efficiency and to achieve organizational goals. The following points justify the importance of leadership in a concern.

1) Leader initiates the actions for the goal of organization through effective planning with subordinates.
2) Leader motivates the people through economic or non-economic, formal or informal rewards.
3) A leader instructs all subordinates to perform their work effectively and efficiently.
4) Through motivation and involvement, confidence of the employees is boosted through significant level.
5) Leader builds the environment through which efficiency of the employee increases through his communication and command.

...) Co-ordination can be achieved through reconciling personal interests with organizational goals. This synchronization can be achieved through proper and effective co-ordination which should be primary motive of a leader.

... Controlling

Once the activities have been started towards accomplishing the goals, it is equally important to strictly monitor it and rectify it, if required, if it deviates from the planned time line. This process of monitoring and bringing it back is termed as ***controlling.*** Controlling function ensures that the actual performance is in-line with the predicted course of action. If controlling is dispensed as one of the functions, then it is impossible to reach the goals. Controlling identifies the reasons for deviations of the activities from target and hence for future projects it is very easy to rectify rather than having same trouble.

Following is the nature of controlling as function of management:

1) Controlling is the function which comes at certain stages which checks wither the performances are made are according to plans or not.
2) Every manager has to perform this function to check the progress.
3) Controlling always look to future so that follow-up can be made whenever required because effective control is not possible without past being controlled.
4) Controlling is a continuous and dynamic process.
5) Planning and Controlling are two inseparable functions of management. Without planning, controlling is a meaningless exercise and without controlling, planning is useless. Planning presupposes controlling and

controlling succeeds planning. So, Controlling is closely related with planning.

Process of Controlling

Controlling as a management function involves following steps:

1) **Establishment of standards**

Standards are the targets which have to be achieved in by the management. They can also be called as the criterions for judging the performance. Some standards are measurable such as no. of units as output and some are non-measurable such as performance of a manager.

2) **Measurement of performance**

The second major step in controlling is to measure the performance. Finding out deviations becomes easy through measuring the actual performance. Performance levels are sometimes easy to measure and sometimes difficult.

3) **Comparison of actual and standard performance**

Comparison of actual performance with the planned targets is very important. Deviation can be defined as the gap between actual performance and the planned targets. The manager has to find out two things here- extent of deviation and cause of deviation. Extent of deviation means that the manager has to find out whether the deviation is positive or negative or whether the actual performance is in conformity with the planned performance. The managers have to exercise control by exception. He has to find out those deviations which are critical and important for business. Minor deviations have to be ignored. Major deviations like replacement of machinery, appointment

of workers, quality of raw material, rate of profits, etc. should be looked upon consciously.

Once the deviation is identified, a manager has to think about various cause which has led to deviation.

4) **Taking remedial actions**

Once the causes and extent of deviations are known, the manager has to detect those errors and take remedial measures for it. There are two alternatives here-

a. Taking corrective measures for deviations which have occurred; and

b. After taking the corrective measures, if the actual performance is not in conformity with plans, the manager can revise the targets. It is here the controlling process comes to an end.

Follow up is an important step because it is only through taking corrective measures, a manager can exercise controlling.

SECTION -B

7.7 Types of Organization Structure

[GTU, Dec. 2015; May 2016; May 2017]

To achieve the established goals, organizations has to take necessary actions which can convert planned goals into results. Necessary actions includes assignment of authority and responsibility, grouping of people and allocation of resources. This complete process is termed as *organizing*.

Organizing is considered as one of the fundamental function of management followed by planning. In order to carry out process of organizing activities of the organizations, it is required to create the structure, which is known as *organization structure*. Organization structure refers to the development of groups, assignment of responsibility to group members, establishing of official reporting relationships and finally developing an integration system to facilitate effective co-ordination system.

Following are the functions of organization structure:

1) Allocate responsibilities by identifying the ability of the persons.
2) Develop relationship through chain of command.
3) Ensure effective and smooth flow of communication through channels
4) Encourage the employee for initiatives.
5) Take decisions through available data.

Following are the different types of organization structures which are existing the business organizations:

1) Based on relationship (Formal and Informal)
2) Based on hierarchy structure (Line, Staff and Matrix)

7.7.1 Based on relationship (Formal and Informal Organization)

Based on relationship, organizations are classified into two types: Formal and Informal.

1) Formal Organization

This is one which refers to a structure of well-defined jobs each person has authority and responsibility. It is a conscious determination by which people accomplish goals by adhering to the norms laid down by the organization structure. This kind of organization is an arbitrary set up in which each person is responsible for his performance. As per rule of 'chain of command', people is allocated work and he has to perform accordingly to complete the goals.

2) Informal Organization

A network developed base on personal and social relationships between the employees within the formal set up is called informal organization. Informal organizations develop relationships which are developed on likes, dislikes, feelings and emotions. Therefore, the network of social groups based on friendships can be called as informal organizations. There is no conscious effort made to have informal organization. It emerges from the formal organization and it is not based on any rules and regulations as in case of formal organization

How formal and informal organizations are related?

Existence of both, formal and informal organizations are important. Both type of organization helps in bringing efficient working organization and smoothness in a concern.

Formal organization originates from the set organizational structure and informal organization originates from formal organization. Formal organization works independently, but informal organization depends totally upon the formal organization. Within the formal organization, the members undertake the assigned duties in co- operation with each other. They interact and communicate amongst themselves. Therefore, both formal and informal organizations are important. When several people work together for achievement of organizational goals, social tie ups tends to build and therefore informal organization helps to secure co-operation by which goals can be achieved smooth. Therefore, we can say that informal organization emerges from formal organization.

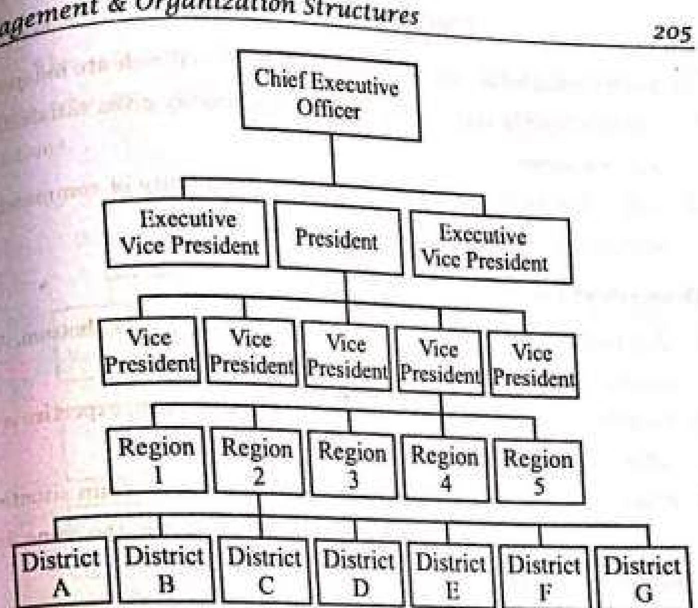
7.7.2 Based on hierarchy structure

As per the hierarchy structure, following are different types of organization structure:

1) Line Organization
2) Staff Organization
3) Line and Staff Organization (Matrix Organization Structure)

7.7.2.1 Line Organization

The line organization is the simplest organizational structure. According to this type of organization, the authority flows from top to bottom. This is the reason for calling this organization as scalar organization which means scalar chain of command is a part and parcel of this type of administrative organization. There are direct vertical links between the different levels of the scalar chain. The line of command flows on an even basis without any gaps in communication and co- ordination taking place. Since there is a clear authority structure, this form of organization promotes greater decision-making and is simple in form to understand.



Merits of Line Organization

1) It is the simplest type of administrative structure.
2) In these organizations, superior-subordinate relationship is maintained and scalar chain of command flows from top to bottom. So, unity of command is strictly followed.
3) In this type of organization, every line executive has got fixed authority power and fixed responsibility attached to every authority.
4) The control is unified and concentrates on one person and therefore, h can independently make decisions of his own. Unified control ensur better discipline.

5) Since the authority relationships are clear, line officials are independent and can flexibly take the decision. This flexibility gives satisfaction of line executives.
6) Due to the factors of fixed responsibility and unity of command, the officials can take prompt decision.

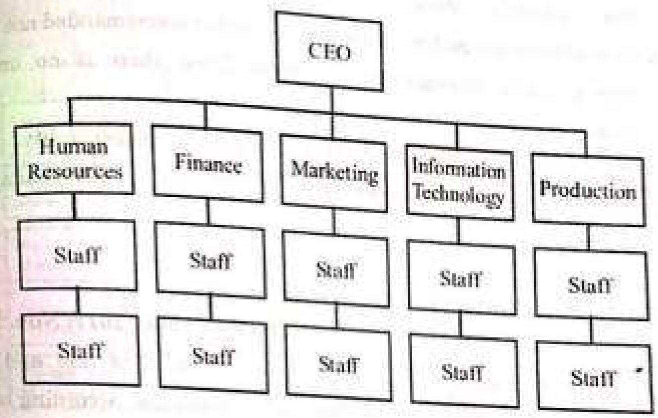
Demerits of Line Organization

1) The line executive's decisions are implemented to the bottom. This results in over-relying on the line officials.
2) Since line executives are not specialized in any function, expertise is not reflected in the decisions.
3) Whatever decisions are taken by the line officials, in certain situations wrong decisions, are carried down and implemented in the same way. Therefore, the degree of effective co-ordination is less.
4) The line officials have tendency to misuse their authority positions. This leads to autocratic leadership and monopoly in the concern.

7.7.2.2 Staff Organization

In functional organization, top positions are acquired by the persons having specialties in performing a particular function throughout the enterprise. For example, production manager has to deal with only production and related issues in the organization. Functional authorities are only restricted to their functional departments. This helps in maintaining quality and uniformity of performance of different functions throughout the enterprise.

The concept of Functional organization was suggested by F.W. Taylor who recommended the appointment of specialists at important positions.



Merits of Staff Organization

1) Expert knowledge of functional manager facilitates better control and supervision over the defined functions.
2) Higher efficiency is achieved since limited number of functions are to be performed.
3) Due to functional manager, it is possible to apply uniform decision policy throughout the function.
4) Management control is simplified as the mental functions are separated from manual functions.
5) Specialization compiled with standardization facilitates maximum production and economical costs.

Demerits of Staff Organization

1) The functional system is quite complicated to put into operation, which leads to poor co-ordination
2) Disciplinary control becomes weak as a worker is commanded not by one person but a large number of people. Thus, there is no unity of command.
3) Because of multiple authority, it is difficult to fix responsibility.
4) There may be conflicts among the supervisory staff of equal ranks. They may not agree on certain issues.

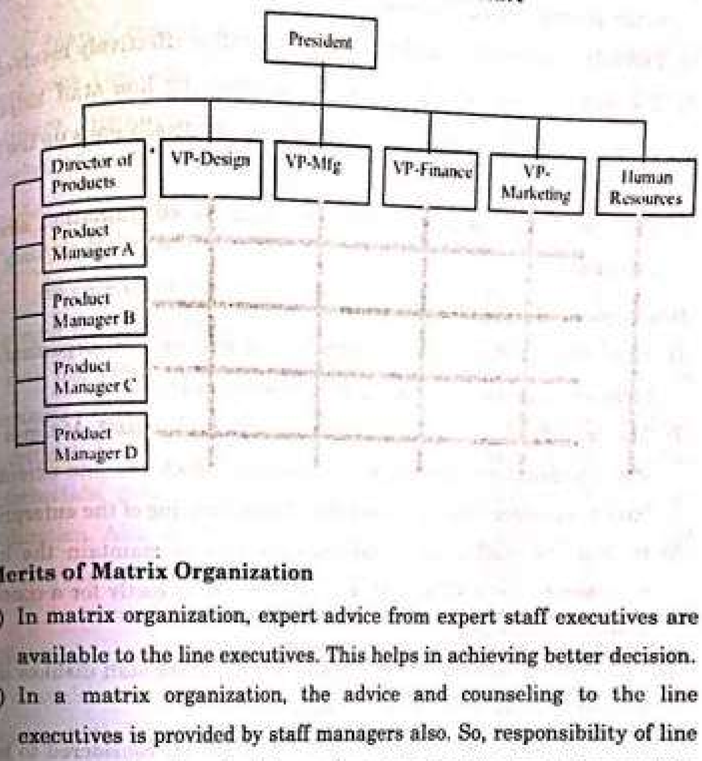
7.7.2.3 Line and Staff Organization

(GTU – May 2016; May 2017; Nov. 2018)

Line and staff organization is a combination of line and staff organization. It is more complex than line organization. According to this administrative organization, specialized and supportive activities are attached to the line of command by appointing staff supervisors and staff specialists who are attached to the line authority. The power of command always remains with the line executives and staff supervisors guide, advice and counsel the line executives.

As shown in the diagram, the highest authority is president who controls all functional heads. Further, a separate director of products is appointed who look after the products through line authority. Further, all functional heads carry out their functions for each type of products. So, this combined structure helps in achieving effective co-ordination and control over the organizational activities. This organization structure is called 'Matrix Organization'.

Sample Matrix Organizational Structure



Merits of Matrix Organization

1) In matrix organization, expert advice from expert staff executives are available to the line executives. This helps in achieving better decision.
2) In a matrix organization, the advice and counseling to the line executives is provided by staff managers also. So, responsibility of line executives is reduced and hence they can concentrate on the execution of plans.
3) Due to the presence of staff specialists and their expert advice serves as ground for training to line officials.
4) Through the advice of specialized staff, the line executives get time to execute plans by taking productive decisions which are helpful for a

concern. This gives a wide scope to the line executive to bring innovations and go for research work in those areas. This is possible due to the presence of staff specialists.

5) Problem of poor co-ordination as it was in staff is effectively resolved.
6) The factor of specialization which is achieved by line staff helps in bringing co- ordination. This relationship automatically ends up the line official to take better and balanced decision.
7) Effective control is possible due to supportive co-ordination among executives.

Demerits of Matrix Organization

1) Since there is dual authority from line as well as staff organization, there are chances of having conflicts between authorities.
2) The line official get used to the expertise advice of the staff. At times the staff specialist also provide wrong decisions which the line executive have to consider. This can affect the efficient running of the enterprise.
3) In line and staff concern, the concerns have to maintain the high remuneration of staff specialist. This proves to be costly for a concern with limited finance.
4) The power of concern is with the line official but the staff dislikes it as they are the one more in mental work.
5) In a line and staff concern, the higher returns are considered to be a product of staff advice and counseling. The line officials feel dissatisfied and a feeling of distress enters a concern. The satisfaction of line officials is very important for effective results.

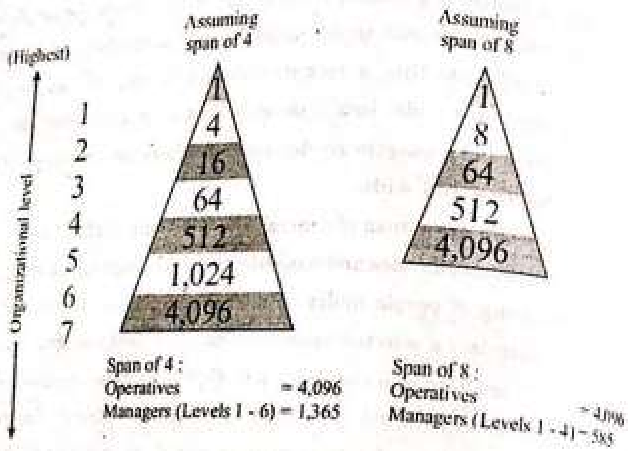
7.8 Span of Control (GTU – Nov. 2016; May 2018)

Span of control is a span of supervision which shows the number of employees that can be effectively handled and controlled by a single manager. According to this, a manager should be able to handle what number of employees under him is decided. Based on employees decided, number of levels and managers are determined. There are two types of span of control: **Narrow and wide.**

In case of narrow span of control, the work and authority is divided amongst many subordinates and a manager doesn't supervises and control a very big group of people under him. According to a narrow span, the manager supervises a selected number of employees at one time. Hence, it is difficult to get effective co-ordination. Further, there are chances that information gets distorted and it is difficult to achieve effective co-ordination. Also, due to this kind of span of control, number of managers are increases and hence the overall costing of the company increases.

In case of wide span of control, manager supervises and control effectively a large group of persons at one time. Due to this, better communication, better supervision and hence better co-ordination is achieved. Also, due to direct contact of manager, it is possible to get prompt response from the employees. In this type of span of control, number of managers required are few, so overall cost is low. As shown in figure, when span of control is wide, *i.e.*, more employees are controlled by one manager, for controlling 4096 employees, only four level of managers, whereas in case of narrow span of control, for the same number of employees, 7 levels of mangers are required.

Members at each level



Factors affecting the Span of Control

1) Managerial abilities

When managers are capable, qualified and experienced, wide span of control is always helpful to control more number of employees.

2) Competence of subordinates

Where the subordinates are capable and competent and their understanding levels are proper, the subordinates tend to very frequently visit the superiors for solving their problems. In such cases, the manager can handle large number of employees. Hence, wide span is suitable.

3) Nature of work

If the work is of repetitive nature, wide span of supervision is more helpful. On the other hand, if work requires mental skill or craftsmanship, tight control and supervision is required in which narrow span is more helpful.

4) Delegation of authority

When the work is delegated to lower levels in an efficient and proper way, confusions are less and congeniality of the environment can be maintained. In such cases, wide span of control is suitable and the supervisors can manage and control large number of sub- ordinates at one time.

5) Economic Consideration

Economic considerations also determines the span of control. As we know that small span of control requires more economic resources and vice versa. So, when there is problem of economic conditions, wide span of control is adopted.

7.9 Departmentalization (GTU – Nov. 2017)

Once the jobs are allocated to individual members of the organization, then it is very important to group them in logical way. It is very essential process of creating departments in the organization. The process of creating departments is known as departmentalization.

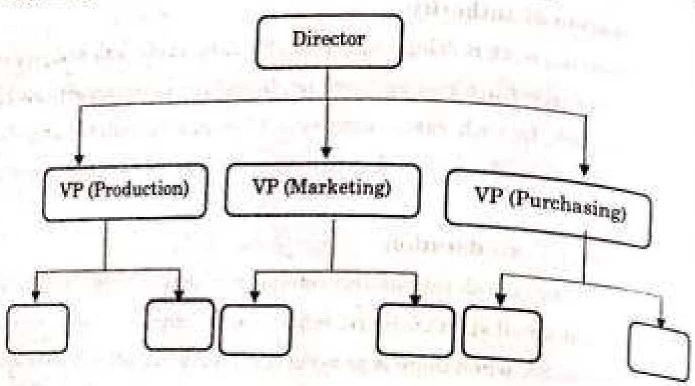
Departmentalization is done on two bases:

1) On the basis of Function
2) On the basis of Divisions

5)

7.9.1 Functional Departmentalization

According to functions to be carried out, functional activities are developed and based on that functional departmentalization is carried out. Mostly in all organization functional departmentalization is adopted. Following chart shows as functional departmentalization.



Following are advantages and disadvantages of functional departmentalization:

Advantages

1) Simplest type of departmentalization
2) Concentrated to the functions of organization and so effective co-ordination is achieved.
3) Avoids duplication of work
4) Person gets skill in one area, so his respective functional skills are developed.
5) Most economical type of departmentalization since involves least cost compared to other types of departmentalization.

Disadvantages

1) Self-perspective within departments, so if the manager is bureaucratic, then department suffers a lot.
2) Repetitive job leads to mental fatigue
3) Further, persons' skills are restricted to allotted work
4) In dynamic environment, this type of departmentalization does not work well.

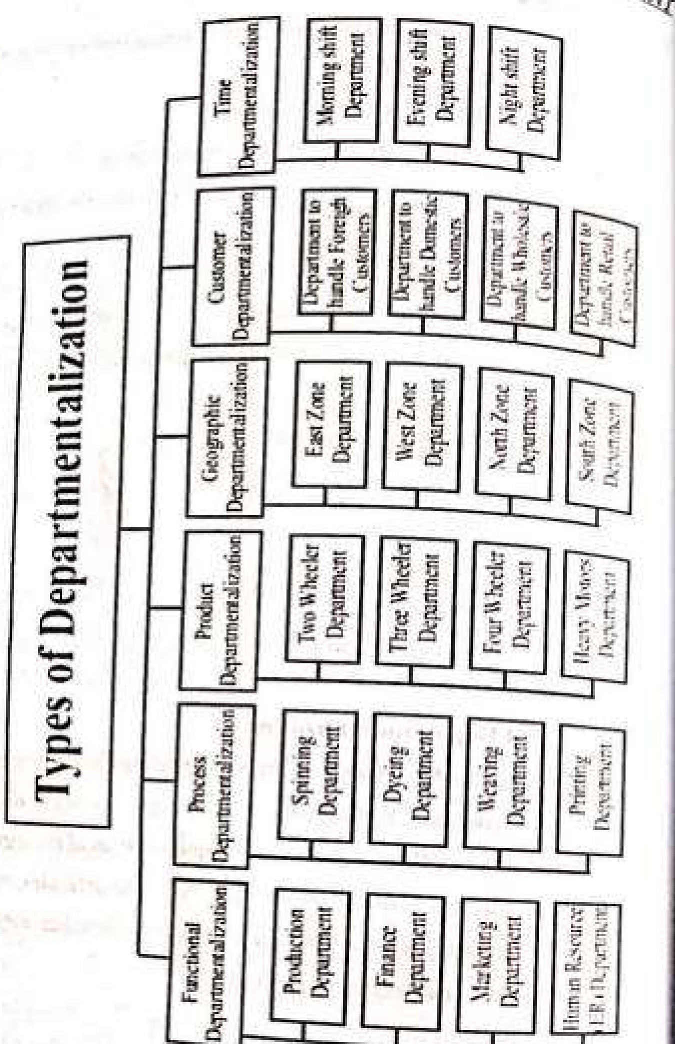
7.9.2 Division Departmentalization (GTU – Nov. 2016)

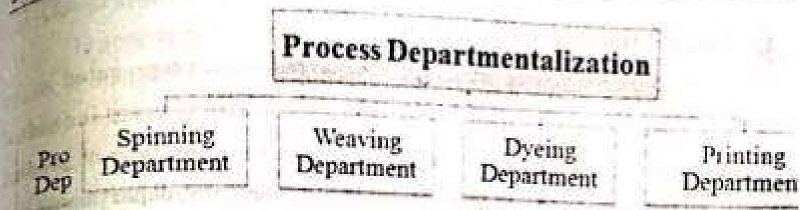
Organization can structure itself into departments in the following ways:

1) Functional Departmentalization
2) Process Departmentalization
3) Product Departmentalization
4) Geographic Departmentalization
5) Customer Departmentalization
6) Time Departmentalization

1) Functional Departmentalization

In functional departmentalization, departments are segregated on the basis of functions performed. For example, Production, Finance, Marketing, Human & Resources etc. are major functions of the organization and departments are formed accordingly. Here, all activities, which are directly or indirectly connected with respective function are grouped together to make a respective department.





Advantages

→ Efficiency is increased as specialist work is to be performed by people with common skills, knowledge, and orientations.

→ In - depth specialization.

→ Effective co-ordination within functional area.

Disadvantages

→ Poor communication across different functional areas.

→ Restricted view of the organization.

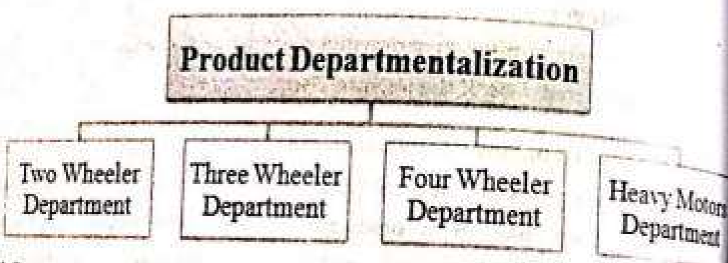
2) Process Departmentalization

In process departmentalization, departments are segregated on the basis of their role in a production process. For example, process departmentalization in a textile mill have spinning department, weaving department, dyeing department, printing department, etc. Here, all activities, which are directly or indirectly related with spinning are grouped together to make a spinning department.

This departmentalization delivers high level of efficient work but on the other hand this type of departmentalization is not possible to adopt for all type of products.

3) Product Departmentalization

In product departmentalization, departments are segregated on the basis of type of product produced by the company. Here, every individual department is responsible for producing and selling the type of product assigned to them. In automobile manufacturing company, departments like a two-wheeler department, three-wheeler department, four-wheeler department, heavy motors department, etc. exists, which manufactures vehicles such as motorcycles (bikes), auto-rickshaws, cars, buses and trucks, respectively. Here, inside an automobile company, all activities, which are directly or indirectly related to car manufacturing are grouped together and assigned to four-wheeler or car department.



Advantages

→ Allows specialization in particular products and services.

→ Managers can become experts in their industry.

→ Closer to customers.

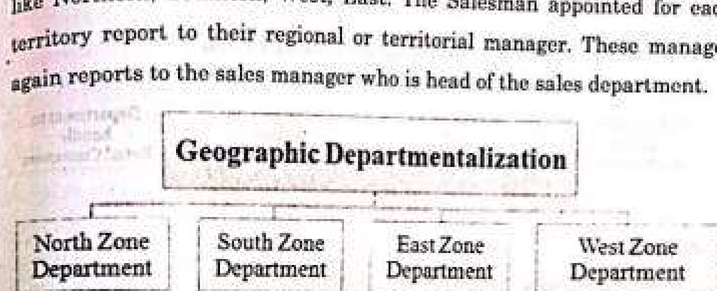
Disadvantages

→ Restricted view of the organization.

→ Repetition of work in each department.

4) Geographic Departmentalization

In geographic departmentalization, separate departments are made on the basis of company's location through branches or offices established at different zones or places in that area. For example, a large company may operate globally through its different zonal departments established on a country basis. Each part or areas have different requirement or interests. Marketing a product in Western USA may have different requirements than marketing the same product in Southeast Asia. Market area is broken up into sales territories like Northern, Southern, West, East. The Salesman appointed for each territory report to their regional or territorial manager. These manager again reports to the sales manager who is head of the sales department.



Advantages

→ Better understanding of regional market and hence effectively serves the need of the society

→ More effective and efficient handling of specific regional issues if arises.

Disadvantages

→ Branches are isolated from main organization.

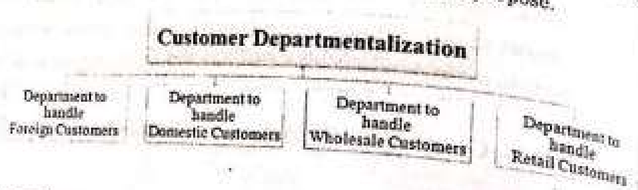
→ Repetition of work.

→ Difficult to control the activities of branches.

→ Requires continuous or daily reporting to judge the work.

5) Customer Departmentalization

In customer departmentalization, departments are segregated on the basis of types or groups of customers to be handled or dealt with. For example, customers can be classified under types such as, international or foreign customers, inland or domestic customers, bulk purchasing or wholesale customers, retail customers, etc. Each group of customers' needs different tactics and strategies to handle them better. Hence, an appropriate customer departmentalization serves this purpose.



Advantages

→ Better service is provided to the customers

→ Customer satisfaction is higher.

Disadvantages

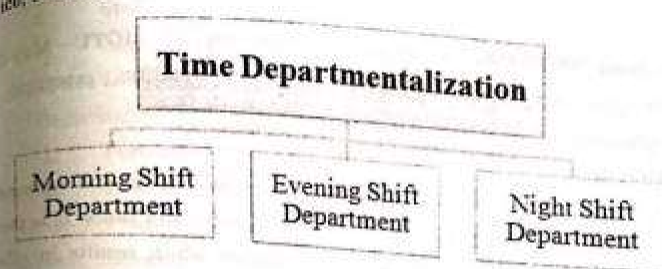
→ Repetition of work.

→ Restricted view of the organization.

6) Time Departmentalization

In time departmentalization, departments are segregated on the basis of shift of work. For an example, departments can be made based on night shift, morning or regular shift, evening shift, etc. This method of departmentalization is generally seen among those organizations who render 24-hours emergency and/or essential ...

year. Examples of such organizations include; hospitals, hotels, airports, police, security, and so on.



Chapter 8
Organizational Culture

8.1 Concept of Organization Culture and its importance
8.2 Attributes to Culture
8.3 Effect of Culture on Management and Employees

8.1 Concept of Organization Culture and its Importance

In today's world, the success of organization depends on not only technology adopted in the organization but it has been revealed that "Culture" plays an important and most significant role in the success of the organization. Organization culture is invisible guiding tool for the organization and individuals tend to become more aware of their organization's culture when they spend more time in the organization.

Schein (1985) defined Organizational culture as, "***A deeper level of basic assumptions and beliefs that are shared by members of the organization, that operate unconsciously and define the basis 'taken for granted' fashion an organization's view of itself and its environment***".

In simple terms, organization culture refers to a system of shared assumptions, values, and beliefs that directs the people of organizations about what is appropriate and inappropriate behavior. The behavior, attitude and performance of employees and management is directed by the culture. Though the behavior of an individual may vary depending upon own thinking in the same culture.

Importance of Organization culture

An organization's culture may be one of its strongest assets or its biggest liability. In fact, it has been argued that organizations that have a rare and hard-to-imitate culture enjoy a competitive advantage. In survey of Bain and Company (2007), most of the business leaders endorsed organization culture as most important directing element for the success of organization. Well-structured and ethical organization culture supports the organization at the time of crisis and enjoys the success at the time of successful venture.

Organization culture serves **as an effective control mechanism** dictating employee's behavior. Culture is more powerful way of controlling and managing employee's behavior than rules and regulations of the organization. For example, when a company is trying to improve the quality of its customer service, rules may not be useful, particularly as the problem of customer is different from others. Creating a culture where customer service is high priority, can lead to achieve better results by encouraging employees to think as customers. Keeping the customers happy is preferable to other concerns, such as saving the cost of a refund. Therefore, the ability to understand and influence organizational culture is an important for managers.

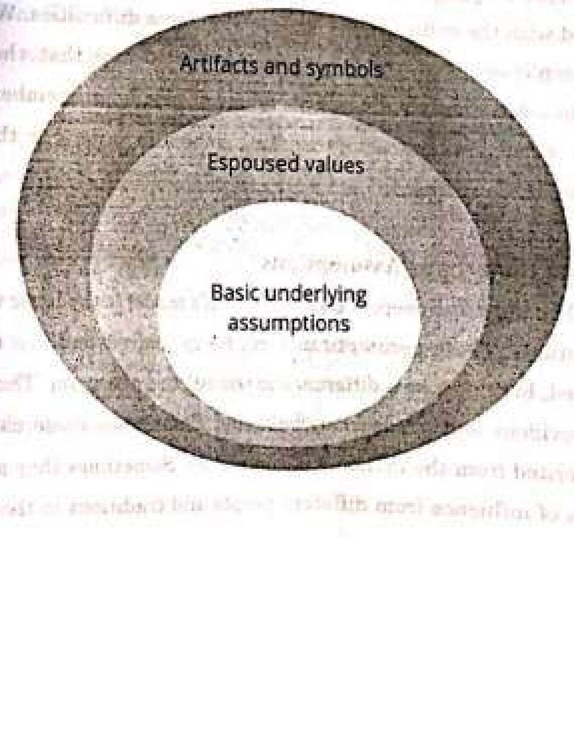
Further, a strong prevailing culture in the organization promotes consistency of perception, problem definition and preference of action between team of employees, which **reduces the conflict** level within organization significantly.

In addition to having implications for dictating the behavior of employees, culture also affects the **organizational performance**. Researchers found a

strong relationship between organizational cultures and company performance. Company performance indicators, namely revenues, sales volume and market share are positively corelated with culture of the organization. In other words, just as having the "right" culture may be a competitive advantage for an organization, having the "wrong" culture may lead to performance difficulties, may be responsible for organizational failure, and may act as a barrier preventing the company from changing and taking risks.

Levels of Organizational Culture

As per Schein (1996), cultures are deep, seated, pervasive and complex in nature. Organizational culture consists of some aspects that are relatively more visible, as well as aspects that may lie below one's conscious awareness. Schein divides organizational culture as consisting of three interrelated levels, namely **Artifacts (Symbols), Values and Basic assumptions.**



➢ **Artifacts and Symbols**

The outer layer of Schein's model is the artifacts and symbol layer. In a product team this can be user stories that are visible either on physical boards or in the software of the organizations. Artifacts and symbols can also statements representation vision or mission of the organization on websites as well as on the walls of organizations. Artifacts are visible to stakeholders of the organization. These are clear signals of a team working in a user-centered way.

➢ **Values**

The middle layer of the culture is the layer of 'values'. The values are a concern with the team's way of expressing strategies and goals. Only artifacts and facilities are not just sufficient for the development of culture. Employees who are either new to the organization or whose values are not aligned with the culture of the organization faces difficulties. While hiring new employees, due care is required to make sure that the potential candidate has similar values. The values of new team members must be closely aligned with a team's existing values in order for the team to continue working from the same core set of values.

➢ **Basic Underlying Assumptions**

The third and deepest layer of Schein's model is the basic underlying assumptions. These assumptions can't be measured and are not openly discussed, but do make a difference to the culture of a team. They are seen as self-evident and unconscious behavior. Sometimes these assumptions are inherited from the founders of companies. Sometimes they are shaped by years of influence from different people and traditions in the company.

These basic underlying assumptions might define how team members behave in social situations. This layer is the most inner layer of an organization's culture and is most difficult to change.

8.2 Attributes to the Culture

An organization's culture consists of the values, beliefs, attitudes, and behaviors that employees share and use on a daily basis in their work. The organization culture determines how employees describe where they work and how they see themselves as part of the organization. Following are the attributes which describes how the culture is within the organization.

1. Alignment with Goals of the Organization

In the organization, where culture of organization is accepted fully, the goals of the employees of the organization is fully aligned with goal of the organization. The engagement of the employee is at very high level and hence they are highly dedicated to achieve the goals of the organization. Employees enjoys to work willingly even after the schedule time.

The organization where the culture of the organization is weak, management finds difficult to achieve the goal because there is divergence in goals of organization and the effort of the employees.

2. Responsibility Level

The organization where the employee accepts the responsibility and believe the ownership of the organization, the growth of organization is excellent. When the employees himself takes the responsibility, the feeling of ownership leads to exponential growth.

3. **High Employees Retention Ratio**

Organization having high employees' retention ratio depicts that the organization culture is highly adopted by the employees. Low turnover ratio of the employees indicates that the culture of organization is fully integrated in the blood of employees.

4. **High level of Teamwork**

Organization having strong culture, integrates the employee with each other and promotes them to do work in teams. This develops the spirit of team work among the employees and endorse that every employee has the same vision and mission.

5. **Willingness of Others to Join the Organization**

When the organization has good reputation and creditability of the culture, other people from outsider are also willing to join the organization. This tendency represents well accepted of organization of culture within the employees of the organization.

Apart from these attributes' other attributes like employee behavior, communication with stakeholders, trust on other employees, respect to seniors, fairness with employees or same level etc. represents the culture of the organization.

8.3 Effect of Culture on Management and Employees

Organizational culture provides the basic framework for behavior of employees in their workplace. Depending on the type of culture created in an organization, it can have a positive or negative effect on employee performance.

An organizational culture where employees are considered an integral part of the growth process of the organization, employee

commitment towards the organization is very high. They align their goals and objectives with those of the organization and feel responsible for the overall well-being of the organization. As a reward, their efforts are appreciated by the management and suitably rewarded either by monetary terms or by position, they feel immense job satisfaction. In such organizational cultures, the employees are committed to achieving their goals and thus have a positive effect on the overall performance of the organization.

In organizations where managers are not facilitators but taskmasters, employees live with fear and disturbed mindset. Since they are not involved in the overall organizational goals, they do not understand the implications of their tasks and hence are not be committed to achieving them. Ultimately leads to develop conflict between the department of the organization and hence it affects the overall health of the organization.

Organizational culture to a large extent determines the performance of the employees. Therefore, it is in the interest of organizations to eliminate negative factors that slow down employee performance in order to foster a positive workplace environment or a positive organizational culture.

Question Bank

1) *Explain the concept of culture. Also, explain why culture plays an important role in the development of organization.*
2) *What are the attributes which develops the culture?*
3) *How culture affects the decision taken by management and employees at different levels?*

Chapter 9
Corporate Social Responsibility and Business Ethics

9.1 CSR: Meaning & Importance

(GTU – Nov. 2016; Nov. 2017; May 2018; May 2019)

Concept of corporate social responsibility (CSR) is becoming dominant in the present business scenario. Every organization adopts the policy related to CSR and follows it. This represents that organizations inevitable part of the society and further they have some responsibility towards the society.

Initially in the starting of this concept, the stakeholders were against these non-profit activities. Such group people were believing that organizations are meant to utilize the external resources and to earn the profit for the shareholders. Other social non-profit activities are note their responsibility since it is the task of other agencies. Hetherington (1973) reported that:

"There is no reason to think that shareholders are willing to tolerate an amount of corporate non-profit activity which appreciably reduces either dividends or the market performance of the stock."

As per Friedman (1970) he stated that:

"There is only one and one social responsibility of business- to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud".

On the other hand, group of people believed that the business can help in solving social problem. Drucker (1984) given opinion that:

"Business turns a social problem into economic opportunity and economic benefit, into productive capacity, into human competence, into well-paid jobs, and into wealth."

With the passage of time, the concept of CSR was accepted by many organizations as well as by many writers. Initially it was going to believed that CSR is a conditional and they have to adopt up to extent they are responsible for the society. Nowadays, big organization are adopting the concept of CSR as the integral part of their organization activity to support the society. Following are the few examples of CSR:

- → Tata Consultancy Services (TCS) has taken many initiatives towards CSR. Recently TCS pledged Rs. 100 crores for building girls toilets in schools.
- → Further TCS has taken responsibility for adult literacy programs.
- → Aditya Birla groups have taken many initiatives in the field of health improvement, education, health and hygiene.
- → Also, IDBI took the responsibility of building toilets in 300 schools.
- → P & G allocates certain amount on selling of its products for the health and hygiene of the society.
- → 'CRY' organizations performs the welfare and development for the society at 'no profit' concept.

- → Adani group has also taken many initiatives to help the programs under Government flagship in educating children.

Importance of CSR [GTU, Dec. 2014; Dec. 2015; May 2016; Nov. 2018]

Businesses are established with the target to earn the profit through utilization of the resources. These resources are available from the society and environment of the society. Here, environment not only refers to ecological environment but refers to all the components of the external environment. So, one should never forget the importance of society and environment in our lives. Mostly, we all live for ourselves but to live for others and doing something for them is a different feeling altogether. Bringing a smile to people's life just because your organization has pledged to educate the poor children of a particular village not only gives a sense of inner satisfaction but also immense feeling of pride and pleasure.

CSR gives an opportunity to organizations to work towards the betterment of the society and make it a better place to live. Also, it gives a chance to all the employees of an organization to contribute towards the society, environment, and country and so on. It is indeed high time when all have to start thinking about people around us who are less privileged and fortunate than us. Following are the importance of CSR activities performed by organizations:

- → CSR allows organizations to do their bit for the society, environment, and customers or any of the stakeholders.
- → CSR goes a long way in creating a positive word of mouth for the organization on the whole. Doing something for your society, stake holders,

customers would not only take your business to a higher level but also ensure long term growth and success.

- CSR plays a crucial role in making your brand popular not only among your competitors but also media, other organizations and most importantly people who are your direct customers. Such brand becomes a "common man's brand". People start believing in the brand and nothing can help you more than your customers trusting you and your brand. Positive word of mouth eventually helps to generate more revenues for the organization.
- In today's scenario of cut throat competition, everyone is so occupied in chasing targets and handling the pressure at workplace that we actually forget that there is a world around us as well. CSR in also plays a crucial role in the progress of the society, which would at the end of the day benefit us only.
- CSR activities do not require too much investments. Organizations are not required to adopt CSR to gain publicity but because they have to believe in the cause. There are many organizations which tap remote villages, some of which are even unheard as an initiative of corporate social responsibility.
- CSR also gives employees a feeling of unparalleled happiness. Employees take pride in educating poor people or children who cannot afford to go to regular schools and receive formal education.

CSR activities strengthen the bond among employees. People develop a habit of working together as a single unit to help others. In fact they start enjoying work together and also become good friends in due course of time. They also develop a sense of loyalty and attachment towards their organization which is at least thinking for the society.

Employees develop a positive feeling for a brand which takes the initiative of educating poor children, planting more trees for a greener environment, bringing electricity to a village, providing employment to people and so on.

9.2 Business Ethics: Meaning & Importance

[GTU, Dec. 2015; May 2016; Nov. 2016; May 2017; May 2018; Nov. 2018]

Business ethics is the application of ethics in business. Business ethics deals with of adoption of general ethical ideas to business behavior. Business Ethics or Ethical standards are the principles, practices and philosophies that guide the business people in the day today business decisions. It relates to the behavior of a businessman in different business situation. Though concept of business ethics mean various things to various people, but generally it is coming to know what it right or wrong in the workplace and doing what is right - this is in regard to effects of products/ services and in relationships with stakeholders. Ethical business behavior facilitates and promotes goodwill in the society, improves profitability, enhances business relations and employee productivity.

Business ethics is concerned with the behavior of a businessman in doing a business. Unethical practices are creating problems to businessman and business units. The life and growth of a business unit depends upon the ethics practiced by a businessman. Business ethics is applicable to every type of business. One of the social responsibility of a business to observe business ethics. A business man should not ignore the business ethics while assuming social responsibility. Business ethics means the be[illegible] of a businessman while conducting a business, by observing mo[illegible] his business activities.

According to Wheeler, *"Business Ethics is an art and science for maintaining harmonious relationship with society, its various groups and institutions as well as reorganizing the moral responsibility for the rightness and wrongness of business conduct".*

According to Rogene. A. Buchholz, *"Business ethics refers to right or wrong behaviour in business decisions".*

Business ethics are dealing primarily with the impacts of decisions of the society within and outside the business organizations or other groups who keep interest in the business activities. Business ethics can be said to begin where the law ends. Business ethics is primarily concerned with those issues not covered by the law, or where there is no definite consensus on whether something is right or wrong.

Importance of Business Ethics

There may be many reasons why business ethics might be regarded as an increasingly important area of study. Following points reflects the importance of business ethics:

1) It is generally viewed that good business ethics promote good business.
2) Business has the potential to provide a major contribution to our societies, in terms of producing the products and services that we want, providing employment, paying taxes, and acting as an engine for economic development and thereby increases the goodwill.
3) The power and influence of business in society is greater than ever before. Business ethics helps us to understand why this is happening, what its implications might be, and how we might address this situation.
4) The demands being placed on business to be ethical by its various stakeholders are constantly becoming more complex and more challenging. Business ethics provides the means to appreciate and understand these challenges more clearly, in order that firms can meet these ethical expectations more effectively.

5) Business malpractices have the potential to inflict enormous harm on individuals, on communities and on the environment. Through helping us to understand more about the causes and consequences of these malpractices, business ethics helps to create mutual trust and confidence in relationship.
6) Business ethics can help to improve ethical decision making by providing managers with the appropriate knowledge and tools that allow them to correctly identify, diagnose, analyze, and provide solutions to the ethical problems and dilemmas they are confronted with.
7) Business ethics can provide us with the ability to assess the benefits and problems associated with different ways of managing ethics in organizations.
8) A business can prosper on the basis of good ethical standards and it helps to retain the business for long years.
9) Good ethical standard helps the business to face the challenges in today competitive field of business.

9.3 Responsibilities of CEO [GTU, Dec. 2014]

The Chief Executive Officer ("CEO") is responsible for leading the development and execution of the Company's long term strategy with a view to creating shareholder value. The CEO's leadership role also entails being ultimately responsible for all day-to-day management decisions and for implementing the Company's long and short term plans. The CEO acts as a direct liaison between the Board and management of the Company and communicates to the Board on behalf of management. The CEO also communicates on behalf of the Company to shareholders, employees, Government authorities, other stakeholders and the public.

More specifically, the duties and responsibilities of the CEO include the following:

1. To lead, in conjunction with the Board, the development of the Company's strategy;
2. To lead and oversee the implementation of the Company's long and short term plans in accordance with its strategy.
3. To ensure the Company is appropriately organized and staffed and to have the authority to hire and terminate staff as necessary to enable it to achieve the approved strategy;
4. To ensure that expenditures of the Company are within the authorized annual budget of the Company;
5. To assess the principal risks of the Company and to ensure that these risks are being monitored and managed;
6. To ensure effective internal controls and management information systems are in place;
7. To ensure that the Company has appropriate systems to enable it to conduct its activities both lawfully and ethically;
8. To ensure that the Company maintains high standards of corporate citizenship and social responsibility wherever it does business;
9. To act as a liaison between management and the Board;

10. To communicate effectively with shareholders, employees, Government authorities, other stakeholders and the public;
11. To keep abreast of all material undertakings and activities of the Company and all material external factors affecting the Company and to ensure that processes and systems are in place to ensure that the CEO and management of the Company are adequately informed;
12. To ensure that the Directors are properly informed and that sufficient information is provided to the Board to enable the Directors to form appropriate judgments;
13. To ensure the integrity of all public disclosure by the Company;
14. In concert with the Chairman, to develop Board agendas;
15. To request that special meetings of the Board be called when appropriate;
16. In concert with the Chairman, to determine the date, time and location of the annual meeting of shareholders and to develop the agenda for the meeting;
17. To sit on committees of the Board where appropriate as determined by the Board; and
18. To abide by specific internally established control systems and authorities, to lead by personal example and encourage all employees to conduct their activities in accordance with all applicable laws and the Company's standards and policies, including its environmental, safety and health policies.