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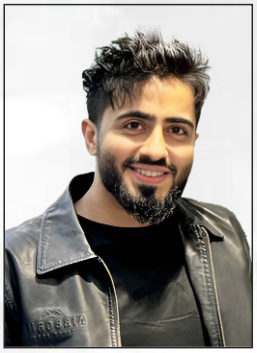

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On behalf of TEAM YES

CS VIKAS VOHRA
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BUSINESS ECONOMICS

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BASIC CONCPETS

PART I

THE FUNDAMENTALS OF ECONOMICS

WHAT IS ECONOMICS?

a) Economics is one of the **social sciences** studying how people, businesses, and societies **allocate scarce resources to meet unlimited wants.**

b) It explains about the economic activities of a man.

c) Any activity which is related to earning of the money and spending of the money is called economic activity. Almost all people are engaged in economic activities, because they want to earn the money.

d) The main economic problem is to transform society's resources into consumable commodities by using productive technology.

e) It is a problem because **human wants are unlimited** and **society's resources are limited.**

f) So the central task of economics is to decide how much of which commodities are to be produced for the optimum satisfaction of human wants.

g) The firms and the households are the basic economic entities in an economy.

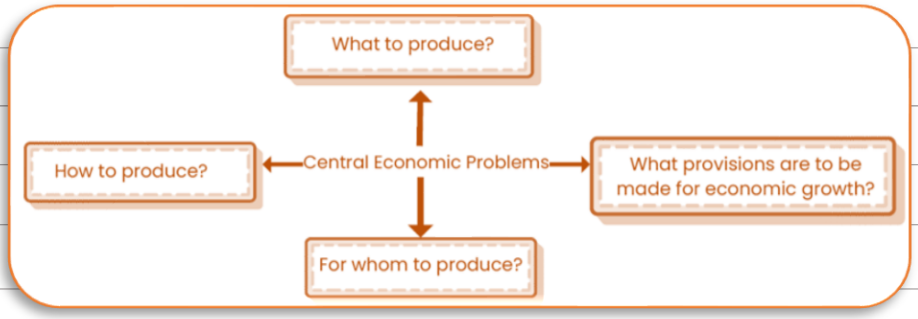
h) The firms are the "production units" and households are the "consumption units".

i) These firms buy different factors of production such as machines, labour, raw materials etc., and produce and sell different types of products and services.

j) The main aim of these firms is to maximise their profits. The households, on the other hand, try to maximise their satisfaction from their consumption of the goods produced by the firms

CENTRAL PROBLEMS OF ALL ECONOMIES

Due to the **scarcity of resources, every economy faces problems**. The central problems of all economics are explained as follows:



What to produce?

An economy should produce something on the basis of the **requirements of the society**. Further, if the present is given importance the resources are diverted for the production of consumer goods. If future is given importance the resources are diverted for the production of capital goods.

How to produce?

This problem is arising because of unavailability of some resources. A country may produce by **labour intensive technique** 'or' **capital Intensive technique**, depending upon its man power and stock of capital.

For whom to produce?

Government policy determines what are the commodities to be produced and for whom. One can make a conjecture from the **pattern of production** of the country. If the government decides to produce more ordinary buses than luxury cars then one can understand that the country is producing for the poor and not for the rich.

HOW DIFFERENT ECONOMIES OF THE WORLD SOLVE THEIR CENTRAL PROBLEMS?

In order to understand this, we divide all the economies into three broad classifications based on their mode of production, exchange, distribution and the role which their governments plays in economic activity. These are:

i) Capitalist economy
ii) Socialist economy
iii) Mixed economy

i) Capitalist economy (Free Market / Laissez-faire Economy)

Meaning:

Capitalism is an economic system in which **means of production are privately owned and controlled for profit. Private property and profit motive** are its foundation. Economic decisions are guided by market forces with **limited government intervention**.

Examples: USA, UK, Hong Kong, South Korea (not pure capitalism).

Features:

a) **Right to Private Property:** Individuals can own and use productive assets; limited restrictions for social welfare.
b) **Freedom of Enterprise:** Producers are free to start any business and produce goods of their choice.
c) **Freedom of Economic Choice:** Individuals freely choose consumption, occupation, production and exchange.
d) **Profit Motive:** Main driving force guiding all economic activities.
e) **Consumer Sovereignty:** Consumers determine what and how much is produced through their spending.

f) **Competition:** Ensures efficient use of resources.

g) **Absence of Government Interference:** No central planning; decisions guided by price mechanism.

Solution to Central Problems (Price Mechanism):

What to Produce: Decided by consumer demand and profit signals.

How to Produce: Determined by relative factor prices (labour-intensive or capital-intensive).

For Whom to Produce: Based on income and purchasing power.

Consumption, Saving and Investment:

- Savings depend on income and interest rate
- Investment depends on expected profit (rate of return)

ii) **Socialist economy (command / centrally planned economy)**

Meaning:

Proposed by Karl Marx and Frederic Engels (1848). Means of production are **owned by the State**. Resources are allocated through **central planning** to maximize **social welfare**. Market forces play no significant role.

Features:

a) **Collective Ownership:** State ownership of major means of production; profit motive absent.

b) **Economic Planning:** Central Planning Authority decides what, when and how much to produce.

c) **Absence of Consumer Choice:** Limited choice due to planned production; occupation decided by the State.

d) **Relatively Equal Income Distribution:** Narrow income inequalities due to lack of private capital accumulation.

e) **Minimum Role of Price Mechanism:** Prices are administered prices fixed by the State.

f) **Absence of Competition:** State is the sole entrepreneur.

Examples: Former USSR (1917–1990); Vietnam, China, Cuba, North Korea.

iii) **Mixed Economy**

Meaning:

A mixed economy combines **market mechanism and government intervention** to retain merits and remove demerits of both capitalism and socialism. Private enterprise is allowed but **regulated by the State** to achieve welfare objectives.

Features:

a) **Co-existence of Private and Public Sector**

b) **Government Regulation:** Controls private sector to ensure social welfare.

c) **Balanced Approach:** Encourages private initiative while correcting market failures.

Sectors in Mixed Economy:

Private Sector:

- Owned and managed by private individuals
- Profit motive and private property
- Regulated by government

Public Sector:

- Owned by the State
- Welfare-oriented, not profit-oriented

Combined (Joint) Sector:

- Joint participation of government and private enterprises

SUBJECT MATTER OF ECONOMICS:

a) In economics, a want is something that is desired. But **all desires are not economic wants**. The desires, which are achievable and are covered by purchasing power, are economic wants.

b) Such wants give rise to efforts and thereby economic activity.

c) If one wants to go to the moon, that cannot be construed as economic want as it is not covered by purchasing power.

d) Want is the starting point of economic activity. Wants leads to efforts. An effort leads to satisfaction.

Wants → Efforts → Satisfaction.

e) This is the subject matter of economics.

This subject matter of economics is divided into four parts.

i) Consumption

ii) Production

iii) Exchange

iv) Distribution

i) **Consumption:** It is an act to use the goods or service to satisfy the wants. In Economics, Consumption is typically defined as **final purchase by an individual that are not investments** of some sort. In other words, when you buy food, clothes, airplane tickets, a car, etc., that's consumption.

Through consumption the consumer destroys the utility of the commodity. This utility was created by the producer through production.

Example: If someone buys a house to live in, that should be defined as consumption. If they buy a house to rent out it to someone else, that should be defined as an investment. Similarly, if they buy a car to drive, that's consumption. If you buy a car to use as a taxi for a business, that could be construed as an investment. In short the reason for the purchase determines whether something is viewed as an investment or as consumption.

ii) **Production:** In economics, Production involves the creation of goods and services by using resources. It is a process to change the **raw materials into final/finished goods**. It is nothing but **creation of utility**. To produce anything so many factors are essential.
All these factors are classified into four categories. They are:

- ✓ Land
- ✓ Labour
- ✓ Capital
- ✓ Organization

iii) **Exchange:** When two individuals bring their products for trading purposes in the market, such act is called exchange when trading is complete.

In olden days, goods were exchanged for goods under the "Barter system". But this system is inconvenient.

iv) **Distribution:** Distribution means sharing of the income among the factors of production. The total income which is generated by selling of these goods and services in the market must be **distributed among the factors of production in the form of rent, wages, interest and profits.**

There are two types of distributions

a) Micro distribution

b) Macro distribution

a) **Micro Distribution**

Micro distribution is nothing but **pricing of factors of production**. It means it explains how the price (rent) per unit of land is determined. In the same way how the price per unit of labour (wages) and capital (rate of interest), etc. is determined are discussed in this head.

Ricardian theory of rent, modern theory of rent, different wage theories, interest theories, profit theories, etc are discussed.

b) **Macro Distribution**

Macro distribution means **sharing of the total national income among the total factors of production.** It means we will come to know whether the income is distributed properly or not properly among the people in the society.

Modern economists extended the subject matter of economics. They added some other concepts to the different dimensions of economics. They are:

(a) Employment (b) Income (c) Planning and Economic development (d) International trade

DEFINITIONS OF ECONOMICS:

The definitions of economics can be classified into four categories.

a) Wealth definition
b) Welfare definition
c) Scarcity definition
d) Growth definition

a) **Wealth definitions:**

- Almost all the classical economists followed wealth definitions. It is mostly associated with **J.B. Say and Adam Smith.**
- **Adam Smith** was called "**Father of Economics**".
- The name of the book written by Adam Smith is "**An Enquiry into the Nature and Causes of Wealth of Nations" (1776).**
- Adam Smith delinked the economics from political economy and he explained it in a scientific manner.

Definitions:

According to **J. B. Say**, "Economics is the study of **science of wealth**.

According to **Adam Smith**, "Economics is the **science which deals with the wealth**".

According to the above definitions:-

✓ Economics explains how the wealth is produced, consumed, exchanged and distributed.

✓ According to Adam Smith man is an economic man.

- ✓ Economics is a science of study of wealth only.
- ✓ This definition deals with the causes behind the creation of wealth.
- ✓ It only considers material wealth.

Criticism:

- This definition was criticized by so many philosophers. They are Carlyle, Ruskin, Walras, and Dickens and others.
- According to critics, economics is a decimal science, Gospel of Mammon, bread and butter science, incompleted science etc.
- Wealth is of no use unless it satisfies human wants.
- This definition is not of much importance to man and his welfare.

b) **Welfare definition:**

This definition was given by **Alfred Marshall**. He was the follower of Adam Smith.

He wrote a famous book "**Principles of Economics**" (or) "**Principles of Political Economy**" in 1870.

Definition:

"Economics is the **study of mankind** in ordinary business of life. It examines that part of individual and social action which is most closely connected with the attainment and with the use of material requisites of well being".

According to **Alfred Marshall's** definition, economics is one side study of wealth, on the other and more important side, a part of the study of man (or) welfare of the man.

Main Points:

- According to this definition, economics is a social science.
- According to the definition, goods are classified into two types (or) categories:
  - ✓ Material goods
  - ✓ Immaterial goods
- According to Alfred Marshall, economics is a normal science.
- The top priority is given to man (or) welfare of man, secondary priority is given to wealth.
- Marshall enhanced the status of man from economic man to social man. Economics related only some material goods which promote the human welfare.

Criticism:

This definition was criticized by Lionel Robbins on the following grounds:

- According to Robbins, welfare definition is an incomplete definition.
- According to Robbins, economics must be neutral between ends. Marshall neglected some materials goods which do not promote human welfare, but these goods are also produced; exchanged & consumed. So, they also come under the subject matter of economics.

  Example: Cigarette and alcoholic products.

c) **Scarcity Definition/Robbins definitions:**

This definition was given by **Lionel Robbins**. He wrote a famous book "**An Essay on the Nature and Significance of Economic Science" (1932).**

Definitions:

"Economics is a science which studies human behavior as a relationship between ends and

scarce means which have alternative uses". – ***Robbins***

Main Points:

In the above definition:

- *Wants are unlimited*
- *Limited resources*
- *Alternative uses of limited resources*
- *Problem of choice*

Merits:

- *According to this definition economics is an analytical science.*
- *Economics turns into universal science.*
- *According to Robbins, it is a positive science.*
- *Neutral between ends*

Criticism:

These definitions was also criticized by so many economists on the following terms:

- *It is not a universal science.*
- *Not applicable to developed countries.*
- *Not applicable to communist (or) dictatorship countries.*
- *It is not applicable to developing countries like India.*
- *It is an old wine in a new bottle.*
- *It also neglected the dynamic concepts*

d) ***Growth Definition***

This Definition was given by ***J.M. Keynes and P.A. Samuelson*** *in the book written by*

Samuelson **"Economics – An Introductory Analysis", (1948).** In this book, he gave a new definition to economics.

Definitions

"Economic is the study of how men and society choose with 'or' without use of money to employ the scarce productive resources that would have alternative uses to produce various commodities over time for distributing them for consumption now or in future among the various persons and groups in the society. It analyses the costs and benefits of improving pattern or resource [use allocation]. – **P.A. Samuelson**

Main points:

- Like the scarcity definition, it also accepts the unlimited wants and limited resource which have alternative uses.
- According to Samuelson, the problem of scarcity of resources not only confined to present but also to the future. It means he introduced the concept of time element.
- He also adopted a dynamic approach to the study of economics considering economic growth as an integral part of economics.
- This definition includes Marshall's welfare definition and Robbin's scarcity definition.

MICRO AND MACRO ECONOMICS

The term '**Micro**' and '**Macro**' were introduced by **Ragnar Frisch** in Economics.

He is the Prof. of **Oslo University** in Britain. According to him, economics is studied in two ways i.e., **Micro level and Macro level**.

Meaning of Micro Economics:

a) The word Micro is derived from the **Greek work 'Mikros'**, means '**very small or millionth part'**.

b) It **studies about the behavior of individual units**. Individual units are a consumer, a producer, a firm or industry.

c) According to Marshall, the Micro economics divide the economy into small units or small parts and each part is studied.

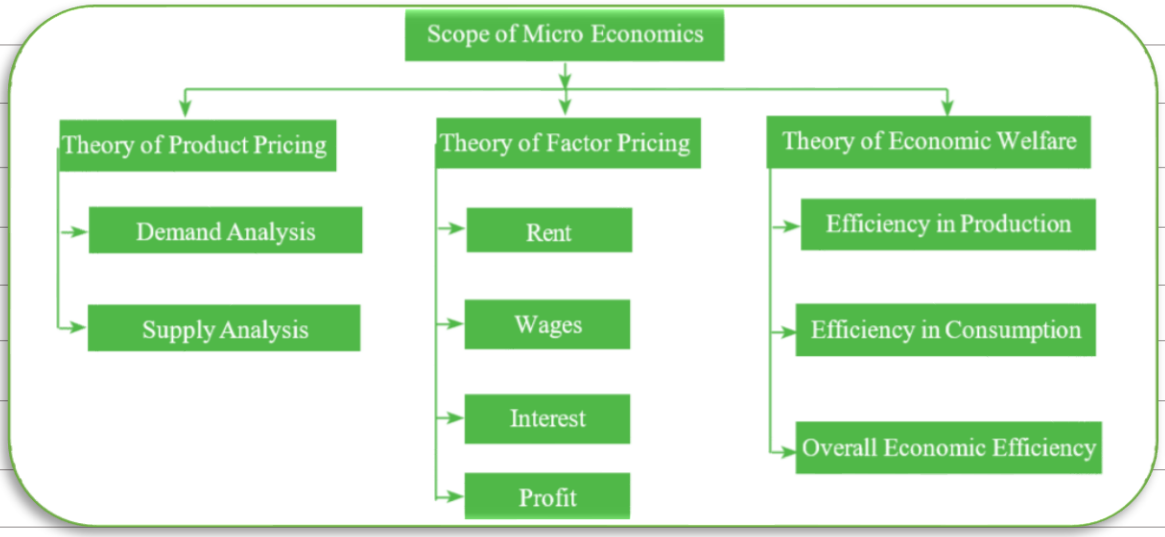
d) It explains how a consumer gets maximum satisfaction, how the producer gets maximum output and how the firm gets maximum profit.

Definition:

Micro economics is the study of "particular firm particular household, individual prices, wages, incomes, individual Industries, particular commodities". – **K. E. Boulding**

Scope of Micro Economics:

The Micro economics explains **how the price of a good is determined and how the price per unit of factors of production is determined** and it also deals with theories of economic welfare. So micro economics is called "**Price theory**".



Uses or Significance of Micro Economics:

a) Understanding the operations of economy

b) Economic welfare of people

c) Managerial economics

Macro Economics:

The word "**Macro**" is derived from **Greek word "Makros"**, means "**large or very big**".

The Macro economics studies the economy as a single unit. It does not deal with individual units. It deals with the aggregates 'or' totals and averages.

For example: National Income, full employment, total output, total investment, total consumption etc.

Definition:

According to **Gardner Ackley**, "Macro economics is concerned with such variables as an aggregate volume of output of a economy with the extend to this resources are employed with the size of the national Income and with the general price level".

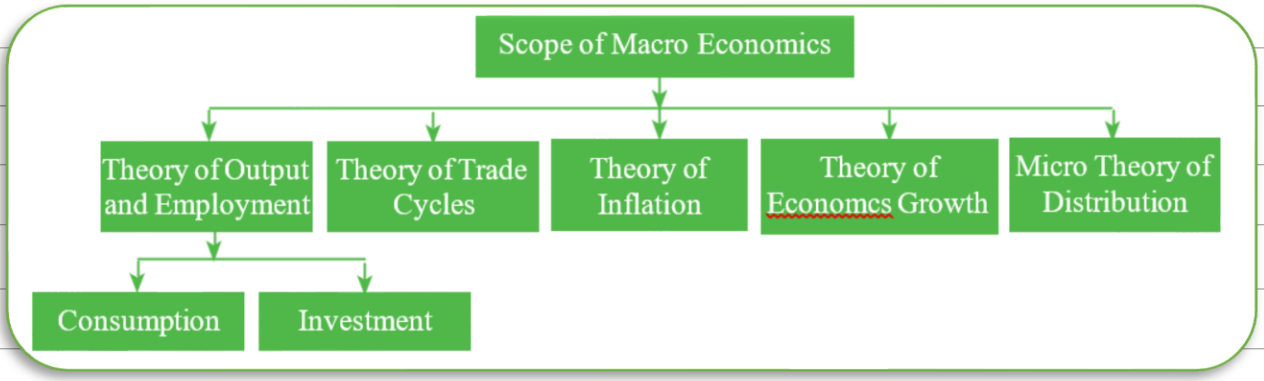
Scope of Macro Economics:

Macro economics studies about the **National Income** i.e. calculation of the national income, trends in the national income etc., It also deals with **total employment** (full employment), **total output** etc., It also studies about **trade cycles, Inflation** etc., It also deals with theories of economic growth and macro theory of distribution. It is also called Income and Employment theory.

Both Micro and Macro Economics are **interdependent**. From 1930 onwards there is an

importance to the Macro economics.

Scope of Macro economics can be explained by the following chart.



The Macro economics analyses some problems of the economy:

a) Level of output and employment.

b) Fluctuation in level of output, employment and National Income.

c) Changes in the general price level.

d) Economic growth and economic development.

e) Theories of distribution.

Significance of Macro economics:

a) Understanding the working of an economy

b) Formulating policies

c) Preparations of the economics plans

d) Taking the remedial measures of trade cycles & Inflation

IS ECONOMICS – AN ART OR SCIENCE

Meaning of science:

The term science implies:

a) A **systematic body of knowledge** which traces the relationship between cause and effect.

b) Observation of certain facts, systematic collection and classification and analysis of facts

c) Making generalization on the basis of relevant facts and formulating laws or theories there by.

d) Subjecting in the theories to the test of **real world observations**.

Like the subjects, physics, chemistry botany and economics also satisfies the above four characteristics. Hence, Economics is regard as science.

Economics as an Art:

Keynes defines Art as 'a system of rules for the attainment of a given end". The object of Art is to formulate rules to be used for the formulation of policies.

Difference between Science and Art:

a) Science is theoretical but art is practical.

b) Science teaches us "to know", an Art teaches us "to do".

c) Economics is science in its methodology and Art in its application.

Hence, economics is considered as both Science as well as Art.

Is Economics Positive Science 'or' Normative Science?

Economics as a positive science:

a) The **positive science** explains "**what it is**" but not "what ought to be"

b) It explains about the things as they are

c) It does not deal with value judgments.

d) According to **Lionel Robbins Economics is a Positive Science**.

Economics as a Normative Science:

a) A normative science explains **what ought to be** and what not ought to be.

b) It does relate to value judgments

c) It deals with good & bad (or) right and wrong.

d) According to **Alfred Marshall Economics is a Normative Science.**

Note: Hence, economics is considered as both positive & normative science.

Deductive Method and Inductive Method

Conclusion (Deductive method is a static analysis and Inductive method is dynamic.)

Deductive Method:

a) It is also called prior method, abstract method and analytical method.

b) In this method the laws or theories are prepared on the basis of fundamental assumptions.

c) In this method the logic proceeds from general to particulars.

For example: law of D.M.U, law of equi-marginal utility, law of consumer surplus etc.

d) Classical economists followed deductive method.

Inductive Method:

a) This method is also known as historical method 'or' statistical method.

b) In this method, the laws 'or' theories are prepared on the basis of facts 'or' statistical data.

c) In this method, the logic proceeds from particular to general.

For example: law of variable proportions, law of returns to scale, population theories etc.

d) Modern economist followed Inductive method.

PART II

UTILITY AND WEALTH

UTILITY

Utility measures the **satisfaction or benefit a consumer gets from consuming a good** or service, helping explain choices based on preferences.

WEALTH

The **stock of goods under the ownership** of a person 'or' a nation is called wealth.

a) **Personal wealth:**

The stock of goods under the **ownership of a person** is called personal wealth.

For example: Houses, buildings, furniture, land, money in cash, company shares, stocks of other commodities etc., health, goodwill etc. can also be considered to be the parts of Individual wealth. But in economics, only transferable goods are considered as wealth.

b) **National Wealth:**

The stock of goods **under the ownership of a nation** is called national wealth. It includes the wealth (common property) of all the citizens in the country.

For example: Natural resources, roads, parks, bridges, hospitals, public education institutions etc., If the citizen of the country holds a government bond it is personal wealth. But from the Government point of view, it is a liability. So, it should not be considered as the part of wealth of nation.

Wealth and Welfare:

Welfare means **well-being 'or' happiness**. Generally, if the level of wealth increases,

welfare also increases but:

i) It is doubtful whether the welfare increases if a nation goes on creating wealth without paying any consideration to the health and mental peace of citizens, whether welfare increases.

ii) It is doubtful if the wealth is not distributed properly.

Wealth and Income:

A person ('or' a Nation) consumes a part of income and saves the rest. These savings are accumulated in the form of wealth. **Wealth is a stock owned at a point of time. Income is a flow, over a period of time.**

PRODUCTION

It refers to **creation of goods for the purpose of selling them** into the market. In one word, production means **"Creation of utility".** When a child make a doll for playing for her enjoyment, it is not called production but the doll maker who sells these dolls in the market is engaged in production.

Factors of production:

The **goods and services with the help of which the process of production is carried out** are called factors of production. The total factors of production are the following:

i) Land

ii) Labour

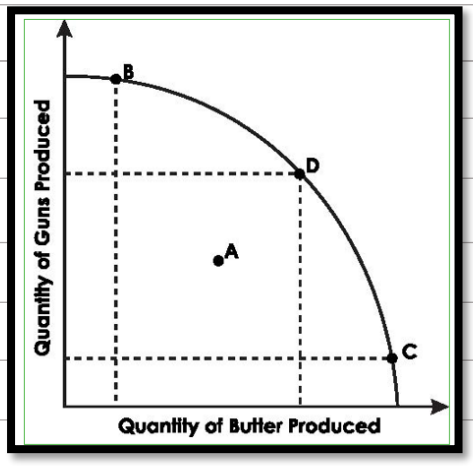
iii) Capital

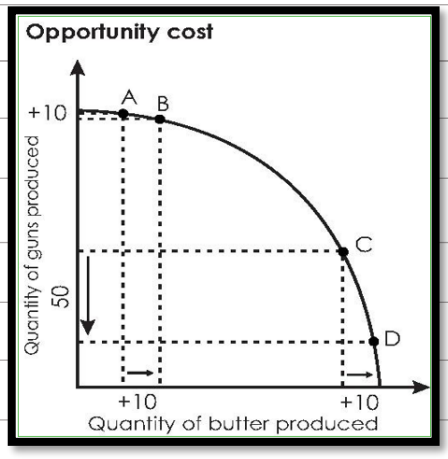
iv) Organization

The factors of production are also called **Inputs**. The goods and services produced with the help of Inputs are called output.

Production Possibility Curve (PPC):

The PPC is also called Production Possibility Frontier, Production Possibility Boundary and Production Transformation Curve. The PPC curve shows the various combinations of two commodities that can be produced by an economy with the given resources and given technology





Important points:

a) The PPC curve always **slopes downwards form left to right**. Because when the production of one commodity is increased the production of another commodity will be foregone. This is due to resource constraint of the economy.

b) The slope of the PPC at any given point is called **Marginal rate of transformation (MRT).** The slope defines the rate at which production of one good can be redirected into production of other. It is also called **opportunity cost.**

c) It is concave to the origin because Marginal rate of Transformation (MRT) goes on

increasing.

d) Suppose, we are on the point D of the left hand diagram of fig.1.2. If we now try to move to the right, we are in fact throwing away guns and taking butter instead. There are some specialised input which are meant for gun factory will be useless in the butter factory. So, gradually more and more inputs will become unemployed. Hence, the sacrifice of the same number of guns will yield less and less amount of butter as we move to the right and this will result in a concave curve. In other words, the Marginal Rate of Transformation will be falling.

Note:

a) If the PPC curve is straight line, the opportunity cost is constant.

b) All the combinations which lie on the PPC curve are possible combinations.

c) The points beyond the PPC curve are impossible combinations.

d) Shift of the PPC curve is nothing but economic growth.

e) Any point which lies below the PPC curve is possible combination. But if the economy is working below the PPC curve that indicates the unused resources 'or' unemployment.

i) **Money:**

Anything which is **widely accepted in exchange of goods or in settling debts** is regarded as money. Barter system existed before the introduction of money.

Under barter system, goods are exchanged for goods.

For example: 1 kg of rice is exchanged for 2 kg of wheat.

But if 2 goats are exchanged for 1 cow, the problem of indivisibility crops up. 1 goat cannot be exchanged for ½ a cow. So, barter system was replaced by the monetary system.

When some commodities are used as a medium of exchange by customs, it is called customary money.

For example: The use of cowries in ancient India as a medium of exchange.

Constituents of Money Supply:

- ✓ Rupee notes and coins
- ✓ Credit cards
- ✓ Traveler's cheques

ii) **Income:**

The **net inflow of money** (purchasing power) of a person over a certain period of time is called income

For example: Daily income, weekly income, monthly income and yearly income.

iii) **Saving:**

Saving is defined as **income minus consumption**. Whatever is left in the hands of an individual after meeting the consumption expenditure is called saving. Saving is generated out of current income and also out of past income.

iv) **Market:**

In ordinary language, the term market refers to a **place where the goods are bought and sold**. But in **economics** it refers to a **system by which the buyers and sellers establish contact with each other** directly 'or' indirectly with a view to purchasing and selling the commodity.

Function of the Market:

- ✓ To determine the price of the goods.
- ✓ To determine the quantity of goods [supply]

Market Mechanism:

Market Mechanism means the totality of all markets i.e. the markets for all goods & services in the economy. The market mechanism determines the prices and quantities brought and sold of all the goods and services.

v) **Capital Stock and Investment:**

Investment is the increment in capital stock.

For Example: Suppose, we have a reservoir filled with water and there is a tap over the reservoir. If the tap is turned on, water will flow in the reservoir and the water level in the reservoir will increase. If we are permitted to draw analogy, then, water in the reservoir can be compared to the capital stock and the water-flow from the tap can be compared with the investment.

Capital stock indicates the **productive capacity of the economy**.

For Example: Suppose, with 100 machines the economy can produce at the maximum 1,00,000 units of output. Here, 100 machines represent the capital stock and 1,00,000 units of output represent productive capacity. If the economy decides to increase the level of output, it has to produce new machines. Producing new machines is called capital formation or investment. If through out the year 50 machines are produced, then these 50 machines will be the investment for the economy. The economy can start production with 150 (100 + 50) machines as the new capital stock in the next year

Types of Investment:

a) **Real Investment:**

An **increase in the real capital stock** is called real investment.

For example: machines, raw material, buildings and other types of capital goods.

b) **Portfolio Investment:**

The purchasing of new shares of a company is called portfolio investment.

Note: Purchasing of an existing share from another share holder is not an investment. Because it cannot increase the capital stock of the company.

It is the savings that are invested:

In the product market in the macroeconomic frame work, equilibrium will be established when the following equation holds.

$$Y = C + I$$

Where, Y is the National Income (or, output), C is Consumption demand and I is Investment demand.

The right hand side of the equation is aggregate demand and the left hand side of the equation is aggregate supply. In equilibrium, aggregate demand is exactly equal to aggregate supply. Aggregate supply or, National Income can be sub-divided into two parts, namely, consumption and savings (C + S). Therefore, equilibrium equation will now be as follows:

$$C + S = C + I$$

$$Or, S = I$$

So, in equilibrium, savings is equal to investment. But there is no guarantee that these two should always be equal. This is because savings are made by the households while investments are undertaken by the businessmen. Their motives are completely different.

Note: If there is foreign investment then $S \neq I$.

Gross Investment and Net Investment:

The **Aggregate Investment** made by an economy during a year is called gross investment. The gross investment **includes:**

a) **Inventory Investment:**

Investment in **raw materials, semi-finished goods and finished goods** are called inventory investment.

b) **Fixed Investment:**

Investment made in **fixed assets** like machines, building, factories shares etc. is called fixed investment.

Net Investment:

By deducting the depreciation cost of capital from gross investment, the net investment can be obtained.

Net Investment = Gross Investment – Depreciation

PART – III

THEORY OF DEMAND, SUPPLY AND EQUILIBRIUM

MEANING OF DEMAND

a) The term 'demand' refers to the quantity of a good or service that **buyers are willing and able to purchase** at various prices during a given period of time.

b) It is to be noted that demand, in Economics, is something more than the desire to purchase, though desire is one element of it.

For example: people may desire much bigger houses, luxurious cars etc.

c) But there are also constraints that they face such as prices of products and limited means to pay. Thus, wants or desires together with the real world constraints determine what they buy.

d) The effective demand for a thing depends on (i) **desire** (ii) **means to purchase** and (iii) **willingness** to use those means for that purchase.

e) Unless desire is backed by purchasing power or ability to pay and willingness to pay, it does not constitute demand.

DETERMINANTS OF DEMAND:

The demand for any commodity depends upon so many factors. These factors are called determinants of demand. They are:

a) **Price of the goods:**

The demand for any commodity firstly depends upon its own price. When the **price rises demand decreases**, and when the **prices falls demand increases**.

b) **Prices of the substitute goods:**

The demand for any commodity not only depends upon its own price but also the prices of its substitute goods.

For example: tea and coffee. Here the demand for tea depends upon price of the coffee. If the price of coffee falls, the demand for coffee will rise following the law of demand. Since coffee is the substitute for tea, people will reduce the consumption of tea and increase the consumption of coffee, as coffee is now relatively cheaper than tea. So, when the price of coffee falls, the demand for tea will also fall. The essence of this example is that demand for a commodity, Dn and the price of its substitute, Ps are directly or positively related.

c) **Prices of the complementary goods:**

Complementary goods and services are those that are **bought or consumed together or Simultaneously**. The demand for a commodity also depends upon the price of its complementary goods.

For example: car and petrol. The increase in the demand for one causes an increase in the demand for the other.

When two commodities are complements, a fall in the price of one (other things being equal) will cause the demand for the other to rise.

For example: a fall in the price of petrol-driven cars would lead to a rise in the demand for petrol. Similarly, computers and computer software are complementary goods. A fall in the price of computers will cause a rise in the demand for software.

The reverse will be the case when the price of a complement rises. An increase in the price of a complementary good reduces the demand for the good in question.

Thus, we find that, there is an inverse relation between the demand for a good and

the price of its complement.

d) **Income of the consumer:**

The income of the consumer also influences the demand for a commodity.

When the income rises people purchase the more quantity of goods. When the income falls they purchase less quantity of goods. This happens when the good is normal.

But the reverse relation will work when the good will be inferior.

e) **Tastes and preferences of the consumer:**

The tastes and preferences of the consumer can also determine the demand for a commodity. When the tastes are changed, the demand for goods are also changed.

f) **Population:**

When the population size increases, the demand for goods also increases. When the population decreases demand also decreases.

g) **Climate:**

The climatic conditions also can influence the demand. In hot climatic conditions, cold drinks are demanded. In rainy season, the demand of umbrellas are increased.

LAW OF DEMAND

The law of demand is one of the most important laws of economic theory. The law states the nature of relationship between the quantity demanded of a product and its price.

Prof. Alfred Marshall defined the Law thus: "The greater the amount to be sold, the smaller must be the price at which it is offered in order that it may find purchasers or in other words the amount demanded increases with a fall in price and diminishes with a rise in price"

The law of demand states that other things being equal, when the price of a good rises, the quantity demanded of the good will fall.

Thus, there is an **inverse relationship between price and quantity demanded**, ceteris paribus.

The 'other things' which are assumed to be equal or constant are the prices of related commodities, income of consumers, tastes and preferences of consumers, and all factors other than price which influence demand. .If these factors which determine demand also undergo a change, then the inverse price-demand relationship may not hold good.

For example: if incomes of consumers increase, then an increase in the price of a commodity, may not result in a decrease in the quantity demanded of it. Thus, the constancy of these 'other factors' is an important assumption of the law of demand

The Law of Demand may be illustrated with the help of a demand schedule and a demand curve.

Demand Function:

Demand function explains the functional relationship between price and quantity demanded. According to the law of demand, when all other things remain constant, if the price of the good rises then its demand is decreased. If the price falls, demand will be increased. It means there is an inverse relationship between price and change in demand/ change in price is negative in sign.

$$Dx = f\,[Px]$$

The demand function explains the functional relationship between demand for a commodity and determinants of the demands. This can be explained by the following equation:

$$Dn = f\,[\,Pn, Ps, Pc, Y, T\,]$$

Where, Dn = Demand for commodity 'n' f = functional relationship

Pn = Price of commodity 'n' Ps = Price of the substitute Pc = Price of the complement

Y = Income of the consumer

T = Taste and preference of the consumer

Demand Schedule:

A demand schedule is a **table showing the quantities of a good** that buyers would choose to purchase at different prices, per unit of time, with all other variables held constant.

There are two types of demand schedules:

a) Individual Demand Schedule

b) Market Demand Schedule.

a) **Individual Demand Schedule:**

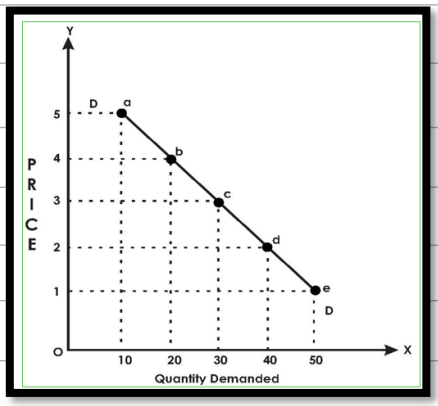
It shows the various quantities of a particular good that are demanded by an individual at various levels of prices in the market.

Price	Demand
5	10
4	20
3	30
2	40
1	50

The above table depicts an inverse relationship between price and quantity of goods demanded. We may note that that the demand schedule obeys the law of demand.

Individual Demand Curve:

A demand curve is a **graphical presentation of the demand schedule**. It shows the relationship between the quantities of a good that buyers are willing to buy and the price of the good.

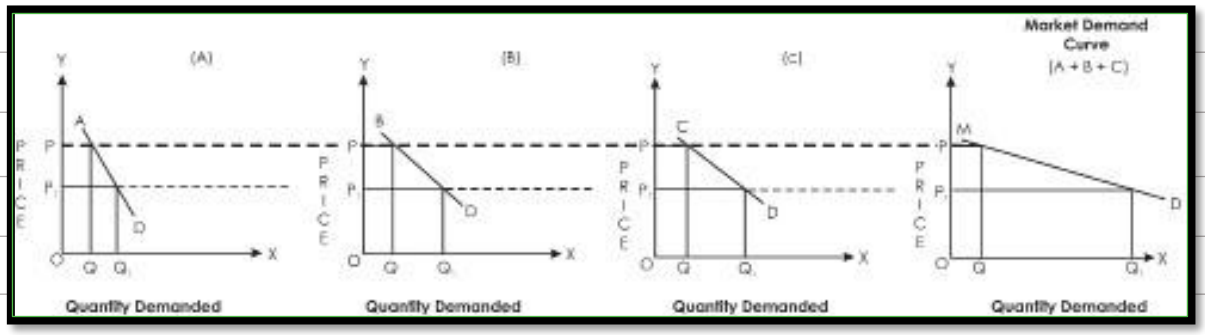


b) **Market Demand Schedule:**

It shows the various quantities of the goods that are demanded by all the consumers (A, B, C..say) in the market at various levels of prices in the market. When the individual

demands are added, market demand then be obtained.

Price of Good 'x'	Demand			
	A	B	C	Demand (A+B+C)
10	100	150	50	**300**
8	125	200	60	**385**
6	175	250	80	**505**
4	250	300	110	**660**
2	**350**	**400**	**150**	**900**



The individual demand curve or market demand curve slopes downwards from left to right because there is an inverse relationship between price and demand.

Causes for falling nature of Demand Curve i.e. downward sloping demand curve:

There are many reasons for the falling nature of demand curve. Some of the reasons are explained as follows:

a) ***Law of diminishing marginal utility:***

According to law of diminishing marginal utility when the quantity of goods is more the marginal utility of the commodity will be less. So, the consumer demands more goods

when the price is less. That is why, the demand curve slopes downwards from left to right.

b) Substitution effect:

In the case of substitutes, if the price of commodity 'x' rises relatively to the other good 'y' the consumer will buy less of commodity 'x' and buy more of the good 'y' which has become relatively cheaper. This is called substitution effect. So the demand curve slopes downward.

c) Income effect:

The income effect tells that the real income of the consumer rises due to the fall in the price level. So they purchase more and more goods when the price falls. This is said to be the income effect.

d) New buyers:

When the price of a commodity decreases, the new consumers are attracted to that commodity because when the price level falls it becomes cheaper good than before. So, the demand will rise when the price falls.

e) Old buyers:

When the price of anything decreases the old buyers purchase more goods than before. So the demand will be increased. That is why, the demand curve slopes downward from left to right.

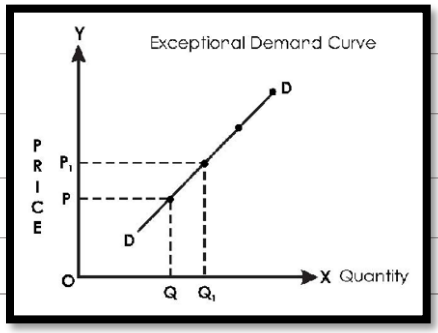
Exceptions to the Law of Demand:

The law of demand is a general statement stating that price and quantity demanded of

a commodity are inversely related.

But in certain situations, **more will be demanded at a higher price and less will be demanded at a lower price.**

In such cases, the demand curve slopes upward from left to right which is called an exceptional demand curve as shown in the following diagram.



When price increases from OP to OP_1, quantity demanded also increases from OQ to OQ_1. This is contrary to the Law of Demand.

The following are the exceptions to the Law of Demand.

a) Giffen Paradox (Necessary goods):

Sir **Robert Giffen**, a **Scottish economist and statistician**, was surprised to find out that as the price of bread increased, the British workers purchased more bread and not less of it. This was something against the law of demand. Why did this happen?

The reason given for this is that, when the price of bread went up, it caused such a large decline in the purchasing power of the poor people that they were forced to cut down the consumption of meat and other more expensive foods. Since bread, even when its price was higher than before, was still the cheapest food article, people consumed more of it and not less when its price went up

Such goods which exhibit direct price-demand relationship are called 'Giffen goods'.

Generally those goods which are inferior, with no close substitutes available and which occupy a substantial place in consumers' budget are called 'Giffen goods'. All Giffen goods are inferior goods; but all inferior goods are not Giffen goods.

Examples of Giffen goods are coarse grains like bajra, low quality rice and wheat etc.

b) Speculation:

Some times the price of a commodity might be increasing and it is expected to increase further. The consumers will buy more of the commodity at the higher price than they did at the lower price. It is contrary to law of demand.

c) Conspicuous:

These are certain goods which are purchased to project the **status and prestige of the consumer** e.g., expensive cars, diamond jewellery, etc. Such goods will be purchased more at a higher price and less at a lower price.

d) Shares or Speculative market:

It is found that people buy shares of a company whose price is rising on the anticipation that the price will rise further. On the other hand, they buy less shares in case the prices are falling as they expect a further fall in price of such shares. Here, the law of demand fails to apply.

e) Bandwagon effect:

Here the **consumer demand of a commodity is affected by the taste and preference of the social class to which he belongs to**. If playing golf is fashionable among corporate executive, then the price of golf accessories rises, the business man may increase the demand for such goods to project his position in the society.

f) Veblen Effect:

Sometimes, consumers develop a **false idea that high priced goods will have a better quality instead of a low priced good.** If the price of such a good falls, they feel that its quality also deteriorates and they do not buy, which is contrary to the law of demand. It is also known as Veblen Effect.

TYPES OF DEMAND:

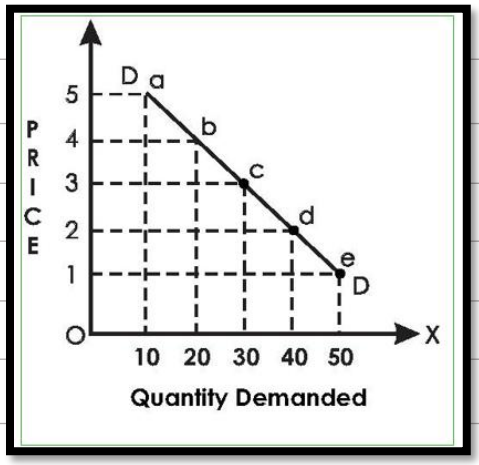
There are three types of demands. They are:

a) Price demand
b) Income demand
c) Cross demand

a) **Price Demand:**

Price demand explains the **relationship between price of a commodity and demand for that commodity**. There is an **inverse relationship** between price and demand. So, the price demand curve slopes downwards from left to right.

$$Dx = f\,[Px]$$



b) **Income Demand:**

Income demand explains the functional r**elationship between income of consumer and demand for goods**.

Generally, if the level of income rises, the consumer purchases more goods. If the level of income decreases he purchases less quantity of goods. It means there is a **direct proportional relationship** between income of consumer and demand of goods. So, normally the income **demand curve slopes upwards form left to right.**

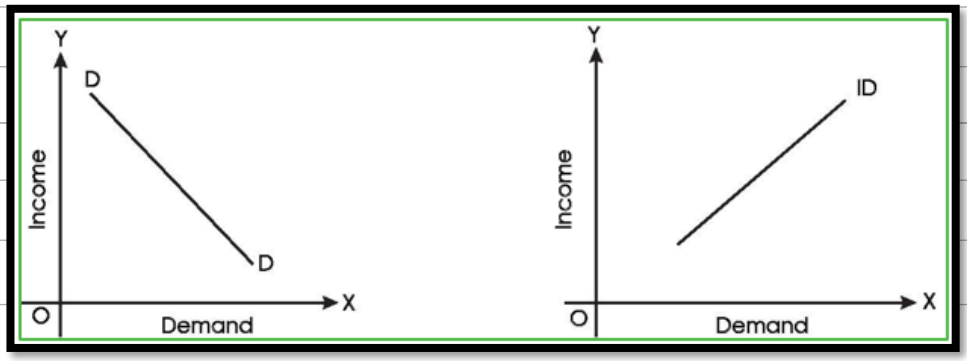
$$D_x = f[y]$$

The income demand curve is of two types:

In case of superior goods 'or' normal goods the income demand curve [I.D.] slopes upwards from left to right. Superior goods mean 'best quality goods'.

In the case of Inferior goods the I.D. slopes downwards form left to right inferior goods means "less quality goods".

Inferior goods **Superior goods**



c) **Cross Demand:**

It shows the **relationship between price of one commodity and demand for another commodity.** It means the demand for one commodity not only depends upon its price but also prices of its substitute goods and complementary goods.

$$D_x = f[P_y]$$

The cross demand curve is in two types:

It is **upwards from left to right** in the case of substitute goods and its slope downwards from left to right in the case of complementary goods.

Substitute goods:

If one good is used in the place of other good to satisfy the same want they are called substitute goods.

Example: Tea & coffee, pen & pencil etc.

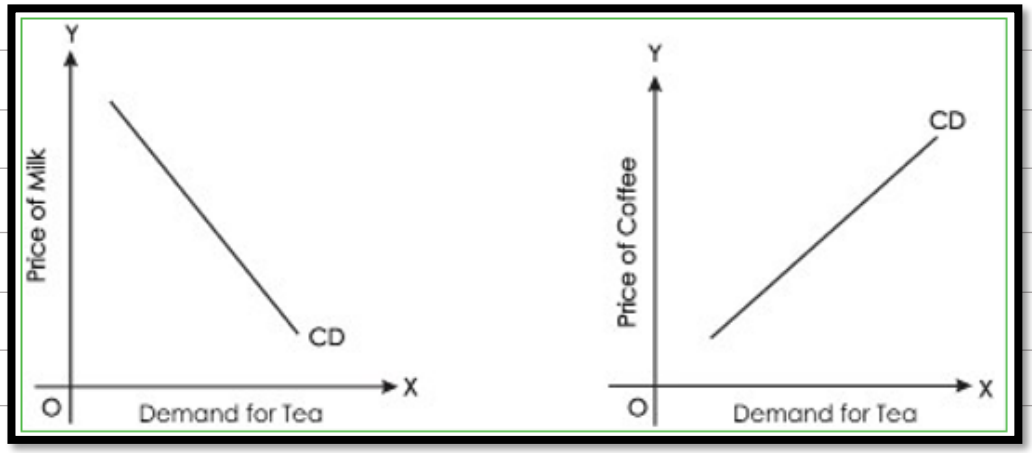
In the case of substitute goods, there is a direct proportional relationship between price of one commodity and demand for another commodity. So, the crossed demand curves [CD] in this case is upward from left to right.

Complementary goods:

If two 'or' more goods are used jointly to satisfy the single want they are called complementary goods.

Example: Milk, sugar, tea powder etc., are complementary for tea, cement, bricks, iron etc., are complementary for construction work. In this case of complementary, there is an inverse relationship between price of one commodity and demand for another commodity. So, C.D In this case slopes downwards from left to right.

Complementary **Substitutes**



CHANGE IN DEMAND AND CHANGE IN QUANTITY DEMANDED:

The change in the determinants of a demand leads to the change in demand. These changes in demand are of two types. They are:

a) Extension and contraction of demand

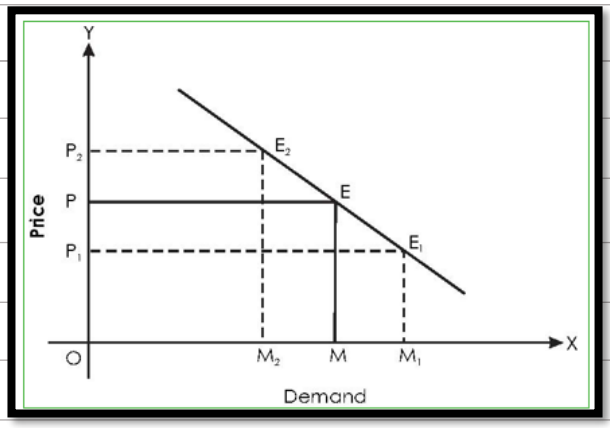
b) Increase and decrease of demand

a) **Extension and Contraction of Demand:**

When all the other things remain constant, **a change in the price leads to the change in demand**. These changes in demand are called extension and contraction of demand.

When the price is decreased the demand is extended when the price is increased the demand is contracted.

To explain the extension and contraction of demand a single demand curve is enough.



b) **Increase and decrease of demand**

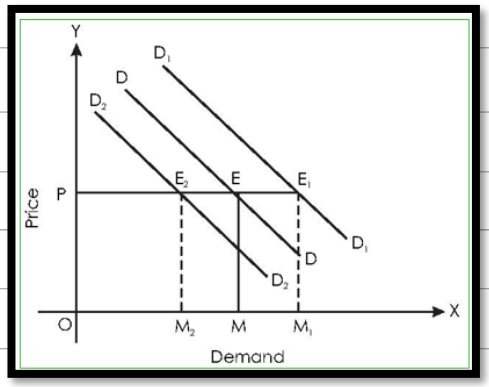
With the **price remaining constant, if there is a change in the other determinants that leads to a change in demand** then these changes in demand are called "Increase and decrease of demand".

To explain the increase and decrease of demand, single demand curve is not enough. It means new demand curves are formed.

i) When the demand is increased, the new demand curve is formed towards right to old demand curve 'or' preceding demand curve.

ii) In the same way, when the demand is decreased, the new demand curve is formed

towards left to old demand curve 'or' preceding demand curve.



ELASTICITY OF DEMAND

Meaning of Elasticity of demand

a) Elasticity means **sensitiveness 'or' responsiveness**.

b) **Elasticity of demand is defined as the degree of responsiveness of the quantity demanded of a good to changes in one of the variables on which demand depends. More precisely, elasticity of demand is the percentage change in quantity demanded divided by the percentage change in one of the variables on which demand depends.**

c) From the point of view of a business firm, it is more important to know the extent of the relationship or the degree of responsiveness of demand to changes in its determinants.

d) Often, we would want to know how sensitive is the demand for a product to its price; for example, if price increases by 5 percent, how much will the quantities demanded change? Also, how much change in demand will be there if the average income rises by 5 percent? What effect will an advertising campaign have on sales?

e) Economists use a number of different types of elasticity to answer questions like these so as to make demand predictions and to recommend changes in strategies.

Type of Elasticity of demand

There are three types of elasticity of demand. They are:

a) Price elasticity of demand.

b) Income elasticity of demand

c) Cross elasticity of demand.

a) **Price Elasticity of Demand:**

Definition:

"Elasticity of demand in a market great or small according to the demand increases much 'or' little for a given fall in the price and diminishes much 'or' little for a given rise in the price" – **Marshall**

"Elasticity of demand is a degree of responsiveness of demand as a result of change in price" – **Mrs. John Robinson**

It shows the **relationship between proportionate change in the demand and proportionate change in the price.** It explains how much change in the price leads to how much change in the demand.

$$\text{Price Elasticity} = Ep = \frac{\%\ \text{change in quantity demanded}}{\%\ \text{change in Price}}$$

Therefore:

$$Ep = \frac{\frac{\text{Change in quantity}}{\text{Original Quantity}} \times 100}{\frac{\text{Change in Price}}{\text{Original Price}} \times 100}$$

$$\text{OR } Ep = \frac{\text{Change in quantity}}{\text{Original Quantity}} \times \frac{\text{Original Price}}{\text{Change in price}}$$

In Symbolic Terms

$$Ep = \frac{\Delta q}{q} \times \frac{p}{\Delta p} = \frac{\Delta q}{\Delta p} \times \frac{p}{q}$$

Where Ep stands for price elasticity

q stands for original quantity

p stands for original price

Δ stands for a change.

Values of price elasticity of demand:

There are five values of price elasticity of demand

i) Perfectly elastic demand ($E_p = \infty$)

ii) Perfectly Inelastic demand ($E_p = 0$)

iii) Relatively elastic demand ($Ep > 1$)

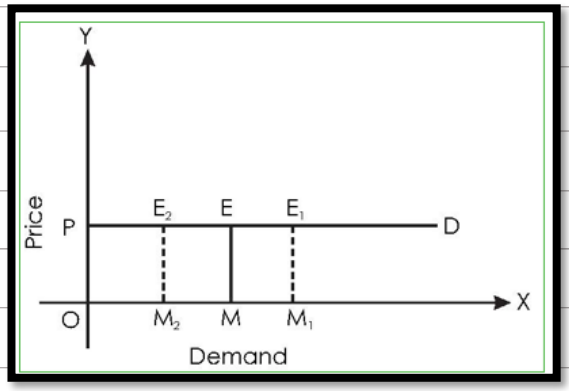
iv) Relatively Inelastic demand ($Ep < 1$)

v) Unitary elastic demand ($Ep = 1$)

i) **Perfectly elastic demand (Ep = ∞):**

With the **price remaining constant, if there is a change in demand** it is said to be perfectly elastic demand. It means that the demand may increase 'or' decrease without change in the price. Here the value of Ep is infinity.

The demand curve in this case parallel to the OX axis



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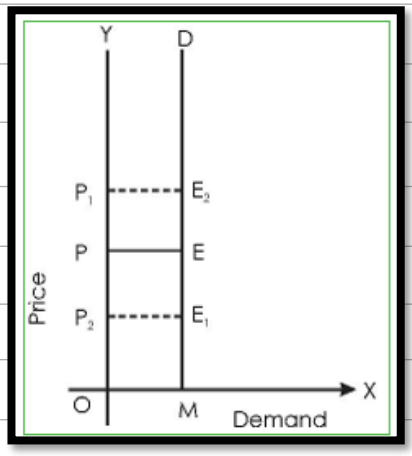
ii) **Perfectly Inelastic demand (Ep = 0):**

With the **change in price, if there is no change in the demand** it is said to be perfectly inelastic demand.

It means that the price may increase 'or' decrease but the demand is constant.

Here the value of Ep = 0.

The demand curve in this case is parallel to OY axis. It holds for goods like salt, life saving drug, etc.



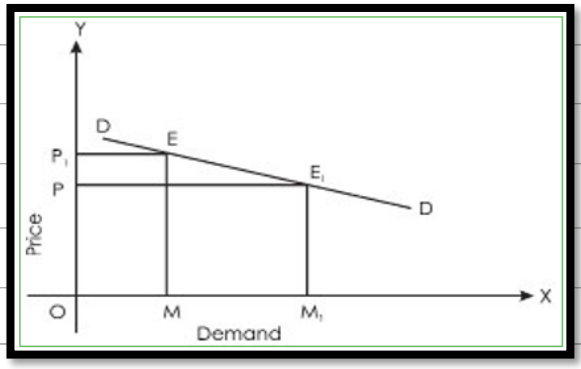
iii) **Relatively Elastic Demand (Ex: luxury goods): (Ep > 1)**

If the **proportionate change in demand is more than proportionate change in the**

price, it is said to be relatively elastic demand.

It means a little change in the price leads to more change in demand.

Here the value of Ep is greater than one the demand curve in the case slopes downward from left to right.



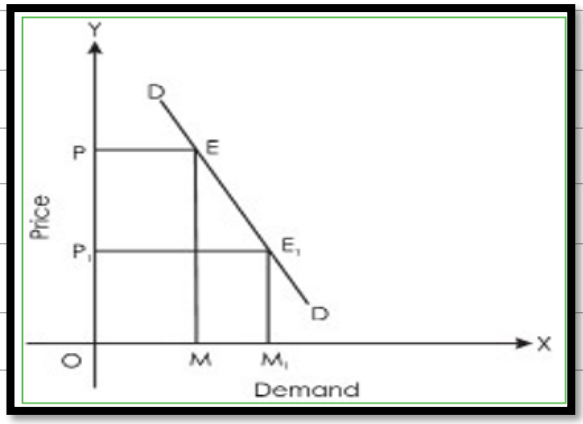
iv) **Relatively Inelastic demand (ex: necessary goods) (Ep < 1)**

If the **proportionate change in demand is less than proportionate change in the price,** it is said to be relatively inelastic demand.

It means more change in the price leads to less change in demand.

Here the value of Ep is less than one.

The demand curve in this case slopes down wards from left to right. But is steeper than relatively elastic demand



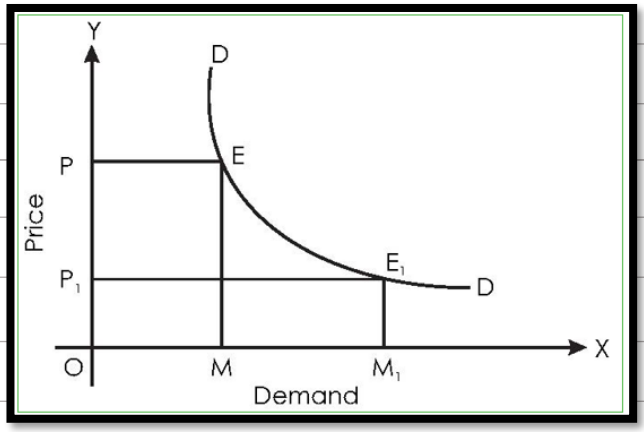
v) **Unitary elastic demand: (Ep = 1)**

If the **proportionate change in the demand is equal to the proportionate change in the price**. It is said to be unitary elastic demand.

It means the change in the demand and change in price are same.

Here the value of Ep is 1.

Generally comfort goods have unitary elastic demand. The demand curve also slopes downwards from left to right but it is rectangular hyperbola.



Income elasticity of demand:

It shows the proportionate change in demand with respect to proportionate change in income. It means it explains how much change in the income leads to how much change in demand.

$$E_i = \frac{\text{Percentge change in demand}}{\text{Percentge change in income}}$$

$$E_i = \frac{\Delta Q}{Q} \div \frac{\Delta Y}{Y}$$

$$= \frac{\Delta Q}{Q} \times \frac{Y}{\Delta Y}$$

$$E_i = \frac{\Delta Q}{\Delta Y} \times \frac{Y}{Q}$$

Here,

E i = Income elasticity of demand

ΔQ = Change in demand

Q = Original demand

Y = Original money income

ΔY = Change in money income

Values of Income elasticity of demand:

i) Perfectly elastic Income demand (Ey= ∞)

ii) Perfectly Inelastic Income demand (Ey = 0)

iii) Relatively elastic Income demand (Ey > 1)

iv) Relatively Inelastic Income demand (Ey < 1)

v) Unitary elastic Income demand (Ey = 1)

i) **Perfectly elastic Income Demand**

With the **income remaining constant, if there is a change in the demand**, it is said to be perfectly elastic income demand.

It means the demand may increase 'or' decrease without change in income.

Here the value of Ey is infinity. The demand curve in this case is parallel to OX- axis.

ii) **Perfectly Inelastic Income demand:**

If there is **no change in the demand** it is said to be perfectly inelastic income demand. It means the income may be increase 'or' decrease but the demand is constant Here the value of Ey is zero.

The demand curve in this case is parallel to OY – axis.

iii) **Relatively elastic Income Demand:**

If the **proportionate change in the demand is more than proportionate change in income**, it is said to be relatively elastic income demand.

It means a little change in the income leads to more change in demand.

Here the value of Ey is greater than one.

The demand curve in this case slopes upwards from left to right with relatively flatter in shape.

iv) **Relatively Inelastic Income Demand:**

If the **proportionate change in the demand is less than proportionate change in income**, it is said to be relatively inelastic income demand.

It means a more change in the income leads to less change in demand. Here the value of Ey is less than one.

The demand curve in this case slopes upwards from left to right with relatively steeper in shape.

v) **Unitary elastic income demand:**

If the **proportionate change in the demand is equal to proportionate change in Income.** It is said to be unitary elastic income demand.

It means the change in the income and changes in the demand are same. Here the value of Ey is one.

The demand curve in this case also upward from left to right.

Cross elasticity of demand:

It shows **proportionate change in the demand for one commodity and proportionate change in the price of other commodity**.

It explains how much change in the price of one commodity leads to how much change in the demand for another commodity.

These related goods may be either complementary goods or substitute goods.

$$Ec = \frac{\text{Percentage change in quantity demanded of good X}}{\text{Percentage chagne in price of good Y}}$$

$$E_c = \frac{\Delta q_x}{q_x} \div \frac{\Delta p_y}{p_y}$$

$$E_c = \frac{\Delta q_x}{\Delta p_y} \div \frac{p_y}{q_x}$$

Methods of Measurement of elasticity of demand:

There are four methods to measure the elasticity of demand. They are:

a) Percentage method

b) Total outlay method

c) Point method

d) Arc method

a) **Percentage Method:**

In this method, to measure the elasticity of demand firstly we should find out the change in demand and change in price in percentages.

b) **Total Outlay Method**

In this method, on the basis of **relationship between price and total expenditure** elasticity can be decided

i) If the total expenditure increases with the falling of the price and decrease with the raising of the price, it is said to be relatively elastic demand ($Ep > 1$).

ii) With total expenditure remaining constant the increase 'or' decrease in price it is said to be unitary elastic ($Ep = 1$).

iii) If the total expenditure decreases with the falling of the price and increase with the raising of the price. It is said to be relatively in elastic demand ($Ep < 1$).

Price	Demand	Total Outlay
9	40	360
8	50	400
7	60	420
6	70	420
5	80	400
4	90	360

c) **Point Method:**

*In this method the elasticity of demand can be measured at a **particular point on the demand curve**. In this method the following formula can be used:*

$$Ed = \frac{Lower\ segment\ of\ demand\ curve}{Upper\ segment\ of\ demand\ curve}$$

d) **Arc Method:**

*If there are **big changes in demand and prices** it is not possible to measure the elasticity of demand by the point method. So, the Arc method is introduced.*

In this method, the following formula can be used:

$$Ep = \frac{\frac{Q_2 - Q_1}{(Q_2 + Q_1)/2}}{\frac{P_2 - P_1}{(P_2 + P_1)/2}}$$

$$Ep = \frac{Q_2 - Q_1}{Q_2 + Q_1} \times \frac{P_2 + P_1}{P_2 - P_1}$$

Importance of Elasticity of Demand

The concept of elasticity of demand is of great practical importance in the sphere of government finance as well as in trade and commerce.

a) **Business Decision:**

If the product has more elastic demand the business man fixes less price, if the product has less elastic demand he will fix the more price.

b) **Monopolist:**

The monopolist fixes the higher price in one market in which the elasticity of demand is less. And lower price in more elastic demand market for the same thing (or) same good.

c) **Determination of factor price:**

The concept of elasticity of demand also helps in determining the price of various factors of production. Factor having inelastic demand gets higher price and factors having elastic demand gets lower price.

d) **Route for international trade:**

If demand for exports of a country is inelastic, that country will enjoy a favorable terms of trade while if the exports are more elastic than imports, then the country will lose in the terms of trade.

e) **To the government:**

The concept of elasticity of demand also enable the government to decide as to what particular industries should be declared as 'public utilities' to be taken over and operated

by the state.

Determinants of Elasticity of Demand:

a) Nature of the commodity
b) Availability of substitutes
c) Variety of uses
d) Possibility of postponement of consumption
e) Durable goods

a) **Nature of the commodity:**

In the case of necessities the demand is less elastic (or) comparatively inelastic.

For example rice, salt, pulses, matchbox etc.

On the other hand, the elasticity of demand for luxuries is more elastic.

For example, TV, DVD players, Gold, Diamonds etc.

Comfort goods have unitary elastic demand.

b) **Availability of substitutes:**

If a commodity has substitute goods, the elasticity for that commodity is more elastic.

For example, Lux soap, pears soap, ponds and Lakme creams.

c) **Variety of uses:**

If the goods have several uses, the elasticity of demand for it is more elastic.

For example, milk, coal, electricity etc.

d) **Possibility of Postponement of consumption:**

There are certain goods which can be postponed for purchase. In case of these goods,

the demand is elastic. But in the case of life saving medicines the demand will be inelastic because we cannot postpone the purchase of such goods.

e) **Durable goods:**

In case of durable goods, the elasticity of demand will be less, but in case of perishable goods the elasticity of demand will be more.

THEORY OF CONSUMER BEHAVIOUR CONSUMPTION:

Consumption is defined as the satisfaction of human wants through the use of goods and services.

Determinants of consumption:

- ✓ Present Income
- ✓ Future income
- ✓ Wealth income

The concept of consumer surplus:

This concept was introduced by **Alfred Marshall**.

This concept is derived from the Law of Diminishing Marginal Utility. Consumer Surplus (C.S.) is the difference between willing price and actual price.

C.S. = Willing Price – Actual Price or

C.S. = Demand Price – Market Price

Definition:

The excess of price which a consumer would be willing to pay for a thing rather than go without the thing and over what he actually does pay.

LAW OF DIMINISHING MARGINAL UTILITY:

a) The law of D.M.U explains the common experience of every consumer.

b) It is based upon one of the characteristics of wants i.e. "A particular want is suitable".

c) According to this law, **when a person goes on increasing the consumption of any one commodity the additional utility derived from the additional units goes on diminishing**.

d) So, it is called law of diminishing marginal utility.

e) The law of D.M.U was **firstly profounded by H.H. Gossan in 1854. So, it is called Gossans' first law of consumption.**

f) The law of D.M.U was developed by **Alfred Marshall.**

Definition:

"The additional benefit which a person derives from a given increase in his stock of anything, diminishes with every increase in the stock that he already has". – **Marshall**

Concepts in this law:

a) **Total utility (TU):**

TU refers to the **sum total of utilities derived from the consumption of all the units** of a commodity consumed by a consumer at a given time. In other words, it is a sum of marginal utilities up to the units consumed by a consumer.

$$TU = \Sigma MU$$

b) **Marginal Utility:**

It is the **additional utility obtained by the consumer by the consumption of additional unit** of a thing 'or' one more unit of a thing. The change in the total utility is also called marginal utility.

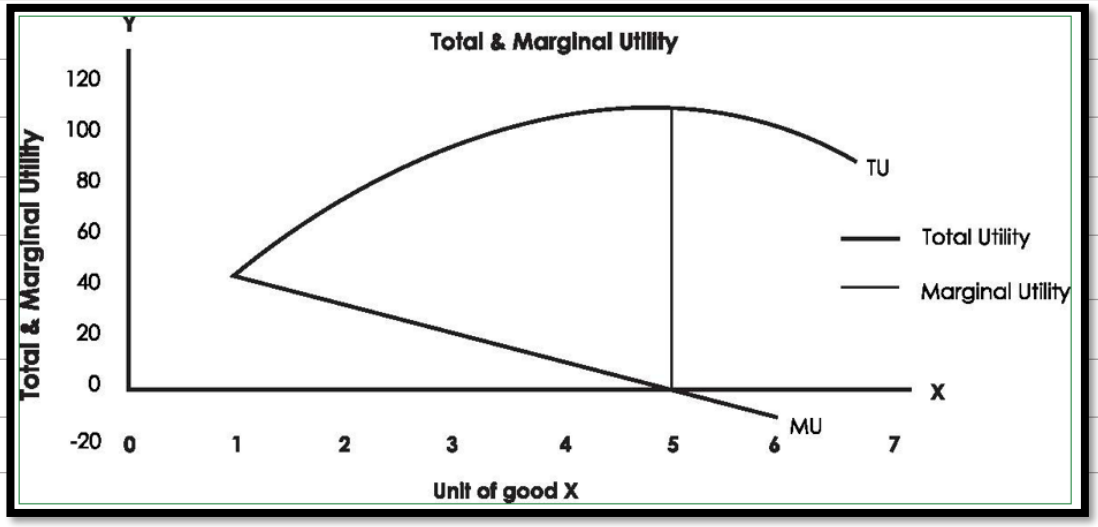
$$MU = TU_{n} - TU_{n-1}$$

Or

$$MU = \Delta TU / \Delta N$$

Table explanation:

Units	Total utility	Marginal utility
1	40	40
2	70	30
3	90	20
4	100	10
5	100	0
6	90	-10



Main Points:

i) When **total utility Increases, then the Marginal utility diminishes**. So, T.U. Curve moves upward from left to right and M.U curve slope downwards from left to right.

ii) However, this is only true when the law of diminishing marginal utility operates. Initially,

	it may so happen that the marginal utility might be rising along with the total utility curve for a particular commodity.
iii)	When the total utility reach the maximum, then the marginal utility is zero. At this point T.U curve reached the peak stage and M.U curve intercepts 'X' axis.
iv)	When the total utility goes on diminishing then the M.U becomes negative. So, the T.U curves slopes downwards and M.U curve crossed the x-axis.
	Assumptions:
a)	The units are **homogeneous.**
b)	The units of consumption must be in **standard units** e.g., a cup of tea, a bottle of cool drink etc.
c)	There should be no time gap or interval between the consumption of one unit and another unit i.e. there should be **continuous consumption**.
d)	There is **no changes in the taste** and preferences of the consumer.
	Exceptions to Diminishing Marginal Utility:
a)	Collection of the rare goods.
b)	Hobbies
c)	Misers
d)	Money and gold
e)	Reading of books
	Importance:
a)	Value paradox
b)	Basis for economic laws
c)	Progressive Taxation

d) Re-distribution of wealth

DEMAND FORECASTING:

The success of the business firm depends upon the successful demand foresting. Estimation of future demand for product at present is called demand forecasting.

Methods of Demand forecasting:

a) Expert opinion method
b) Survey of buyers intensions
c) Collective opinion method
d) Controlled experiments
e) Statistical method.

SUPPLY

Meaning of supply:

a) The term 'supply' refers to the amount of a good or service that the **producers are willing and able to offer to the market at various prices** during a given period of time.
b) Further Supply refers to what a firm offer for sale in the market, not necessarily to what they succeed in selling. What is offered may not get sold.
c) Supply requires both willingness and ability to supply. Production cost is often the primary influence on ability.
d) Supply is a flow. Supply is identified for a specified time period. The quantity supplied is 'so much' per unit of time, per day, per week, or per year.

Determinants of supply:

The supply of any commodity depends upon some factors. They are called determinants of the supply. They are:

a) **Price of the goods:**

Price of the goods is main determinant of supply. Producers supply more goods if the prices are high. They supply the fewer goods when the prices are low.

b) **Goals of the firm:**

Firms may try to work on various goals. For e.g. Profit maximization, sales maximization, employment maximization. If the objective is to maximize profit, then higher the profit from the sale of a commodity, the higher will be the quantity supplied by the firm and vice-versa.

c) **Inputs Prices:**

The producers supply more when the inputs prices are low, that is at lower costs of production. At higher input, price rises and the supply is reduced.

d) **Technology:**

New Technology generally helps to save inputs and reduces costs and time to produce the output. An improved technology enhances the supply of the goods.

e) **Government Policies:**

Government policy of taxes and subsidies on goods brings about changes in supply, higher taxes on goods discourage producers and their supply will be less. On the other hand, subsidies from government encourage producers to supply more.

f) **Expectation about future prices:**

If the producers expect an increase in the price of a commodity, then they will supply less at the present price and hoard the stock in order to sell it at a higher price in the near future. This will be opposite in case if they anticipate fall in future price (e.g. Fruit seller).

g) **Prices of the other commodities:**

Usually an increase in the prices of other commodities makes the production of that commodity whose price has not risen relatively less attractive. We thus, expect that other things remaining the same, the supply of one commodities falls the price of other goods rises.

h) **Number of firms in the market:**

Since the market supply is the sum of the suppliers made by individual firms, hence the supply varies with changes in the number of firms in the market. A decreases in the number of firm reduces the supply.

i) **Natural factors:**

Supply of goods depends on favourable weather conditions.

Conditions like drought, floods, extreme weather, pests and diseases disturb crop production and raw material supply. This will affect the supply of goods.

LAW OF SUPPLY:

The law of supply can be stated as: **Other things remaining constant**, the quantity of a good produced and offered for sale will increase as the price of the good rises and decrease as the price falls.

This law is based upon common sense, because **the higher the price of the good, the greater the profits that can be earned and thus greater the incentive to produce the good and offer it for sale.**

Supply function:

The supply function explains the relationship between the supply and the factors that determines the supply. This can be explained through an equation:

$$S_x = f\ (P_x, PI, T, W, GP)$$

In the above equation

S_x = supply of goods 'x'

f = functional relationship P_x = Price of 'x'

PI = Price of inputs (factors) T = Technology

W = Weather conditions GP = Government policy

Supply Schedule:

It shows the various quantities of the goods that are supplied at various levels of prices.

Types of supply schedule:

There are two types of supply schedule. They are:

a) Individual supply schedule

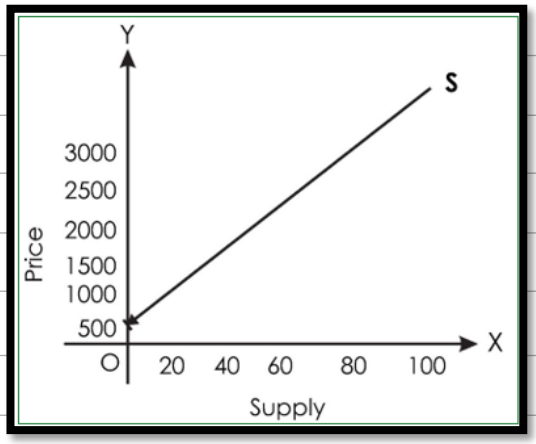
b) Market Supply schedule

a) Individual supply schedule:

It shows various quantities of the goods that are supplied by an individual seller (or) producer at various levels of prices in the market.

Price of x	Supply of 'x' goods
500	0
1000	10
1500	30
2000	55
2500	90

Supply curve: *From the above supply schedule the supply curve can be drawn*



b) Market Supply schedule:

It shows the various quantities of the goods that are ***supplied by various producers*** *(or) sellers at various levels of prices in the market. When we add the supply of all sellers then total supply 'or' market supply can be obtained.*

Whether the individual supply curve 'or' market supply curve slopes upward from left to right as there is a direct proportional relationship between price and supply.

Exceptions to the law of supply:

Land (or) Agriculture goods.

In the case of land (or) Agriculture goods the supply curve is parallel to OY-axis.

- **Rare goods.**

In the case of rare goods supply cannot be changed according to the price. So in the case of rare goods the supply curve is parallel to OY-axis.

- **Supply of labour.**

In the case of labour, the supply curve is backward bending. Because in the initial stage if the wage level is increased the supply of the labour also increased. Beyond a certain stage, if the wages are increased people will substitute leisure for paid worktime. So, the supply of labour will be decreased.

Change in Supply:

If the change in the determinants of the supply leads to the change in supply.

These changes in supply are two types. They are:

a) Extension and contraction of the supply

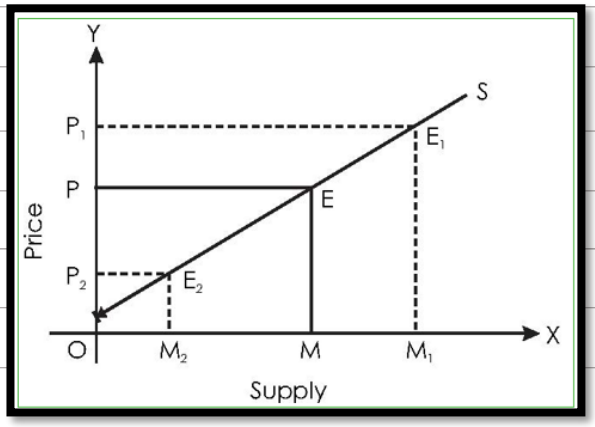
b) Increase and decrease of the supply.

a) Extension and contraction of the supply:

When all other things remaining constant, if there is **a change in the price that leads to change in the supply** then these changes in the supply are called extension and contraction of the supply.

When the price is increased the supply will be extended, when the price is decreased the supply will be contracted.

To explain the extension and contraction of the supply a single supply curve is enough.



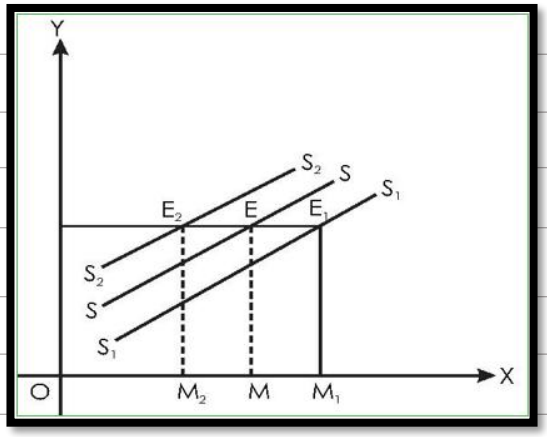
b) Increase and decrease of supply:

When the **price is constant**, if there is a **change in any one of the determinants that leads to change in supply**, then these changes in supply are called increase and decrease of supply.

To explain the increase and decrease of the supply a single supply curve is not enough. It means new supply curves are formed.

⊙ When the supply is increased the new supply curve is formed towards right to the old supply curve.

⊙ In the same way when the supply is decreased the new supply curve is formed towards left to the old supply curve.



Elasticity of supply:

The elasticity of supply is defined as the responsiveness of the quantity supplied of a good to a change in its price. Elasticity of supply is measured by dividing the percentage change in quantity supplied of a good by the percentage change in its price.

$$E_s = \frac{\text{Percentage change in quantity supplied}}{\text{Percentage change in Price}}$$

Or

$$\frac{\frac{\text{Change in quantity supplied}}{\text{quantity supplied}}}{\frac{\text{Change in price}}{\text{Price}}}$$

Or

$$\frac{\Delta \frac{q}{q}}{\Delta \frac{p}{p}} = \frac{q}{p} \times \frac{p}{q}$$

Here,

q denotes original quantity supplied.

△ q denotes change in quantity supplied.

p denotes original price

△ p denotes change in price.

Values of Elasticity of Supply:

There are five values of elasticity of supply

i) Perfectly elastic Supply (Es= ∞)

ii) Perfectly Inelastic Supply (Es = 0)

iii) Relatively elastic Supply (Es > 1)

iv) Relatively Inelastic Supply (Es< 1)

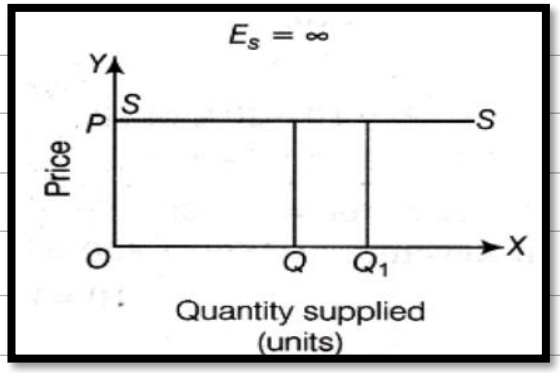
v) Unitary elastic Supply (Es = 1)

i) Perfectly elastic Supply (Es= ∞):

When the **price is constant if there is a change in supply**, it is said to be perfectly elastic supply.

It means the supply may increase 'or' decrease without change in price.

Here, the value of Es is infinity. The supply curve in this case is parallel to OX axis.



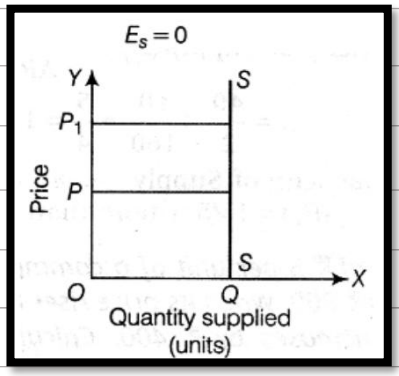
ii) Perfectly Inelastic Supply (Es = 0):

When the **price is changed, if there is no change in the supply**, it is said to be perfectly inelastic supply.

It means the price may increase 'or' decrease but the supply is constant.

Here the value of Es = 0.

The supply curve in this case is parallel to OY axis.



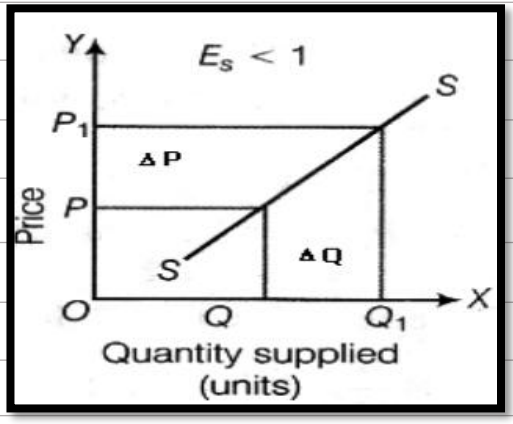
iii) Relatively elastic Supply (Es>1):

If the **proportionate change in supply is more than proportionate change in the price**.

It is said to be relatively elastic supply.

It means a little change in the price leads to more change in supply.

Here, the value of Es is greater than one the supply curve in the case upwards from left to right.



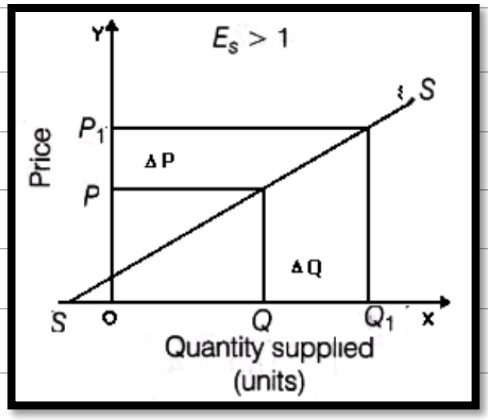
iv) Relatively Inelastic Supply (Es <1)

If the **proportionate change in supply is less than proportionate change in the price**.

It is said to be relatively inelastic supply.

It means a more change in the price leads to less change in supply.

Here, the value of Es is less than one. The supply curve in this case also slopes up wards from left to right.

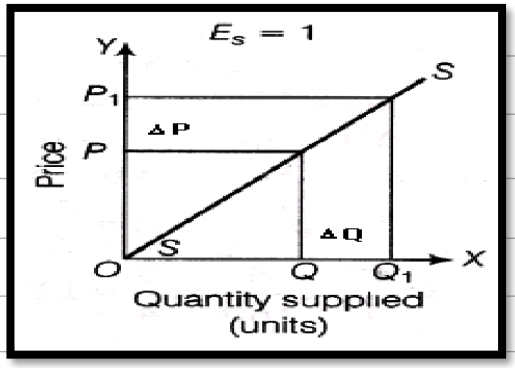


v) Unitary elastic Supply:

If the **proportionate change in the supply is equal to the proportionate change in the price.**

It is said to be unitary elastic supply.

It means the change in the supply and change in price are same. Here the value of Es is 1. Unitary elastic supply curve also slopes downwards from left to right.



Determinant of elasticity of supply:

a) **Nature of the commodity:**

If the good is durable, the elasticity of supply will be more [ES > 1], the perishable goods have less elastic [EP <1].

b) **Time factor:**

In the long period the elasticity of supply will be more [ES > 1]. In the short period, the elasticity of supply will be less [ES<1].

c) **Availability of facilities:**

If there are more facilities [ES>1] (or) [ES<1].

d) **Cost of production:**

If the cost of production is more the elasticity of supply will be less, if the cost of production is less [ES>1].

e) **Nature of inputs:**

If the inputs are available in the market, there is a more elastic supply otherwise less elastic supply.

f) **Risk taking:**

If the entrepreneur takes the risks the elasticity of supply, there will be more otherwise less.

EQUILIBRIUM PRICE:

a) The equilibrium price in a market is determined by the **intersection between demand and supply.**

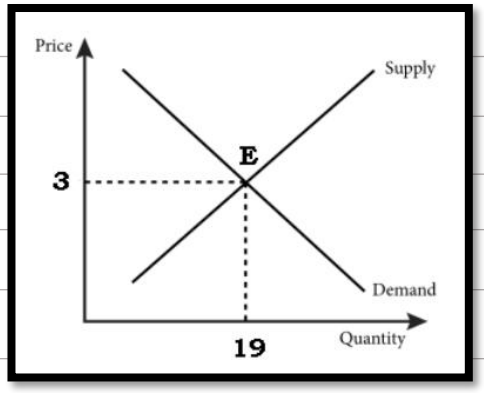
b) It is also called the **market equilibrium**.

c) At this price, the amount that the buyers want to buy is equal to the amount that sellers want to sell.

d) The competitive market equilibrium represents the 'unique' point at which both consumers and suppliers are satisfied with price and quantity.

e) Equilibrium price is also called **market clearing price.**

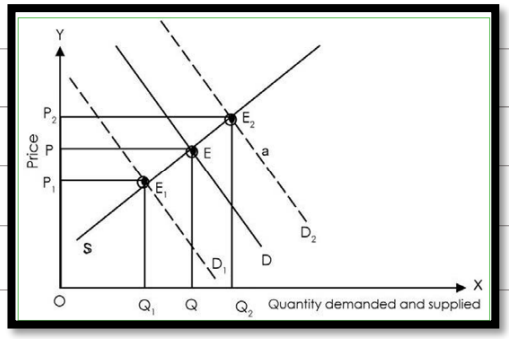
Price (Rs)	Quantity Demanded	Quantity Supplied	Impact on price
5	6	31	Downward
4	12	25	Downward
3	19	19	Equilibrium
2	25	12	Upward
1	31	6	Upward



But this equilibrium price can also be changed whenever there is a total change in the demand and total change in supply. This can be explained by the following cases.

Case – I

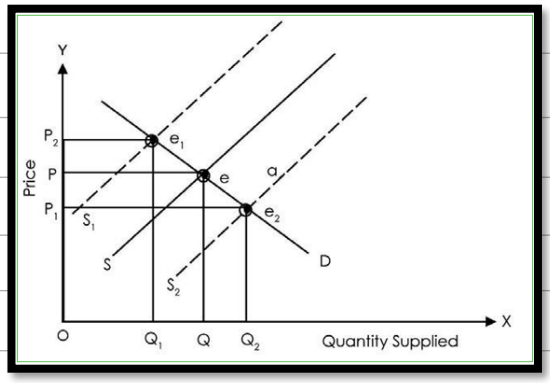
When the supply is constant, and the demand is changed, the price movements are as follows:



When supply is constant, if the demand is increased equilibrium price is also increased. When the demand is decreased the equilibrium price is also decreased.

Case-II

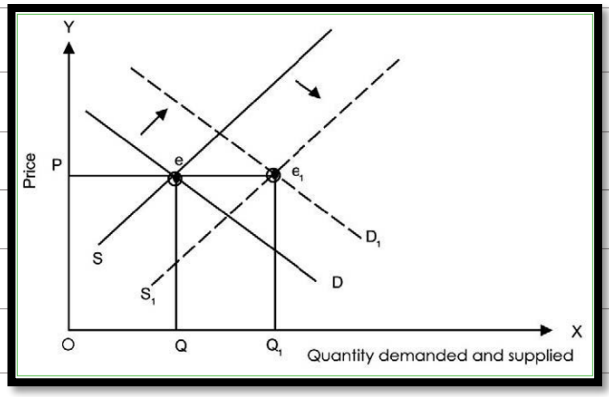
Demand is constant and supply is changed. If the demand is constant and the supply is increased then price will be decreased and if the supply is decreased the price will be increased.



Case-III

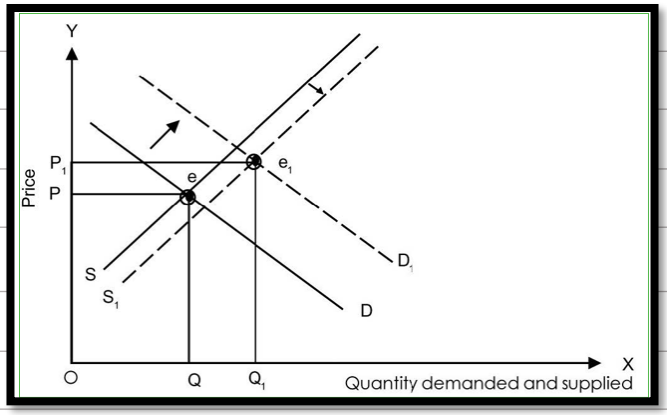
When both demand and supply change in the same proportion. When both demand and supply are increased in same proportion there must be not change in the equilibrium

price. In the same way when both D/S are decreased in same proportion, price is at the equilibrium.



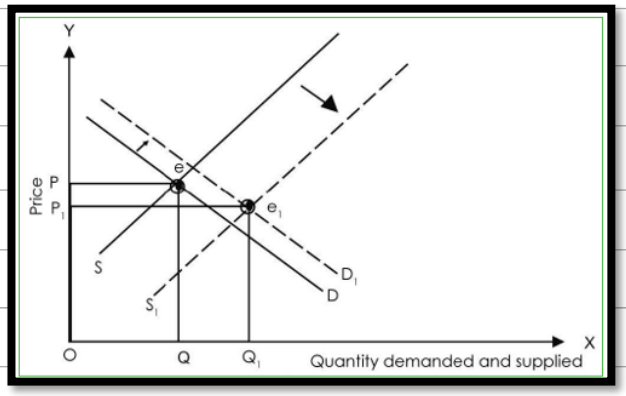
Case – IV:

When the proportionate change in demand is more than the change in supply and less change in supply. If there is a more increase in demand and less increase in supply that leads to increase of the price.



Case – V

When the proportionage change in the supply is more than the proportionate change in demand it leads to decrease of the price.



Case – VI

When the demand is increased and supply is decreased, the new equilibrium price will be increased. In the same way, when the supply is increased and demand is decreased the equilibrium price will be decreased.

PART IV

THEORY OF PRODUCTION

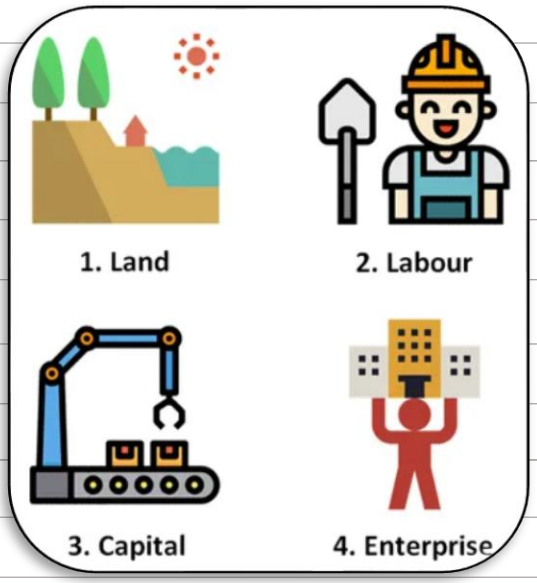
MEANING OF PRODUCTION:

Generally production means a process of converting raw materials into finished goods. One of the principal concerns of business managers is the achievement of optimum efficiency in production by minimising the cost of production. The performance of an economy is judged by the level of its production. **The amount of goods and services an economy is able to produce determines the richness or poverty of that economy**. In fact, the standard of living of people depends on the volume and variety of goods and services
produced in a country.

In Economics the word 'production' is used in a wider sense to denote the **process by which man utilises resources** such as men, material, capital, time etc, working upon them **to transform them into commodities** and services so as to make them **satisfy human wants.**

Whether it is making of **material goods or providing a service**, it is included in production provided it satisfies the wants of some people.

FACTORS OF PRODUCTION AND THEIR CLASSIFICATIONS



Factors of production refer to **inputs.**

An input is a good or service which a firm buys for use in its production process.

Land, labour, capital and entrepreneurial ability are the four factors or resources which make it possible to produce goods and services.

Even a small piece of bread cannot be produced without the active participation of these factors of production.

1) Land:

The term 'land' is used in a special sense in Economics. It does not mean soil or earth's surface alone, but refers to all free gifts of nature which would include besides land in common parlance, natural resources, fertility of soil, water, air, light, heat natural vegetation etc. Land has certain peculiar features:

a) Gift of nature:

Land is a gift of nature. Location of land, deposits of minerals at certain places and Climatic conditions are no doubt gift of nature.

b) Limited in supply:

The total geographical area of a country remains the same. In fact, certain resources like oil, gas, coal and some species of wild life may not be available after some time.

c) Immobile factor:

Land cannot be moved from one place to another like other factor. However, its ownership can be transferred and its use can be shifted from one crop to another crop.

d) Diminishing returns:

Early economists held the view that land is subject to the law of diminishing returns. Increased use of capital and labour on any given quantity of land would give us diminishing returns.

e) Land differs in fertility:

There will be differences in fertility of land. As a result, the output changes from one plot to the other. It is because of these peculiarities of land, the early economists considered land as a separate factor of production.

2) Labour

In the ordinary usage, labour stands for only physical labour. **In economics, labour means physical as well as mental services engaged in production to earn income.** Classical economists and Karl Marx have considered labour as the sole factor of production.

Features of Labour:

Labour as a factor of production possesses certain peculiar features:

a) Labour is inseparable:

When a labourer sells his service, he has to be physically present where they are delivered. The labourer sells his labour against wages, but retains the capacity to work. Labour is inseparable from labourer but in the case of other factors i.e. land and capital are separable from land lord and capitalist.

b) Labour is perishable:

If a worker does not find work on a particular day, the labour is lost for that day.

c) Supply of labour:

A labourer can make a choice between the hours of labour and the hours of leisure. This feature gives rise to a peculiar backward bending shape to the supply curve of labour. The supply of labour and wage rate is directly related. It implies that, as the wage rate increases the labourer tends to increase the supply of labour by reducing the hours of leisure. However, beyond a desired level of income, the labourer reduces the supply of labour and increases the hours of leisure in response to further rise in the wage rate. That is, he prefers to have more of rest and leisure than earning more money

d) Weak-bargaining power:

Labour has less bargaining power as it is a perishable thing. In the same way the trade unions are not strengthened so they cannot fight for better wages.

e) Differ in efficiency of labour:

Some labourers have more efficiency and some labourers have less efficiency.

3) Capital:

In the ordinary sense capital means money for an individual or a firm.

However **in economics, All man-made resources used in producing goods and services are called capital.** It is the third factor of production. Capital is a type of physical resource including anything that can be regarded as made by humans to aid production. **Capital means physical capital or capital goods and not financial capital**. So, cash is not a physical capital as it is not productive. Robots are considered as capital, not labour. As a factor of production, 'capital' means physical capital which helps in producing more resources by firms and governments.

Functions of capital:

Capital performs certain important functions in production such as:

a) Capital supplies tools and machines:

Capital supplies tools and machines that assist the labourers in working efficiently and producing maximum output. A labourer backed by better tools and machines will be more efficient in production.

b) Improves productivity of labourer:

Capital improves per capita productivity of labourer. This in turn increases the overall production.

c) Capital supplies raw materials:

Capital supplies raw materials, which is required on a continuous basis for production of goods.

d) Generate more employment:

Additional tools and machines generate more employment to people. However, in the modern production labour replacing machines reduce employment opportunities.

e) Provides transport facilities:

Capital in the form of roadways, railways, ships help to transport raw material to the site of the production and finished goods to the market.

f) Payments of factor:

Capital in the form of money is useful for the payment of advance wages to the labourers. Even before the goods are sold in the market.

4) Entrepreneur:

It is not enough to say that production is a function of land, capital and labour. There must be some factor which **mobilises these factors**, combines them in the right proportion, initiates the process of production and bears the risks involved in it. This factor is known as the entrepreneur. He has also been called the organiser, the manager or the risk taker

Functions of the entrepreneur:

a) Initiation the Business:

Entrepreneur has to initiate the business by mobilizing other factors. All the primary work to start the business will be undertaken by him.

b) Decision making:

Major decisions like the kind of good to be produced, size of the unit, quantity of output, price, marketing etc. have to be made by him.

c) **Choosing the technology:**

Choosing suitable technology, combining factors in right proportion to maximize output at minimum cost are the other functions of organizer.

d) **Innovation:**

He must be dynamic to introduce new methods, techniques, products etc.

e) **Pay the rewards of factors:**

An entrepreneur has to pay the rewards to other factors. He has to bear the responsibility either for profit or loss in production.

LAWS OF PRODUCTION

Laws of Production in economics deals with the concepts of cost and producer's equilibrium. It is an important aspect of economics as it helps a business to determine the level of output that leads to maximum profits. It also defines the various variables and fixed costs of the firm.

What are the basic laws of production?

The two basic laws of production are as follows:

a) Law of variable proportion &

b) Law of return to scale.

a) Law of variable proportion

It explains the **relationship between inputs and outputs in the short period**. According to this law, output can be changed by changing some factors (variable factors) while other factors are constant. So it is called law of variable proportions. This law was developed by "**Alfred Marshall**".

Definition:

"An increase in the amount of labour and capital applied in the cultivation of land causes in general a less than proportionate increase in the amount of output raised unless it happens to coincide with the improvements in the arts of agriculture". – Marshall

Product Concepts in this law:

Total Product (TP): Total product is the **total output resulting from the efforts of all the factors of production** combined together at any time. If the inputs of all but one factor are held constant, the total product will vary with the quantity used of the variable factor. Column (1) of Table presents the quantity of variable factor (labour) used along with the factors whose quantity is held constant and column (2) represent the total product at various levels of use of the variable input.

Quantity of Labour	Total Product (TP)	Average Product (AP)	Marginal Product (MP)
1	100	100	100
2	210	105	110
3	330	110	120

4	440	110	110
5	520	104	80
6	600	100	80
7	670	95.7	70
8	720	90	50
9	750	83.3	30
10	750	75	0
11	740	67.3	-10

We find that when one unit of labour is employed along with other factors of production, the total product is 100 units. When two units of labour are employed, the total product rises to 210 units. The total product goes on rising as more and more units of labour are employed. With 9 or 10 units of labour, the total product rises to maximum level of 750 units. When 11 units of labour are employed, total product falls to 740 units due to negative returns from the 11th unit of labour.

Average Product (AP): Average product is the total product per unit of the variable factor.

$$AP = \frac{\text{Total Product}}{\text{No. of units of Variable Factors}}$$

It is shown as a schedule in column (3) of Table. When one unit of labour is employed, average product is 100, when two units of labour are employed, average product rises to 105. This goes on, as shown in Table.

Marginal Product (MP): Marginal product is the change in total product per unit change in the quantity of variable factor. In other words, **it is the addition made to the total production by an additional unit of input**. Symbolically,

$$MP_n = TP_n - TP_{n-1}$$

The computed value of the marginal product appears in the last column of Table.

For example, the MP corresponding to 4 units is given as 110 units. This reflects the fact that an increase in labour from 3 to 4 units, has increased output from 330 to 440 units.

Relationship between Average Product and Marginal Product: Both average product and marginal product are derived from the total product. Average product is obtained by dividing total product by the number of units of the variable factor and marginal pro duct is the change in total product resulting from a unit increase in the quantity of variable factor.

Reasons for the diminishing returns:

- All units of variable factors are not homogenous.
- Imperfect substitutions.
- The combination becomes wrong.

Assumptions:

- The units of the variable factor are homogenous.
- There is a possibility to change some factors (Variable factors), while other factors are constants (fixed factors).
- There is a possibility to change the combination of fixed and variable factors.
- There must be no change in the level of technology.

- It is applicable to only short period.

b) Law of Return to Scale

It shows the **relationship between inputs and outputs in the long period.**

The change in the quantity of the factors is called scale. But, all the factors of production must be changed multiple times.

For example, all the factors of production are doubled or tripled. This is done to carry out large scale production. If all the factors of production are halved or changed to one-third, it is said that the production is carried out in a small scale. Change in the output is called returns. So law of returns to scale explains changes in the output due to changes in the inputs in the long period.

Explanation of the law:

This law explains the proportional change in output with respect to proportionate change in inputs. The changes in the output are classified in to three stages. They are

- Increasing returns to scale
- Constant returns to scale
- Diminishing returns to scale

Increasing returns to scale:

If the proportionate increase in the output is more than proportionate increase in the inputs it is said to be increasing returns to scale. It means when we double the inputs the output will be more than double.

Cause for increasing returns:

- Specialization (or) Division of labour

- Indivisible factors.
- Dimensional economics and positive economies of scale
- Volume discounts etc.,

Constant returns to scale:

If the proportionate increase in the output and proportionate increase in the inputs are same it is said to be constant returns to scale. It means when we double the inputs the output also will be double. There are no causes for constant returns. It is just an indicator for the ending of increasing returns and commencement of diminishing returns.

Diminishing returns to scale:

If the proportionate increase in the output is less than proportionate increase in the inputs it is said to be diminishing returns. It means when we double the inputs the output will be less than double.

Cause for diminishing returns:

- Management problems and diseconomies of scale.
- Limit to human factor
- Lack of co-operation and co-ordination
- Rise of the prices of inputs

The main differences between returns to a variable factor and returns to scale are indicated below:

Returns to a Variable Factor	Returns to Scale
Operates in the short run or it is related to short- run production-function.	Operates in the long-run or it is related to long-run production-function.
Only the quantities of a variable factor vary.	All factor-inputs are varied in the same factor proportion.
There is change in the factor-proportion. Suppose on 1 acre land 1 labour is employed, then the land labour ratio is 1 : 1. Now if we add one more unit of labour on the 1 acre land, then land-labour ratio would become 1 : 2.	There is no change in factor-ratio. For instance, if a firm is employing 1 unit of labour and 2 units of capital, then the labour-capital ratio is 1 : 2. Now if the firm increases its scale of operation and employed 2 units of labour and 4 units of capital, the labour-capital ratio still remains the same as 1 : 2.
No change in the scale of production. Because here all the factor-inputs are not changed.	There is change in the scale of production because here all the factor-inputs are varied in the same proportion.

Production Functions

Production function expresses the relationship between the physical inputs and physical output of a firm for a given state of technology.

The production-function is a purely technical relation that connects factor-inputs and outputs.

The production-function can be written mathematically as follows:

$$Q_x = A \cdot f(F1, F2, F3 \ldots Fn)$$

Where, A is the efficiency parameter which reflects the change in technology.

If technology improves, the value of A increases and with the same amount of inputs it will be possible for the producer to produce more output.

Here,

Qx = the quantity of x commodity

F1, F2, F3, FN = different factor-inputs.

This equation tells that the output of x depends on the factor F1, F2, F3 Fn, etc,

There is functional relationship between factor-inputs and the amount of goods x.

Types of production functions:

Before analyzing the types of production-function it will be useful to understand the meaning of the following important terms :

a) Short period production functions:

It shows the **relationship between production and factors of production in the short period.** In the short period all factors may not be available, so the factors of production in the short period can be divided into two types. They are:-

i) Fixed factors

ii) Variable factor

i) Fixed factors:

The factors which are not available in the short period they can be kept as constant. So they are called fixed factors.

Example: land, building, machines etc.

ii) **Variable factors:**

The factors which are available to change the output in the short period.

For Example: capital, labour, raw materials etc.

b) **Long period production function:**

It explains the relationship between production and factors of production in the long period. It is also called as law of return to scale. Here the production system is guided by the laws of returns of scale.

The classification of fixed and variable factors is related to only short period. But in long period all factors are variable factors.

PART V

COST OF PRODUCTION

INTRODUCTION:

Cost of production refers to the total cost incurred by a business to **produce a specific quantity of a product** or offer a service.

Production costs may **include things such as labor, raw materials, or consumable supplies**.

In economics, the cost of production is defined as the **expenditures incurred to obtain the factors of production** such as labor, land, and capital, that are needed in the production process of a product.

Cost = payments for Factors of Production (Land, Labor, Capital, Entrepreneurship).

Concept of Cost

The concept of cost is a key concept in Economics.

It refers to the amount of payment made to acquire any goods and services.

In a simpler way, the concept of cost is a financial valuation of resources, materials, risks, time and utilities consumed to purchase goods and services.

Cost Function

The cost function explains the **functional relationship between cost of production and physical quantity of output**.

$$C = f(Q)$$

Where,

C → Total Cost

Q → Physical Output Quantity

Types of Concepts of Cost:

a) Real cost:

The concept of real cost was **introduced by Alfred Marshall**.

Exertions of all kinds of labour that are already indirectly involved in production process.

All these **efforts and sacrifices** together will be called as real cost of production.

For example exertions of all kinds of labour, waiting and sacrifices required for saving the capital.

b) Economic costs:

Total expenses incurred by a firm (or) producer in **producing a commodity** are called economic costs. These economic costs include

i) Explicit costs

ii) Implicit costs

iii) Normal profit.

i) **Explicit costs:**

Actual payments made by a firm for **purchasing or hiring resources** are called explicit costs. These costs are actual money expenses directly incurred for purchasing the resources.

For example rent to the land, wages to the labourer, expenditure on raw material interest on borrowed money etc.,

Explicit costs are **recorded** in the account books. Explicit costs are also called "**Accounting costs**"

ii) **Implicit costs:**

These costs are **imputed costs of the factors of productions** owned by the producer himself which are generally left out in the calculation of expenses of the firm.

For example, rent for the use own land, interest on his own capital etc.

Implicit costs are **not recorded.**

iii) **Normal profits:**

The minimum amount which is required to keep an entrepreneur in the production process is known as normal profit.

Economic cost = Explicit cost + Implicit cost + normal profits.

c) **Opportunity cost:**

The opportunity cost of anything is **next best alternative cost which is forgone**.

Individual point of view (or) nation point of view the resources are scarce. At that time to get the one commodity we have to forego the another commodity. This is called opportunity costs.

For Example: Suppose a piece of land can be used for growing wheat or rice. If the land is used for growing rice, it is not available for growing wheat. Therefore the opportunity cost for rice is the wheat crop foregone. This is illustrated with the help of the following diagram.

Suppose the farmer, using a piece of land can be produced either 50 quintals (ON) of rice or 40 quintals (OM) of wheat. If the farmer produced 50 quintals of rice (ON), he cannot produce wheat. Therefore the opportunity cost of 50 quintals (ON) of rice is 40 quintals (OM) of wheat. The farmer can also produce any combination of the two crops on the production possibility curve MN. Let us assume that the farmer is operating at

point A on the production possibility curve where he produces OD amount of rice and OC amount of wheat. Now, he decides to operate at point B on the production possibility curve. Here he has to reduce the production of wheat from OC to OE in order to increase the production of rice form OD to OF. It means the opportunity cost of DF amount of rice is the CE amount of wheat.

Applications of Opportunity cost

The concept of opportunity cost has been widely used by modern economists in various fields.

i) **Determination of factor prices:**

The factors of production need to be paid a price that is at least equal to what they command for alternative uses. If the factor price is less than factor's opportunity cost, the factor will quit and get employed in the better-paying alternative.

ii) **Determination of economic rent:**

The concept of opportunity cost is widely used by modern economists in the determination of economic rent. According to them economic rent is equal to the factor's actual earning minus its opportunity cost (or transfer earnings).

iii) **Decisions regarding consumption pattern:**

The concept of opportunity cost suggests that with given money income, if a consumer chooses to have more of one thing, he has to have more of one thing; he has to have less of the other. Hence with the help of opportunity cost he decides the consumption pattern, that is, which goods should be consumed and in what quantities.

iv) **Decisions regarding production plan:**

With given resources and given technology if a producer decides to produce greater amount of one commodity, he has to sacrifice some amount of another commodity.

v) **Decisions regarding national priorities:**

If a country decides that more resources must be devoted to arms production then less will be available to produce civilian goods. In this situation a choice will have to be made between arms production and civilian goods. The concept of opportunity cost helps in making such choices.

d) Private cost and social cost

Private cost means the **cost of production borne by the private sector enterprise**. The private sector enterprise, while maximising its profit, takes into account private cost only.

However, the productive activity of any private sector firm can generate either a positive or a negative impact on the society as a whole.

For example, a private firm may produce a hazardous chemical product and in the process of production, may pour the industrial waste directly into the river water without proper treatment. Any additional increment in the production of such goods in the private sector would create a **Marginal External Damage** to the society. If we add the value of the marginal external damage to the private marginal cost of producing that commodity, we get the **marginal social cost of situation**, social cost will be lower than the private cost.

In order to maximise the social welfare, the social marginal cost has to be equated to the marginal revenue. In other words, this equality of marginal revenue and social marginal cost also ensures the most efficient allocation of resources.

SHORT RUN AND LONG RUN COST

Cost of short-run and the long-run is an economic term that describes the cost involved in the production of goods in a firm in the short as well as long period.

a) The short-run is a certain future period of production where the firm's one input of production is fixed while others are variable. The short-run does not specify the extent of time but rather is unique to the firm, industry, or economic variable. During the short-run period, the firm faces both fixed and variable costs. It differs in the long run.

b) The long-run is a hypothetical perception where all markets are in equilibrium and quantity and price are fully adjusted. During the long-run period, all the factors of production and costs involved in the production are variable. During this period, a firm can adjust its costs.

Short run costs:

In the short period cost of production can be divided into two types. They are

i) Fixed costs

ii) Variable costs

i) **Fixed costs:**

The costs which don't change with change of the output are called fixed costs. It means output may be increased or decreased without change in costs. Irrespective of the Level

of output Quantity the producer must incur this cost. Even if the output is zero the fixed cost is positive. The fixed cost curve (TFC) will be parallel to ox-axis.

For Example: Expenditure on the land, building, salaries of permanent employees, interest payment, insurance premium etc.

ii) **Variable costs:**

Costs which is changed with the change in the output quantity are called variable costs. It means when the output is increased, these costs are increased and when the output is decreased, these costs are also decreased. When the output is zero these costs are also zero. The TVC (Total Variable Cost) curve will be sloped upwards from "left to right" and start from the origin.

For Example: Expenditure on raw material, power, fuel, wage of daily laborers etc..

Fixed costs	Variable costs
Fixed costs do not vary with quantity of output.	Variable costs vary with the quantity of output.
They are related with the fixed factors.	They are related with the variable factors.
They do not become zero. They remain same even when production is stopped.	They can become zero when production is stopped.
Production may not recover the fixed costs.	Production should at least recover the variable cost.

Other cost curves in short period:

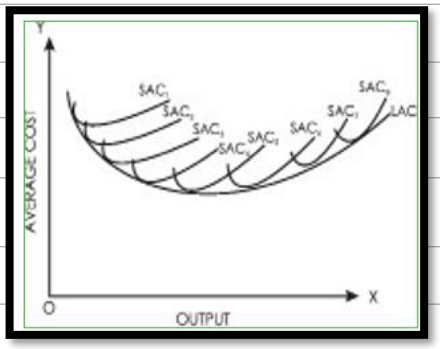
We can derive the other costs (concepts) from the above table this can be explained by the following table

Output	TFC	TVC	TC	AFC	AVC	AC	$MC = TC_n - TC_{n-1}$
0	20	0	20	-	-	-	-
1	20	8	28	20	8	28	8
2	20	14	34	10	7	17	6
3	20	18	38	6.66	6	12.66	4
4	20	22	42	5	5.5	10.5	4
5	20	28	48	4	5.6	4.6	6
6	20	32	52	3.33	5.33	8.66	4
7	20	40	60	2.85	5.71	8.56	8
8	20	50	70	2.5	6.25	8.75	10

Long Run Cost Curves

In a short period a firm has a fixed scale of plant, one short run average cost curve is corresponding to a particular scale of plant. So in short period the firm can operate on a particular scale of plant.

But in the long run a firm can choose among possible sizes of plant (or) it can move from one scale of plant to another scale of plant. This can be shown by the following diagram.



In the above diagram there are various short run average cost curves which correspond various sizes of plant. The LAC curve will be tangent to each of the short run AC curves. It shows the least possible AC producing a quantity of the output when scale of plant is varied.

Main points:

LAC curve is 'U' shaped. LAC curve is also called planning curve and envelop curve. Like the LAC curve the long run marginal cost curve (LMC) is also 'U' shaped.

Average cost:

It is the average total cost per unit of the output. When the **total cost is divided with no. of units of outputs** AC can be obtained.

$$AC = \frac{TC}{Q}$$

$$AC = AFC + AVC$$

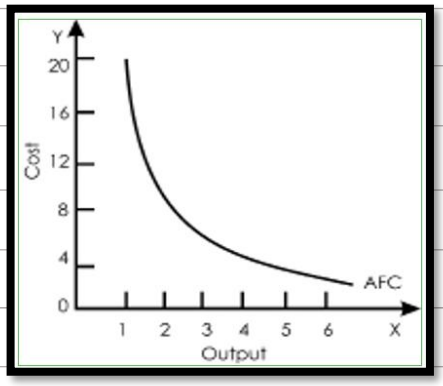
The average total cost curve is 'U' shaped

Average fixed cost:

It is the average total fixed cost per unit of output when TFC is divided with no. of units of output AFC can be Obtained

AFC = TFC/Q

The AFC curve slopes downwards from left to right and it is Rectangular hyperbola.

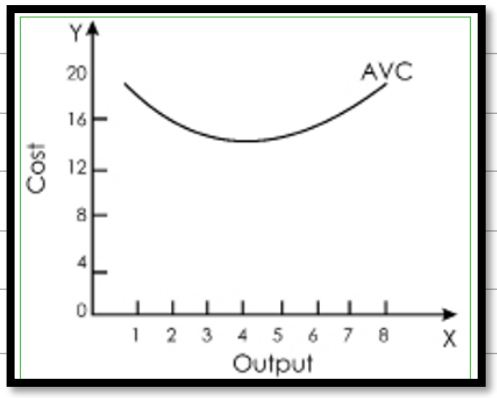


Average variable cost:

It is the average total variable cost per unit of output when the TVC are divided with no. of units of output AVC can be obtained

$$AVC = TVC / Q$$

The AVC curve will be in 'U' shape

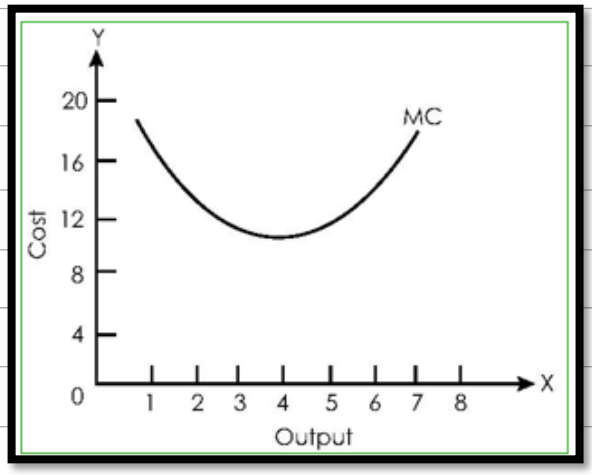


Marginal cost:

It is the additional cost to produce the additional unit of a thing (or) one more unit of a thing. The change in the total cost is also called marginal cost.

$$MC = \Delta TC / \Delta Q$$

Marginal cost curve is also 'u' shaped



Difference between Marginal Cost and Average Cost:

Average cost:

It is the average total cost per unit of the output. When the total cost is divided with no. of units of outputs AC can be obtained.

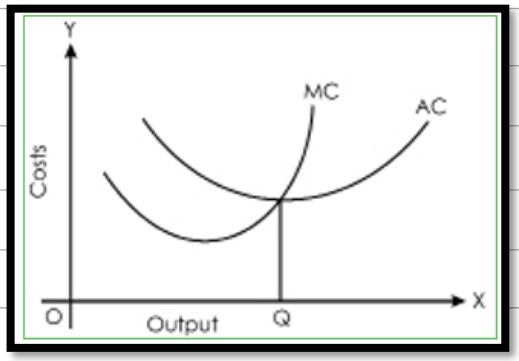
$$AC = TC/Q \text{ or } AFC + AVC$$

Marginal cost:

It is the additional cost to produce the additional unit of a thing (or) one more unit of a thing. The change in the total cost is also called marginal cost.

$$MC = \Delta TC / \Delta Q$$

The difference between MC and AC can be explained by the following diagram



In the above diagram in the Ist stage both MC and AC go on diminishing.

The MC is less than AC, so in the Ist stage MC curve is below and AC curve is above. In the second stage when MC and AC go on increasing. The MC is more than the AC. So in this stage the mc curve is above and AC curve is below. Changes in the MC are more than changes in AC. MC curve cuts the AC curve when the AC is minimum (abnormal profits).

Total Costs:

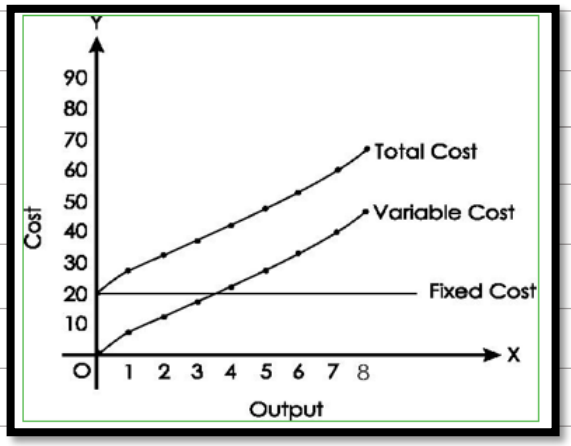
When the fixed cost are added with variable costs then the total cost is obtained, when the output increases total costs also increases and when the output decreases total costs also decreases. The total cost curve will slope upwards from the left to right as there is direct relationship between output and total cost.

The TC curve starts above the origin and where TFC curve is started.

TC = TFC + TVC

Output	TFC	TVC	TC
0	20	0	**20**
1	20	18	**38**

2	20	30	50
3	20	40	60
4	20	52	72
5	20	65	25
6	20	82	102
7	20	106	126
8	20	140	160



ECONOMIES OF SCALE

Economies of large-scale production:

Economies of scale are the **reduction in the per unit cost of production as the volume of production increases**. When the output is carried on larger quantities there are some advantages. These advantages are called economies of the large scale production. These economies are divided in to 2 types. They are:

a) Internal economies

b) External economies

a) **Internal Economies:**

When a firm expands its size of business (or) increases its output, **it gets some advantages. They are called internal economies.** These internal economies are related to a **single firm** and not related to all other firms in the industry.

Types of the internal economies (Advantages to a single firm when it expands):

i) **Labour economies:**

Division of labour and specialization are possible more in large-scale operations. Different types of workers can specialize and do the job for which they are more suited. As a result of this, **quality and speed of work improve**.

ii) **Technical economies:**

A large firm will be able to install large capacity of machines in place of small sized machines. It also adopts latest technologies. These will give **mechanical advantage over small firms and costs will be minimum.**

iii) **Managerial economies:**

Highly talented managers of specialized skills will be employed by large firms. It helps to makes **better decisions in the production**.

iv) **Marketing economies:**

Large scale purchase of raw materials and sale of finished goods give the advantage of transport concessions to the firm. **Advertisement costs will be less due to large output sales.**

v) **Financial economies:**

Large firms will be able to **borrow credit easily**. These firms will be able to offer securities and their goodwill in the market enables them to borrow at **reasonable rate of interest**. They also raise capital by attracting investors.

vi) **Research and Development:**

Improvements in technology, efficient use of resources and improvement in quality of products depend on research. Only large firms can afford to bear the expenditure on research.

vii) **Economies Related to Transport and Storage costs:**

Large firms are able to enjoy **freight concession from railways and road transport** as its uses its own transport means and large vehicles which results in the fall of per unit transport costs. Similarly, a large firm can also have its own storage godowns and can save storage costs.

viii) **Risk bearing economies:**

Generally, large firms **diversify their production into different goods and services.** Therefore, even if there is a loss in one item of good it can be covered by profit in other goods.

Internal diseconomies (Disadvantages due to over-expansion of firm):

Internal diseconomies are those **disadvantages which are internal to the firm and accrue to the firm when it over expands its scale of production**. The main internal diseconomies of scale are as follows:

i) **Management diseconomies**

These diseconomies occur primarily because of **increasing managerial difficulties due to large scale of operations**. It becomes **difficult** for the top management to **exercise control** and to bring about proper coordination.

ii) **Technical diseconomies**

If a firm **frequently changes its technologies** and use new technologies and new machines, it may increase its costs. After a certain limit, the large size or volume of the plant and machinery may also prove disadvantageous.

iii) **Risk bearing diseconomies**

The business cannot be expanded indefinitely because of the principle of increasing risk. The risk of the firm increases because of **reduction in demand, change in fashion and introduction of new substitutes in the market.**

iv) **Marketing diseconomies**

A large firm is forced to spend more on bringing and **storing of raw materials and selling of finished goods in the distant markets**.

v) **Financial diseconomies**

A large firm has to borrow a **large amount of money even at higher rate of interest**. It imposes a burden on the financial position of the firm.

Impact of internal economics and internal diseconomies on Long Run Average Cost (LAC) curve:

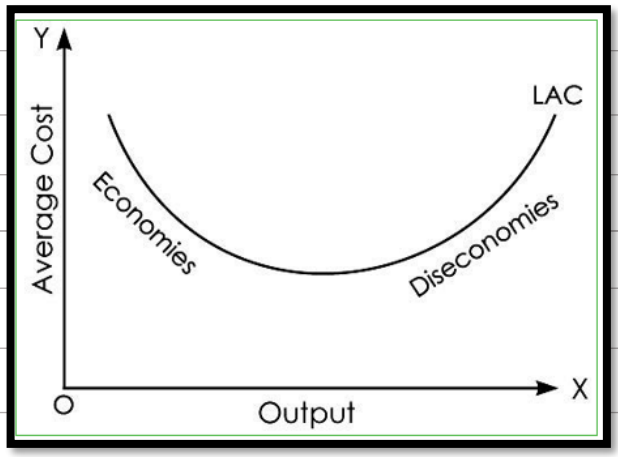
- Internal Economies → **LAC falls**

- *Internal Diseconomies → **LAC rises***
- *Result → **U-Shaped LAC Curve***

Reason:

Economies operate first → cost decreases

Diseconomies operate later → cost increases



b) ***External Economies:***

Firm is a unit, the group of firms is called industry. *When industry is expends there are some advantages. These advantages are enjoyed by all the firms in the industry so they are called external economies. These economics are opened for all the firms which means that they are not related to a single firm.*

Types of External Economies (Advantages to all firms due to expansion of industry):

i) ***Economies of localization (or) concentration***

Location of several firms at one place makes certain facilities available. *Local authorities may develop roads, communication, power, irrigation etc. Other facilities like*

banking, insurance, skilled labour will come up in the area. These arrangements benefit all the firms located in that place.

ii) **Economies of disintegration (or) specialization**

Production of goods can be **split into different parts** and each firm may take up one part of producing the goods. This **will result in specialization and improvement of performance of each firm in the production**. This division of labour helps to produce more output and reduces costs of production.

iii) **Economies of related information services**

All the firms in the area are dealing with the same goods. **Information can be shared** among the firms about raw material, skilled labour, marketing etc. **Expenditure on these items can be reduced** and there will be mutual advantage to all the firms.

iv) **Economies of producers' organization**

Collective research by all the firms on new products, technologies will help **reduce expenditure**. The fruits of research can be enjoyed by all the firms.

External diseconomies (Disadvantages due to industry expansion):

Diseconomies which accrue to the firms as a result of the expansion in the output of the whole industry are termed external diseconomies. The main external diseconomies are as follows:

i) **Increase in the input prices**

When the industry expands, the demand for factor-inputs increases. As a result, **the input prices** (such as wages, prices of raw materials and machinery equipments, interest rates,

transport and communication rates etc.) **shoot up.** This causes the cost of production to rise.

ii) **Pressure on infrastructure facilities**

Concentration of firms in a particular region creates undue pressure on the infrastructure facilities – transportation water, sanitation, power and electricity etc. As a result, **bottlenecks and delays in production process** become frequent which tend to raise per unit costs.

iii) **Exhaustible natural resources**

Diseconomies may also arise due to **exhaustible natural resources**. Doubling the fishing fleet may not lead to a doubling of the catching of fish; or doubling the plant in mining or on an oil-extraction field may not lead to a doubling of output.

iv) **Diseconomies of disintegration**

When the production of a commodity is disintegrated among various processes and sub-process, it may prove disadvantageous after a certain limit. The problem and fault in any one unit may create limit. The **problem and fault in any one unit may create problem for whole of the industry,** Coordination among different concerns also poses a problem.

Impact of external economies and external diseconomies on LAC curve:

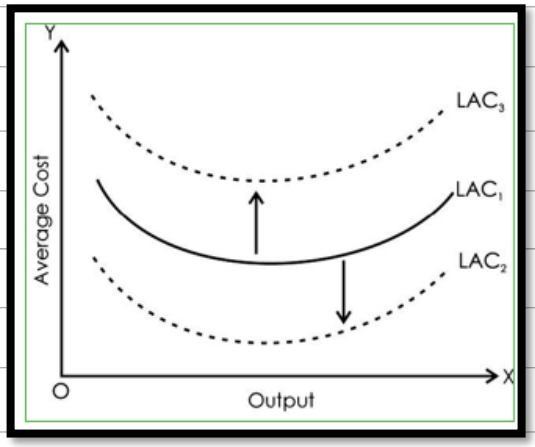
External Economies → **LAC shifts downward**

External Diseconomies → **LAC shifts upward**

Along same LAC:

- Falling portion → Economies of Scale

- *Rising portion → Diseconomies of Scale*



CONCEPTS OF REVENUE

*It is the **income obtained by the firm or producer by the sale of goods and services** in the market. There are three concepts in revenue. They are:*

a) **Total Revenue:**

*It is the **total amount of income** obtained by the firm 'or' producer **by the selling of total goods and services in the market.***

The sum of all marginal revenue (MR) is also called total revenue.

$$TR = PXQ$$

(or)

$$TR = \Sigma MR$$

Where:

P = Price

Q = Quantity

b) **Average Revenue:**

It is the **revenue per unit of output to be sold in the market**. When the total revenue divided with no. of units of output, AR can be obtained.

$$AR = TR/Q$$

c) **Marginal Revenue:**

It is the **additional revenue** obtained by the firm (or) producer **by selling additional unit of a thing** (or) one more unit of a thing. The change in the total revenue is also called marginal revenue

$$MR = \Delta TR/\Delta Q$$

(or)

$$MR = TR_n - TR_{(n-1)} \text{ units}$$

REVENUE CURVES UNDER DIFFERENT MARKETS:

The revenue curves are different from one market to another market. They are in one type in perfectly competitive market and another type in imperfectly competitive market.

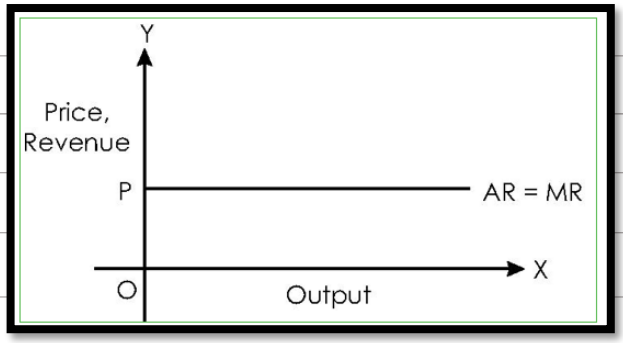
i) **AR and MR curves under Perfectly Competitive market**

In perfect competition market in brief, the price is constant as the goods are homogeneous. So how the AR and MR are changed when the output is increased is shown in following table:

Output	Price	TR	AR	MR
1	10	10	10	10
2	10	20	10	10
3	10	30	10	10
4	10	40	10	10

5	10	50	10	10

From the above table AR and MR curves can be drawn as below:



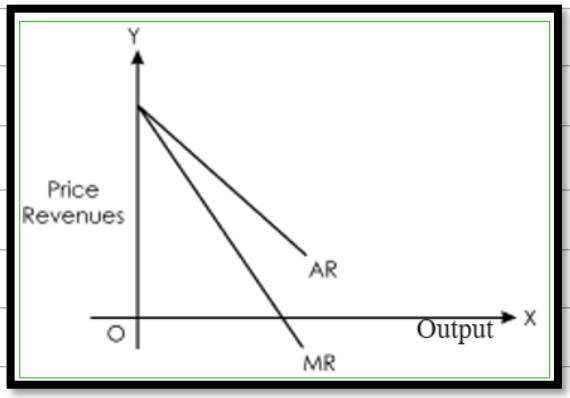
In the above diagram AR = MR curve is parallel to OX-axis. Because the price is constant in this market.

ii) **MR and AR curves under Imperfect market:**

In imperfect market, the price is changed. When the seller wants to increase the sales he must reduce the price. When the price is decreased, then the average revenue and marginal revenue are also decreased. This can be shown by the following schedule.

Output	Price	TR	AR	MR
1	10	10	10	10
2	9	18	9	8
3	8	24	8	6
4	7	28	7	4
5	6	30	6	2

From the above table AR and MR curves can be derived. This can be shown by the following diagram.



In imperfect market both MR and AR curves slope downwards, from left to right. Here the MR curve is below the AR curve.

The price is always equal to "Average revenue" (P = AR) in all markets. Also MR is half of the AR.

FORMS OF MARKET

PART I

PRICING OF PRODUCTS AND SERVICES IN VARIOUS FORMS OF MARKETS

MEANING OF MARKET

a) A market refers to a **system or arrangement** where buyers and sellers interact for the **purchase and sale** of goods and services.

b) A market does not necessarily mean a physical place.

c) It includes:

- ✓ buyers
- ✓ sellers
- ✓ commodity
- ✓ price and
- ✓ communication between buyers and sellers.

d) The market may exist through personal contact, telephone, internet or agents.

e) Price is determined through interaction of demand and supply.

TYPES OF MARKET

Markets can be classified on different bases:

A) On the Basis of geographical Area

On the basis of geographical area covered, markets are classified into:

a) **Local Markets:**

When buyers and sellers are **limited to a local area** or region, the market is called a local market. Generally, **highly perishable goods** and bulky articles, the transport of which over a long distance is uneconomical' command a local market.

In this case, the extent of the market is limited to a particular locality.

For example: locally supplied services such as those of hair dressers and retailers have a narrow customer base.

b) **Regional Markets:**

Regional markets **cover a wider area** such as a **few adjacent cities**, parts of states, or cluster of states. The size of the market is generally large and the nature of buyers may vary in their demand characteristics.

For example: Mekhela Chador (Traditional Assamese Saree) is primarily worn by women in Assam and adjoining areas.

c) **National Markets:**

When the demand for a commodity or service is **limited to the national boundaries of a country**, we say that the product has a national market. The trade policy of the government may restrict the trading of a commodity to within the country.

For example: Hindi books may have national markets in India; outside India one may not have market for Hindi books.

d) **International markets:**

A commodity is said to have international market when it is **exchanged internationally**. Usually, high value and small bulk commodities are demanded and traded internationally.

For example: Gold and Silver are examples of commodities that have international market.

The above classification has become more or less out-dated as we find that in modern days even highly perishable goods have international market.

B) On the Basis of Time

Alfred Marshall conceived the '**Time' element** in markets and on the basis of this, markets are classified into:

a) **Very short period market:**

Market period or very short period refers to a period of time in which **supply is fixed and cannot be increased or decreased.**

Commodities like vegetables, flower, fish, eggs, fruits, milk, etc., which are perishable and the supply of which cannot be changed in the very short period come under this category. Since supply is fixed, very short period price is dependent on demand.

An increase in demand will raise the prices vice versa.

b) **Short-period Market:**

Short period is a period which is slightly longer than the very short period.

In this period, **the supply of output may be increased by increasing the employment of variable factors with the given fixed factors and state of technology**.

Since supply can be moderately adjusted, the changes in the short period prices on account of changes in demand are less compared to market period.

c) **Long-period Market:**

In the long period, **all factors become variable and the supply of commodities may be changed by altering the scale of production**. As such, supply may be fully adjusted to changes in demand conditions.

C) On the basis of Nature of Transactions

a) **Spot or cash Market:**

Spot transactions or spot markets refer to those **markets where goods are exchanged for money** payable either **immediately** or within a short span of time.

For example: grains sold in the Mandi at the current prices and cash is payable immediately are thus part of Spot Market.

b) **Forward or Future Market:**

In this market, transactions involve contracts with a promise to pay and deliver goods at some **future date**.

For example, purchase of foreign currency contract at future rate from bank.

D) On the basis of Regulation

a) **Regulated Market:**

In this market, **transactions are statutorily regulated** so as to put an end to unfair practices. Such markets may be established for specific products or for a group of products.

For example: stock exchange.

b) **Unregulated Market:** It is also called a **free market** as there are no stipulations on the transactions.

For example: Traditional Village market, street vendors

E) On the basis of volume of Business

a) **Wholesale Market:**

The wholesale market is the market where the **commodities are bought and sold in bulk** or large quantities. Transactions generally take place between traders. i.e. Business to Business (B2B).

b) **Retail Market:**

When the **commodities are sold in small quantities**, it is called retail market. This is the market for ultimate consumers i.e. Business to Consumer (B2C)

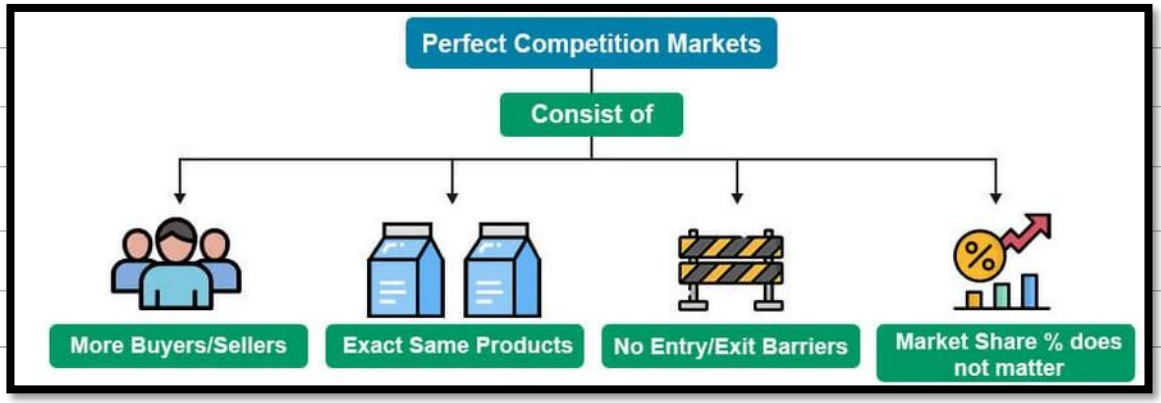
F) On the basis of competition among the seller or producers of firms

Markets can be classified into two types. They are

a) Perfect competition market

b) Imperfect competition market

a) **Perfect Competition**



In a perfectly competitive market there are numerous buyers and sellers selling homogenous products and **no one is able by his own actions to influence the market price**, since all have access to full and immediate knowledge of the price at which the trading is currently taking place.

Definition:

"The more nearly perfect market is the stronger tendency for the same price to be paid for the same thing in all parts of the market" – **Alfred Marshall.**

Features of Perfect Market:

The perfect competition market has the following features.

i) **Large number of sellers and buyers:**

- There will be a large number of sellers and buyers for a good in this market. It means the output of a buyer or a seller is a small part of the total output.

- A single producer or seller cannot change the price by his actions.
- None of them is large enough to influence the price.
- Therefore, a seller takes the price decided by the market. The producer is a price taker.

ii) **Homogeneous commodities:**

Products in this market are **similar in every aspect**. A consumer gets the same good whenever he purchases. As a result there will be one price all over the market.

iii) **Free entry and exit:**

Any firm can enter into the production as per its desire. Finally it can leave the production at any time. This helps new firms to enter into business when conditions are favourable. As long as a firm earns super normal profits, it usually stays in competition. But when the firm ends up with losses, it would leave the market.

iv) **Mobility of factors of production:**

Factors of production will **move from one production to another** easily. This is also useful for free entry and exit of firms factors (land, labour, capital) move to the production activities where they get higher incomes.

v) **Absence of transport cost:**

- Under perfect market transport costs should not be added in the price.
- If transport costs are added the goods are available at the fewer prices at the near markets and they are available at the higher prices at distant markets.
- Existing of two prices for the same thing in different parts is against for perfect market. So transport cost should not be added.

vi) **Perfect knowledge of market:**

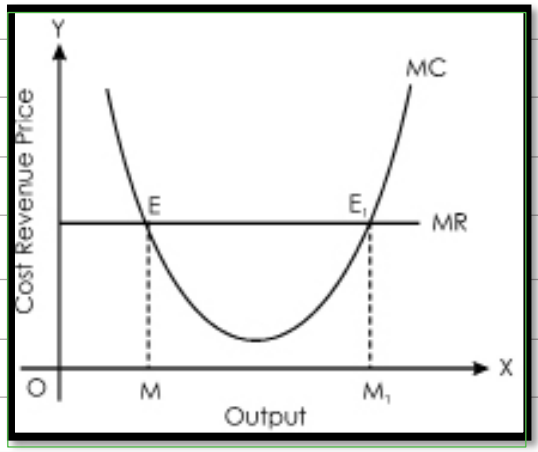
Buyers and sellers in this market will have a clear knowledge about market conditions. So that there will be one price throughout the market. Because of perfect knowledge, **sales and purchases of commodities take place as one price**.

Equilibrium of the firm under perfect Market:

Equilibrium means **constant position** (or) unchanged position. The firm reached the equilibrium position when it gets **maximum output**. To determine the maximum output two conditions must be satisfied. They are:

1) Marginal Cost is equal to Marginal Revenue **(MC = MR)**
2) MC curve cuts the MR curve from below.

The equilibrium of the firm can be shown by the following diagram.



In the above diagram output is shown on OX-axis. Costs and Revenues are shown on OY-axis. In the diagram MR is the Marginal Revenue curve and MC is the Marginal Cost Curve. MC intersects the MR curve from below at point E_1. It means at point E_1 two conditions are satisfied. So the equilibrium output is determined as M_1.

Type of Equilibrium:

The equilibrium of the firm can be divided into two types. They are:

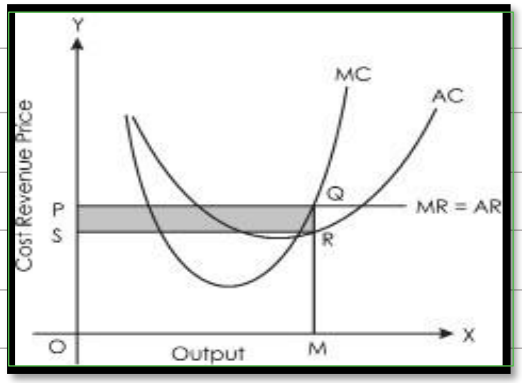
a) Short period equilibrium and

b) Long period equilibrium.

In the **short period equilibrium** the firm can get either **abnormal profits or losses.** But in the **long period equilibrium** it gets **only normal profits.**

i) **Abnormal profits:**

When the firm is in the short period equilibrium sometimes it can get abnormal profits. This can be shown by the following diagram.



In the above diagram output is shown on OX-axis. Costs, Revenue and prices shown on OY-axis. In the diagram MR is the Marginal Revenue curve and MC is the Marginal Cost curve. MC intersects the MR curve from below at point Q. So the equilibrium output is determined as OM at this output the price (AR) is determined as OP. The average costs (AC) is as here AR>AC. So the firm can get abnormal profits.

Abnormal profits = TR – TC

= Q x P (AR) – Q x AC

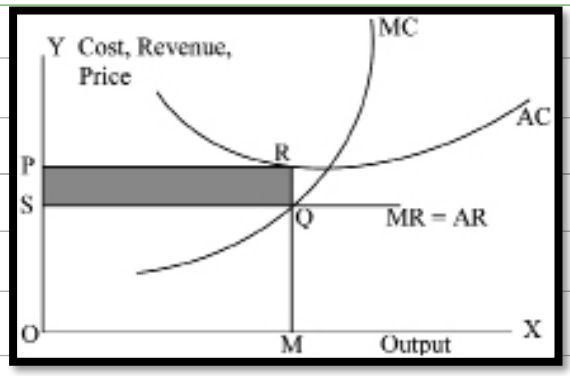
= OM x OP – OM x OS

= OPQM – OSRM

= PQRS

ii) **Losses:**

When the firm is in the short equilibrium sometimes it may get losses. This can be shown by the following diagram.



In the above diagram output is shown on OX-axis costs, and revenues and prices are shown on OY-axis. In the diagram MR is the Marginal Revenue Curve and MC is the Marginal Cost Curve. It intersects the MR curve from below at point Q. So the output is determined as OM at this level of output. The price (AR) is OS and the average costs (AC) are OP. Here AR < AC so the firm will get losses.

Losses = TC – TR

= Q x AC – Q x P (AR)

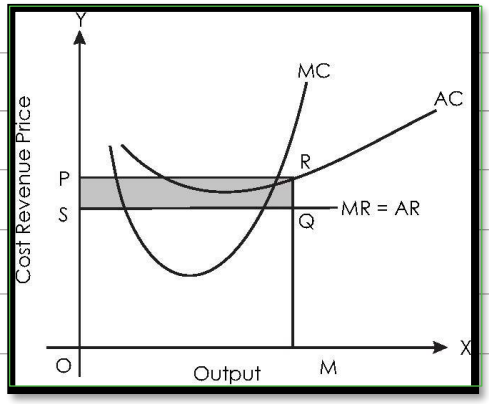
= OM x OP – OM x OS

= OPRM – OSQM

= PRQS

Long period equilibrium – Normal Profits:

When the firm is in the long period equilibrium it gets only normal profits. This can be shown by the following diagram



In the above diagram output is shown on OX-axis Costs, Revenue, Price is shown on OY-axis. In the diagram LMR is the long run Marginal Revenue curve. LMC is the long run Marginal Cost Curve. It intersects the LMR from below at point Q. So the equilibrium output is determined as OM at this level of output the price (AR) is OP. The average (AC) is also OP. Here AR = AC. It means the total revenue (OPQM) is equal to total cost (OPQM). So the firm will get only normal profits. Point Q is called Break Even Point or revenue and cost equalizing point.

b) **Imperfect Competition**

The imperfect market appears in various forms. They are

I. *Monopoly*
II. *Duopoly*
III. *Oligopoly*
IV. *Monopolistic competition*

I. MONOPOLY MARKET:

- The word Monopoly is derived from two words **'Mono' and 'Poly'.**
- Mono means **Single** and Poly means **seller.** In the market where there is only one seller or one producer or one firm it is said to be monopoly market.
- The single seller **supply the commodity to the entire market**.
- They are many restrictions for other producers to enter into the market as a result monopoly has no competition in the market.

Features of Monopoly:

The monopoly market has the following features:

i) **Single firm:**

A single firm produces the commodity in the market there is only one seller or one producer or one firm.

ii) **No close substitute:**

The produce supplied by the monopolist will not have close substitutes in the market. A consumer will not find a substitutes commodity for the monopoly products.

iii) **Strong barriers to entry:**

New firms cannot enter in the production due to the certain restrictions in market i.e. **huge investment, lack of technology; patents** etc. prevent the new firms to enter the market.

iv) **Firm and Industry are same:**

As there is one firm in monopoly market there is no difference between firm and industry.

v) **Price maker:**

In this market the producer can determine the price of the commodity so the **producer in the market** is said to be price maker.

vi) **Nature of AR & MR curves:**

The average Revenue Curve (AR) and Marginal Revenue Curve (MR) both are slopes downwards from left to right because when a seller wants to sell the more of output he must reduce the price when the price is decreased both AR & MR are declining.

vii) **Price discrimination:**

The monopolist can **charge the different prices from the different customers** for the same goods orservices. The price is not uniform as in the perfect market competition.

viii) **Maximum profits:**

The main aim of monopoly is to earn to get the maximum profits.

Price and output determination:

In a monopoly market, there is a **single seller** (monopolist) with no close substitutes. The monopolist faces a **downward-sloping demand curve** (Average Revenue - AR curve) and is a **price maker**.

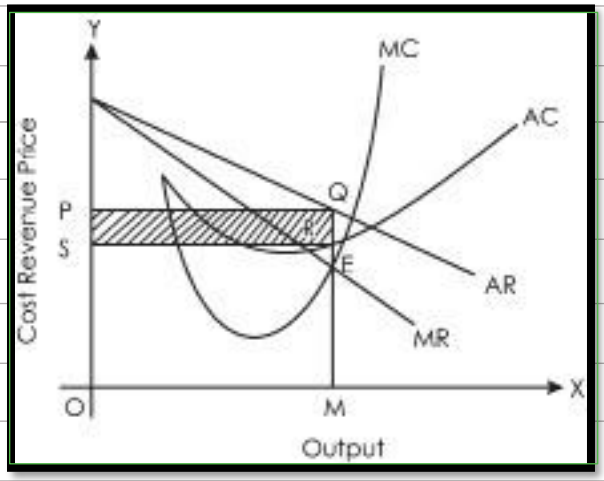
The monopolist cannot control both price and quantity simultaneously:

- To increase price, output must decrease (move up along AR).
- To increase output, price must decrease (move down along AR).

Objective: Profit maximization at equilibrium where **MC = MR**, with MC curve

intersecting MR from below.

In the below diagram output is shown on OX-axis. Cost, Revenue and Price are shown on OY-axis. In the diagram MR is the Marginal Revenue Curve and MC is Marginal Cost Curve. It intersects the MR curve at point E so the equilibrium level of output is determined as OM at this level of output the average revenue is at point Q. So the price is determined as OP the average cost is OS. Here AR > AC as the monopoly is to earn maximum profits.



Abnormal or super normal profits = TR – TC

= O x AR – Q x AC

= OM x OP – OM x OS

= OPQM – OSRM

= PQRS

II. DUOPOLY MARKET:

Where there are **two sellers or two producers or two firms** it is said to be duopoly market. It is also one of the forms of oligopoly markets.

III. OLIGOPOLY MARKET:

The word oligopoly is derived from two **Greek words oligo and pollien**, **oligo means "A few", Pollien means seller**. Where there are a few firms or few producers or few sellers, it is said to be oligopoly market.

For example: automobile industry, gas industry etc.

A market with a small number of producers is called oligopoly. The product may be homogeneous or there may be differences. Since producers are a few each firm produces a large portion of the output. It is a market with competition among the few.

i) **Less number of firms:**

The numbers of producers are a few in this market. Each one produces a large part of the total output. He can control the output in the market. A firm can change the price by supplying either more or less.

ii) **Interdependence:**

In the oligopoly market the **decisions of every producer affect other producers**. This is due to less number of producers in the market. A change in the decisions of a producer (output or price) makes the other producers to change their decisions.

iii) **Selling costs:**

Sometimes commodities are produced with small differences. Then each firm makes a huge expenditure on advertisements. It is in the oligopoly that we can see the highest expenditure on selling costs.

iv) **Uncertainty:**

It will be difficult to guess what kind of demand curve will be there for a firm. Every time when a producer changes his decision, other producers will also change their decision. Therefore, it is not possible to expect price, output conditions to be the same in this market.

v) **Rigid price:**

Usually in this market firms will not change the price, they follow a rigid price. **A firm cannot increase price because other firms will not raise their prices**. The firm that increases the price will be put to loss. If one firm reduces its price others will also do the same. Therefore, all the firms will follow a price without making any changes in it. Hence it is called rigid prices.

Price and output determination under Oligopoly Market:

a) **Cournot's Duopoly Model:**

According to Cournot each duoplist believes that regardless of his actions and the effect upon the market of the product the other firm will go on producing the same commodity. Cournot output is two- third of the competitive output and the price is two – third of most profitable i.e., monopoly price.

b) **Stackleberg Duopoly Model:**

The producer under duopoly structure incorporates the decision level of his rival. It then incorporates in its own profit function and thereby maximizes profit. Non-collusion is practiced at large. Leader-follower relation emerges.

c) **Bertrand Duopoly Model:**

In the Bertrand model, the assumptions/conjectures of the model are similar to the Cournot model but the former is based upon price as the strategy variable. According to this model each producer can always lower the price until price is equal to cost of production.

d) **Edgeworth Model:**

Each duopolist believes that his rival will continue to charge the same price as he is just doing irrespective of what price he himself sets in. No determinate equilibrium can exist under duopoly.

e) **Collusive Oligopoly:**

According to this model a cartel is formed when firms jointly fix the price and output with a view to maximize joint profit.

For example: OPEC countries form a cartel.

IV. MONOPOLISTIC COMPETITION MARKET:

The concepts of monopolistic competition was introduced by **Prof. Chamberlin**. It is a market with **many sellers for a product but the products are different in certain respects**.

The features of monopoly and competition are combined in this market. Hence, it is called monopolistic competition.

For Example: Cosmetics, Soaps etc.

Characteristics of Monopolistic Competition:

The main features are:

a) **A considerable number of producers:**

A commodity is produced by a considerable number of producers. Since there are more number of producers **no one controls the output in the market**. Competition will be high among the producers.

b) **Product differentiation:**

The commodity of each producer will be different from that of other producers. The difference may be due to material used, col sign, smell, packaging, trademark etc. Because of this each product will have specific identification in the market.

c) **Entry and exit:**

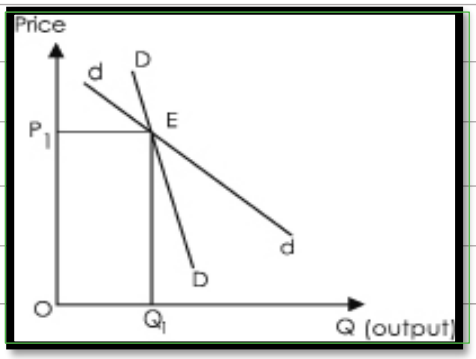
Firms are allowed to enter into production and leave the market. When profits are high new firms will join. In case of losses inefficient firms will leave.

d) **Selling costs:**

An important feature of this market is every firm makes expenditure to sell more output. Advertisement through newspapers, journals, electronic media, sales representatives, exhibitions, free sampling help to promote the sales. Lot of expenditure is made on these items under this market.

e) **Imperfect knowledge:**

Buyers will have an imperfect knowledge about commodities. Sometimes products may be the same but consumers think that a particular good is superior than another. Due to the advertisements and other devices consumers purchase the commodities.



f) **Price decision:**

Each firm produces a commodity with small differences. It is due to this reason that a firm will decide the price for its product. The demand curve for a firm will be downwards sloping and more elastic.

Price and output determination under monopolistic competition market: Demand curves:

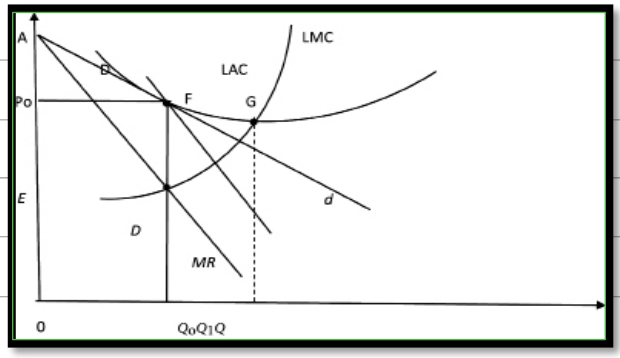
In monopolistic competition (many sellers, differentiated products, free entry/exit), firms face two demand curves:

a) ***Perceived Demand Curve (dd)**: Shows **price-quantity combinations** where the firm believes **rivals won't react**. Firm acts like a monopolist on this curve (downward-sloping, kinked at current price).*

b) ***Proportional Demand Curve (DD)**: Captures impact if **all rivals change price proportionally**. More elastic; shifts with industry actions.*

***Price Determination**: Where **dd and DD intersect**. Firm sets price here, balancing perceived and actual demand.*

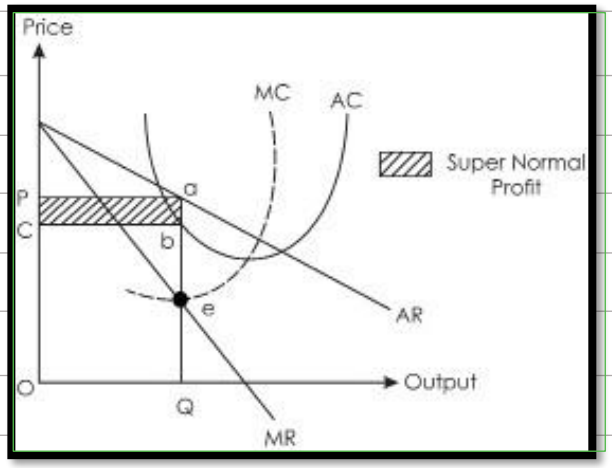
Equilibrium condition under monopolistic competition:



Same as perfect competition:

✓ **MC = MR.**

✓ MC curve cuts MR from below.



TR = Q × P(P (AR) TC – Q × AC

= OQ × OP – OQ × OC

= OPaQ – OCbQ

Abnormal profit = Pabc

In this situation, it is possible for the firm to earn super-normal profit or abnormal profit

Long-run equilibrium under monopolistic competition

Excess profits earned by each firm during the short-run would attract new firms into this market. As there is no barrier on the entry into the market, new firms can easily enter into the market in the long-run. As a result, the actual market-share of each firm will be less than before. So, the actual market-share demand curve shifts in the leftward direction. At that situation, each firm may think that, with a fall in their product price, more quantity can be sold following its perceived demand curve. Thus, in an attempt to increase the profit, a firm wants to lower the price. It expects to sell more along its perceived demand curve. A situation of price competition would arise when each firm tries to do the same thing independently.

Selling costs and monopolistic competition

The recognition of product differentiation provides the rationale for the selling expenses (particularly expenses for advertisement) incurred by any firm under monopolistic competition.

The firm desires to accentuate the differences between its own brand and other brands of the product available, through its advertising and other selling activities.

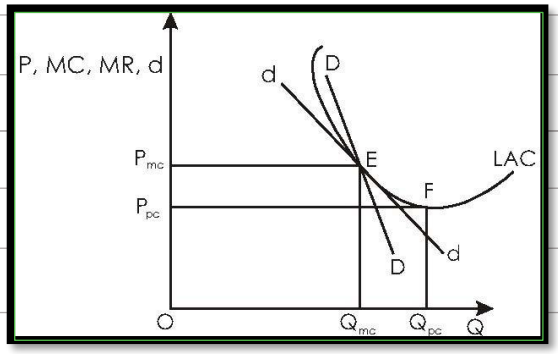
Thus, selling expenses have a definite role in strengthening the preferences of the consumers for the advertised product, and making the demand for the product relatively inelastic.

Chamberlin argues that there are both economies and diseconomies of advertising with changes in the level of output.

At the initial stage, expansion in sale will not require an equi-proportionate increase in selling expenses; and this causes a decline in spend more per unit of output to attract buyers of other varieties, and the average selling costs will rise.

So, the average selling costs curve becomes U-shaped and the vertical summation of the U-shaped Average Cost (AC) curve and the average selling cost curve, would result in the true AC curve.

It operates less than its full utilization level. This call for the emgerance of the excess capacity in the market.



According to the above diagram the difference between Qmc and Qpc captures the extent of excess capacity

PRICING STRATEGIES IN VARIOUS FORMS OF MARKET PRICING STRATEGIES:

a) **Cost-plus pricing:**

Cost-plus pricing is the simplest pricing method. The firm calculates the cost of producing the product and **adds on a percentage (profit)** to that price to give the selling price.

b) **Limit pricing:**

A limit price is the price **set by a monopolist** to **discourage economic entry** into a market. The limit price is often lower than the average cost of production of just low

enough to make entering not profitable.

c) **Penetration pricing:**

Setting the **price low in order to attract customers** and gain market share. The price will be raised later once this market share is gained.

d) **Price discrimination:**

Setting a **different price for the same product** in different segments to the market.

For example, this can be for different classes, such as ages, or for different opening times.

e) **Psychological pricing:**

Pricing designed to have a positive psychological impact.

For example, selling a profit at ₹ 3.95 or ₹ 3.99, rather than ₹ 4.000.

f) **Dynamic pricing:**

A flexible pricing mechanism made possible by advances in information technology, and employed mostly by internet based companies.

g) **Price leadership:**

An observation made of oligopolistic business behavior in which one company, usually the dominant competitor among several, leads the way in determining prices, the others go on following.

h) **Target pricing:**

Pricing method where by the selling price of a product is calculated to produce a

particular rate of return on investment for a specific volume of production. The target pricing method is used most often by public utilities, like electric and gas companies, and companies whose capital investment is high, like automobile manufactures.

i) **Absorption pricing:**

Method of pricing in which **all costs are recovered**. The price of the product includes the variable cost of each item plus a proportionate amount of the fixed costs and is a form of cost-plus pricing.

j) **High-low pricing:**

Method of pricing for an organization where the goods or services offered by the organization are regularly priced higher than competitors, but through promotions, advertisements, and coupons, lower prices are offered on key items.

k) **Marginal cost pricing:**

In business, the practice of setting the price of a product to equal the **extra cost of producing an extra unit of output.**

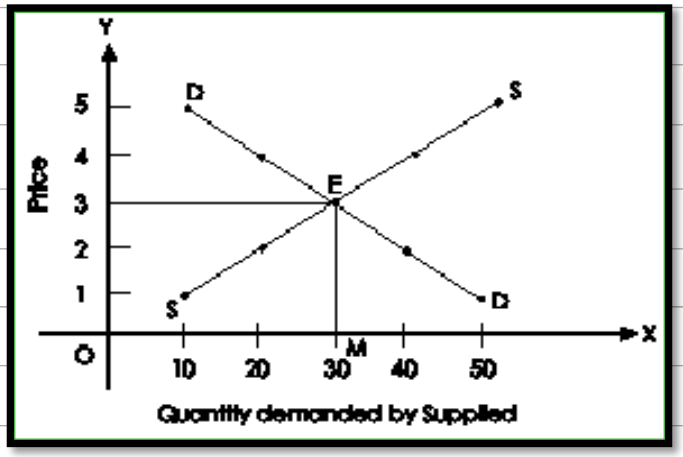
PART II

PRICE DISCRIMINATION

In a perfect situation price is decided by the market. Market brings about a balance between the commodities that come for sale and those demanded by consumers. It means the forces of supply and demand determine the price of the good. Equilibrium price is established at the point where the supply and demand are equal. A table helps us to understand and the changes in supply, demand and equilibrium price

Price	Quantity demanded	Quantity supplied
1	50	10
2	40	20
3	30	30
4	20	40
5	10	50

The above table shows the demand and supply schedule of good. Changes in price are always causing a change in supply and demand. As price increases there is a fall in the quantity demanded. It means price and quantity demanded have negative relation. But rise I prices has increased the supply of goods. The relation between price and supply of goods is positive. Every time a change in price is causing some change in the supply as well as demand. At one price ₹ 3 it can be observed that quantity supplied and demanded are equal. This is called equilibrium price. This process is explained with the help of a diagram.



In the above diagram demand and supply are shown on OX-axis, price is shown on OY-axis. In the diagram DD is the demand curve and SS is the supply curve. Both curves intersect at point E. It means the demand, supply are equal at OM level. So the equilibrium price is determined as OP.

If the seller charges different prices from the different customers for the same goods or services, it is said to be price discrimination. It is possible only in monopoly market. Hence it is called discriminating monopoly.

CLASSIFICATION OF PRICE DISCRIMINATION:

Prof. Pigou has classified the price discrimination into three types:

a) Price discrimination of first degree.
b) Price discrimination of second degree.
c) Price discrimination of third degree.

a) **Price discrimination of first degree:**

If the seller charges the different prices from the different customers on the basis of

paying capacity of the consumer, it is said to be price discrimination of first degree. It is thus called perfect price discrimination.

b) **Price discrimination of second degree:**

In this case the seller charges one price up to a limit of goods purchased, after that limit he charges the another prices, it is called price discrimination of second degree. It is also known as Block Pricing.

c) **Price discrimination of third degree:**

Irrespective of the paying capacity of the consumer and quantity of the goods purchased, if the seller charges the different prices it is said to be price discrimination of third degree. The markets of the product are made different on the basis of differences in elasticity of the demand of the different markets.

The price discrimination of third degree was commonly prevailed in the society.

Conditions for price discrimination:

A monopoly firm can sell the same product at two different prices to two different groups of buyers. This type of price discrimination becomes possible under the following circumstances:

a) **Different price elasticities of demand:**

The monopolist charges higher price for the product in a market where price elasticity of demand is relatively inelastic. On the other hand, he charges relatively lower price in a market where the price elasticity of demand is relatively elastic.

b) **Tariff barrier:**

If two markets are separated by a tariff wall, the monopolist can follow this principle of price discrimination.

For example, the monopolist can sell its product at a lower price in the foreign market, and at a higher price in the domestic market.

c) **Geographical distance between the markets:**

Price discrimination is also possible when two markets are separated from one another by geographical distance. In this case, the monopolist can sell its product at a lower price in a distant market and at higher price in the local market.

d) **Ignorance of the consumers:**

If the consumers remain ignorant about the difference in prices of the same product in two different markets, then also the monopolist can easily follow the policy of price discrimination.

e) **Typical behavior of the consumers:**

In some cases, a group of consumers consider higher price as an indicator of higher quality (the so called Veblen effect). Such typical behavior of the consumers creates an opportunity for the monopolist to follow the policy of price discrimination.

Conditions when price discrimination is profitable

Price discrimination, though possible in many situations, need not always be profitable. The objective of price discrimination is to maximise personal profit of the monopolist. Assume that the firm produces at a single plant and supplies to two markets. We have to determine the amount of sale and the price in each of the markets so that his total

profit is maximised.

Suppose the markets are 1 and 2. R_1 and R_2 are the total sales revenues from these two markets and q_1 and q_2 be the amounts sold in these two markets respectively. So the total revenue functions are

$$R_1 = R_1 (q_1) \text{ and } R_2 = R_2 (q_2)$$

Let C be the total cost of production where

$$C = C (q) = C (q_1 + q_2)$$

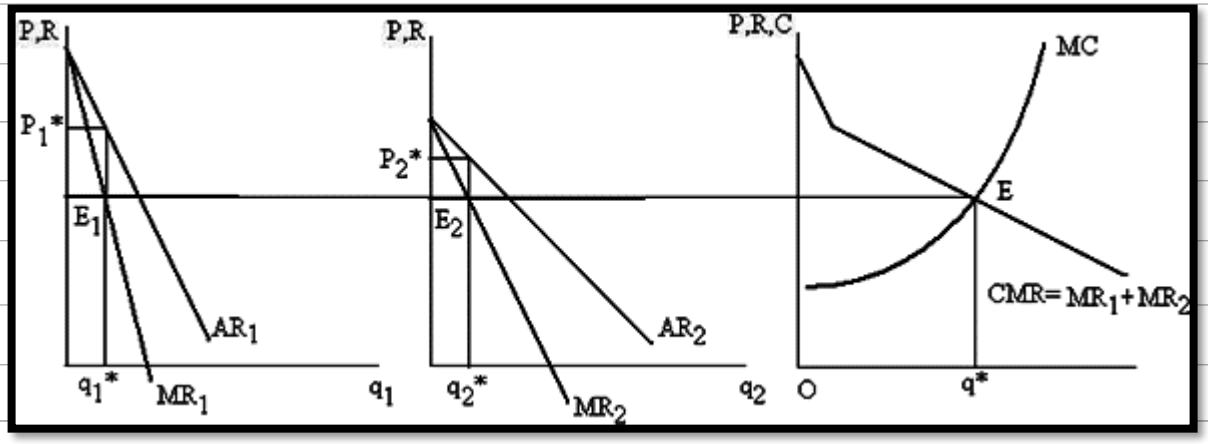
So the relevant profit function is $\Pi = R_1 (q_1) + R_2 (q_2) - C (q_1 + q_2)$ Thus, total profit depends on the quantities of sales in both the markets.

The necessary condition for profit maximisation is the equalizations of the marginal revenues in the two markets with the single marginal cost. That is- $MR_1 = MC$ (1)
And $MR_2 = MC$ (2)
Condition (1) shows that the monopolist will produce for the first market at such a point where the extra revenue from sale of one extra unit in the market is just equal to the extra cost of production. Similarly, condition (2) explains the optimum sale quantity in the second market in such a point that extra product cost for extra production can exactly be recovered by one extra unit of revenue from the market.
Combining (1) and (2) we get $MR_1 = MR_2 = MC$. This is the first order condition of profit maximisation under a common form of price discrimination.

The sufficient or second order condition is that the respective MR function will have lesser slopes than the MC i.e MC curve cuts both the MRs from below.

In the following diagram, the profit maximising levels of output and prices are determined

under third degree price discrimination. The horizontal axis of the third plot measures total quantity of production ($q = q_1+q_2$) and sale.



In the first and second part of the diagram, the equilibrium of the market 1 and 2 has been shown respectively. The last part of the diagram explains the equilibrium of the monopolist in total or aggregated framework.

The demand curve in 1 is less elastic than 2. The corresponding marginal revenue functions are MR_1 and MR_2. By adding them horizontally we arrive at the common MR (CMR) which is $MR_1 + MR_2$. The monopolist is in equilibrium at E where CMR = MC. Corresponding to that equilibrium in aggregate, E_1 is the equilibrium of the first market where $MR_1 = MC$. Similarly we get E_2 for market 2 where $MR_2 = MC$. The corresponding price in market 1 is P_1^* and quantity sold is q_1^* and for market 2, they are P_2^* and q_2^* respectively. The aggregate quantity sold is $q^* = q_1^* + q_2^*$. We see that $P_1^* > P_2^*$. Note that high price is charged in market 1 because of inelastic nature of the demand and lower price for relatively elastic demand for market 2.

MONEY AND BANKING

PART I

MONEY – TYPES, FEATURES AND FUNCTIONS

INTRODUCTION:

At present, money has become the bedrock for trading practices between persons or business entities. In earlier times, when the concept of money had not yet been introduced, barter systems enabled these transactions. It is an old method of exchange. People used to exchange services and goods for other services and goods in return.

DIFFICULTIES OF THE BARTER SYSTEM:

The difficulties of the barter system which may be enumerated as follows:

- × Lack of coincidence of wants.
- × Lack of store of value.
- × Lack of divisibility of commodities.
- × Lack of common measure of value.
- × Difficulty in making deferred payments.

a) **Lack of coincidence of wants:**

Under the barter system, the buyer must be willing to accept the commodity which the seller is willing to offer in exchange. The wants of both the buyer and the seller must coincide. This is called double coincidence of wants.

b) **Lack of store of value:**

Some commodities are perishables (like vegetables or milk). They perish within a short time. It was not possible to store the value of such commodities in their original form

under the barter system. They should be **exchanged before they actually perish**. Otherwise, they would not be available for exchange when the need actually arises in future.

c) **Lack of divisibility of commodities:**

Depending upon its quantity and value, it may become necessary to divide a commodity into small units and exchange one or more units for other commodity. But **all commodities are not divisible.**

For Example: if a horse is worth five sheep but you only need one sheep, you cannot "cut" the horse to complete the trade.

d) **Lack of common measure of value:**

Under the barter system, there was no common measure of value. To make exchange possible, it was necessary to determine the **value of every commodity in terms of every other commodity.** This makes it **impossible to determine a fair exchange ratio**

Example: how many bags of wheat equal one Horse?

e) **Difficulty in making deferred payments:**

Under barter system, **future payment** for payment **for present transaction** was not possible, because future exchange involved some or other difficulties.

For example: suppose it was agreed to sell specific quantity of rice in exchange for a goat on a future date keeping in view the present value of the goat. But the value of goat may decrease or increase by that date.

EVOLUTION OF MONEY:

The term 'Money' was derived from the name of Goddess "**Juno Moneta**" of **Rome**.

DEFINITION OF MONEY:

Money was invented to **overcome the difficulties of the barter system**. Several economists defined money in several ways:

Robertson: Robertson defined money as "anything which is **widely accepted in payments** for goods or in discharge of other kinds of business obligations".

Seligman: According to Seligman's definition, "Money is one that possesses **general acceptability**".

Walker: According to Walker, "**Money is what money does**".

TYPES OF MONEY

In any economic system usually, there are the operations/circulations of **four different types of money**. They are commodity money, fiat money, Fiduciary Money and commercial bank money.

a) **Commodity Money**

i) This is the **oldest form** of money made from valuable resources that **have intrinsic value** (value in themselves) independent of their use as currency.

Examples: Gold, silver, copper coins, or historically salt and cattle.

ii) Commodity money is closely related to (and originates from) a barter system, where goods and services are directly exchanged for other goods and services.

b) **Fiat Money**

i) The term 'fiat' means a **formal authorization** or proposition or a decree.

ii) This means fiat money gets its value from a **government order**.

iii) Here the government declares fiat money to be legal tender, which requires all people and firms within the country to accept it as a means of payment. If they fail to do so, they may be fined or even put in prison.

iv) Unlike commodity money, **fiat money is not backed by any physical commodity**. By definition, its intrinsic value is significantly lower than its face value.

Examples: All modern Indian Rupee notes (₹10, ₹100, ₹500, etc.) and coins.

c) **Fiduciary Money**

i) By the term 'fiduciary' it is meant the involvement of **trust**.

ii) Money that is accepted as a medium of exchange based on the trust between the payer and the payee. It is **not legally compulsory to accept this money**.

Examples: Cheques, drafts, and bills of exchange.

d) **Commercial Bank Money**

Also known as **Bank Money** or **Credit Money**, this refers to the portion of the money supply created by commercial banks through loans and advances (fractional reserve banking). **Any type of loan by the commercial banks** may be termed as commercial bank money.

FUNCTIONS OF MONEY

Money plays a significant role in the modern economic life of the human beings.

Primary Functions of Money

There are two key primary functions:

a) **Medium of Exchange**: Money is used to **buy and sell goods and services**. It removes the complications of barter, making trade straightforward and widespread.
Example: Using ₹100 to purchase groceries illustrates money's medium of exchange function.

b) **Measure of Value (Unit of Account)**: Money provides a **common measure to value goods and services**. This allows prices to be set and compared easily in the market.
Example: If a book is priced at ₹200 and a pen at ₹20, their values are easily compared because both are expressed in rupees.

Secondary Functions of Money

Secondary functions add **flexibility and convenience** by building on the primary roles of money:

a) **Store of Value**: Money allows people to **save their wealth for future use**. Money can be kept for a significant period without losing its value if inflation is low.
Example: Saving ₹5,000 in a bank for an upcoming trip.

b) **Standard of Deferred Payment**: Money is a widely accepted tool for making **future payments and settling debts.**

Example: Students taking a loan and agreeing to repay after completing their course.

c) **Transfer of Value**: Money makes it easy to send or give wealth to someone else, or to make purchases from distant locations.

Example: Transferring money to a family member in another city.

Contingent functions:

Besides the primary and secondary functions, money has certain contingent functions also. They may be stated as follows:

a) **Measurements and distribution of national income.**

National income of a country can be measured in money by **aggregating the values of all commodities**. Similarly, national income can be distributed to different factors of production by making payments to them in money.

b) **Money equalizes marginal utilities/productivities:**

The consumers can equalize the marginal utilities of different commodities purchased by them with the help of money. They can thus maximize their satisfaction. Similarly the firms can also equalize the marginal productivities of different factors of production and maximize their profits.

c) **Basis of credit:**

Credit is created by banks from out of the primary deposits of money. The supply of credit in an economy is **dependent on the supply of nominal money**. It is not possible

to create credit if there is no reserve money.

d) **Liquidity:**

Money is the most important liquid asset. In terms of liquidity, it is **superior to all other assets**. Money is **hundred percent liquid.**

MONEY SUPPLY:

Money supply refers to the **total stock of money available in an economy** at a given time. It is not just cash in hand but also includes deposits in banks and other near-money assets.

Components of money supply

Money supply includes all money in the economy. The components of money supply may vary from country to country. Broadly speaking, money supply composes of the following:

a) Currency issued by the Central Bank.

b) Demand deposits created by commercial banks.

a) **Currency issued by the Central Bank:**

In any country, the Central Bank issues currency. Currency consists of **paper notes and coins.**

In India, Reserve Bank of India which is the Central Bank of the country issues notes in the denominations of ₹ 2000, ₹500, ₹100, ₹50, ₹20 and ₹10. The one rupee note and coins are issued by the Finance Department of the Government of India.

b) **Demand deposits created by Commercial banks:**

Bank deposits are a prominent component of money supply. Commercial banks create credit from the primary deposits of money received from the public. Credit is created in the form of deposits called derived or secondary deposits.

Monetary aggregates:

In India money supply is measured in terms of the following monetary aggregates:

Money Supply	Includes	Example	Key Point
M1 (Narrow Money)	Currency + Demand deposits + Other liquid deposits	Cash in hand, Savings/Current account balance	Most liquid money, used for everyday transactions
M2	M1 + Post office savings deposits	Savings in post office account	Slightly less liquid than M1, easily accessible
M3 (Broad Money)	M1 + Time deposits with banks	Fixed deposit, Recurring deposit	Represents total money in the economy, used for monetary policy
M4	M3 + All post office deposits (except NSC)	Recurring deposits in post office	Broadest measure, shows almost all money in the system

VALUE OF MONEY:

The **purchasing power of money** is called value of money. It is nothing but **exchange value**. How much of goods and services can be obtained in exchange of a unit of money is called value of money. The value of money mainly depends upon price level. The inverse value of Price (P) is called value of money ($\frac{1}{P}$)

Types of value of money:

a) Internal exchange value

b) External exchange value

a) **Internal Exchange Value:**

How much goods and services can be obtained in exchange of a unit or money domestically is called internal exchange value.

b) **External Exchange value:**

How much foreign currency can be obtained in the exchange of a unit of domestic currency is called external exchange value.

Forms of Money:

- ✓ Cash money and credit money.
- ✓ Other financial assets (NBFI) e.g.:- Units of UTI, insurance policy etc.
- ✓ Paper money and coins
- ✓ Near money (or) money substitutes (bank cheque)

GRESHAM'S LAW

Definition: **Bad money drives good money out of circulation** (e.g., in bimetallism, cheaper metal like silver drives out dearer gold; people use paper money and hoard metal coins).

Quantity Theory of Money (QTM)

QTM links money supply (M) to price level (P).

1) **Fisher's Equation (Transactions Approach)**

$$MV = PT$$

- **M**: Money supply
- **V**: Velocity of money (constant)
- **P**: Price level
- **T**: Total transactions/output (constant)

Key Relations:

- Direct: $\frac{dM}{M} = \frac{dP}{P} (\uparrow M \rightarrow \uparrow P)$
- Inverse: $\uparrow M \downarrow$ value of money; $\uparrow P \downarrow$ value of money

Assumptions:

- V and T constant
- Money used only for transactions

Criticisms:

- Mathematical truism, ignores causation ($M \rightarrow P$ process unclear)
- Unreal: Instant spending assumed; ignores unemployment, hoarding, non-transaction uses of money
- Output can rise via imports even at full employment

2) **Cambridge Cash Balance Approach**

$$M = kPY$$

- **k**: Fraction of income held as cash ($k = 1/V$)
- **Y**: Real income/output ($\approx T$ if ignoring timing differences)
- V = income velocity; $1/k$ = transactions velocity

Note: Fisher's MV=PT ≡ Cambridge if T=Y. Focus on reciprocity: ↑k → ↓V.

3) **Keynesian Version**

- ↑M → ↓ interest rate → ↑ investment/employment/income/demand → ↑P → ↓ value of money
- Interest rate determines money's value (integrates with general theory)

Comparison Table

Version	Focus	Key Equation	Assumptions/Emphasis
Fisher	Transactions	MV=PT	V,T constant; transactions only
Cambridge	Cash balances	M=kPY	k=1/V; demand-driven
Keynes	Interest rate	(Indirect)	Liquidity preference key

INFLATION

Meaning:

*Inflation refers to a **persistent rise in general price level** over a long period.*

Definitions:

Crowther: *Inflation is a state where value of money falls and prices rise.*

Samuelson: *Inflation means a rise in general price level.*

Causes of Inflation

A) Primary Causes

i) **Demand-pull inflation:** *Demand exceeds supply.*

ii) **Cost-push inflation:** *Increase in cost of production.*

B) Other Causes of Inflation

i) **Increase in Public Expenditure**

- *Government spending raises aggregate demand.*
- *Leads to inflationary pressure.*

ii) **Deficit Financing**

- *Government prints money to finance expenditure.*
- *Increases money supply → inflation.*

iii) **Increase in Velocity of Money**

- *During boom, money circulates faster.*

- Raises effective demand.

iv) **Population Growth**

- Increases demand for goods and services.

v) **Hoarding**

- Artificial shortage created by hoarders.
- Leads to rise in prices.

vi) **Genuine Shortage**

- Shortage of factors of production reduces supply.

vii) **Exports**

- Excess exports reduce domestic availability.
- Leads to price rise at home.

viii) **Trade Unions**

- Demand higher wages.
- Increases cost of production.

ix) **Tax Reduction**

- More disposable income with people.
- Increases demand.

x) **Indirect Taxes**

- Producers raise prices to maintain profits.

xi) **Rise in International Prices**

- Costlier imports cause domestic inflation.

xii) **Non-Economic Causes**

- Natural calamities reduce supply.
- Prices increase due to shortages.

PART II

BANKING

MEANING OF BANKING

Banking is a financial activity where licensed institutions, known as banks, **accept deposits** from individuals and businesses to safeguard them and **use those funds** to extend credit and **loans** to other borrowers. It acts as a bridge between those with surplus capital and those who need it, facilitating the flow of money throughout the economy

Sayers define bank as, "an institution whose debts (bank deposits) are widely accepted in settlement of other people's debts".

According to **Crowther**, a bank "collects money from those who have it to spare or who are saving it out of their incomes and lends this money to those who require it".

Essentials of a sound Banking System:

A sound banking system **promotes all round economic development of an economy**.

A good bank must have the following features:

a) **Adequate Liquidity**

A bank must keep sufficient cash in hand to meet the claim of depositors, otherwise they would be insolvent. A bank's failure not only affects depositors but the bank also. People would not keep more funds with banker unless it **ensures safety to its customers**.

b) **Expansion of banking**

Banking facilities should spread throughout the economy. It must also **cover all sections of people in need of funds** and all productive activities. The less-developed regions should get more banking facilities than others. Thus, diffusion of banking offices is essential.

c) **Investment and loan policies**

A sound banking system must have a sound investment policy whereby it can optimize the twin goals of liquidity and profitability. If loan and investments are wrong, a bank suffers loss or face liquidity shortage. A prudent banker should carefully determine the composition and character of its loans and advances so as to **optimize earning without endangering safety and solvency.**

d) **Human factor**

The soundness of a bank depends much on the **quality of banker**. Banking being a practical affair, rigid application of bank laws are not always fruitful. Much depends on the discretion of men piloting the ship. Sound banking thus, depends more on banking personnel than on banking laws.

FUNCTIONS OF A COMMERCIAL BANK

Commercial Banks play a very prominent role in the financial system of an economy. They perform a variety of functions as discussed below:

A) **Acceptance of deposits:**

One of the primary functions of a commercial bank is to accept deposits from the public. The deposits accepted by the banks are of the following types.

i) **Current deposits:**

These are the deposits made into the current account of a bank. They are most convenient to the businessmen, public authorities and joint stock companies because there are **no restrictions** on the number and the amount of withdrawals.

ii) **Savings deposits:**

These deposits are made into a savings bank account of the bank. They are most convenient to the small businessman, salaried employees, artisans and people belonging to the **low and middle-income groups**. The interest paid on these deposits is comparatively low and is around 4% per annum.

iii) **Term deposits:**

They are also called fixed deposits because the money is deposited with the bank for a **fixed period of time**. The deposit can be withdrawn after the expiry of maturity period. The rate of interest varies from 6% per annum to 12% per annum.

iv) **Recurring or cumulative deposits:**

These are the variants of fixed deposits. These deposits are very convenient to those who cannot save huge amounts at a time. These deposits carry interest at a rate more than that of savings bank and less than that of a term deposit.

B) Payment of loans and advances:

Another primary function of the commercial bank is to give loans and advances to different sections of the public like traders, industrialists, farmers, artisans etc.

i) **Demand loans/call loans:**

A demand loan is a loan that should be **repaid on demand by the bank.** It does not have a specified maturity period. This loan is a kind of advance made with or without security. These are also called call loans. Normally, call loans are given to other banks or financial institutions for a day or a few days.

ii) **Short term loans:**

These loans are given for a specified short period. They are sanctioned to businessmen and farmers etc. to **finance working capital**. Individuals may also receive such loans as personal loans. They are given against security.

iii) **Cash credits:**

A cash credit refers to an arrangement by which the bank allows its customers to borrow money upto a **specified limit** from an account opened for the purpose. The customers need not withdraw the entire amount in one installment.

iv) **Overdraft:**

This is a facility allowed by the bank to the current account holders. They are allowed to **withdraw** money with or without security **in excess of the balance available** in their account up to a limit. Interest is charged on the amount of actual withdrawal.

v) **Discounting of bills of exchange:**

Bills of exchange are undertakings written by the buyers and given to sellers when the transaction is made on credit basis. The buyer undertakes to make payment after a specified period or on a specified future date. The traders who posses such bills of exchange with them may approach the banks for discounting of the bills of exchange

when they need money.

vi) **Credit cards:**

Now-a-days, the banks have devised new methods of giving loans to the customers. One such popular method is issuance of the credit card. A credit cardholder can use his card to purchase goods on credit from specified firms and shops and also withdraw cash subjects to certain regulations.

C) Creation of Credit:

The commercial banks create credit. This is a unique function of commercial banks. Credit is created from **out of the primary deposits** of money the customers received from the public. Part of the total amount of these deposits is given as loans and advances to its customers.

It should be noted that one single bank cannot create credit. Banking system as a whole consisting of several banks jointly can create credit.

D) Agency Functions:

Commercial banks perform certain agency functions also:

i) Collection of **cheques**, drafts, bills of exchange etc. of their customers from other banks.

ii) Collection of **dividends and interest** from business and industrial firms.

iii) Purchase and sale of **securities**, shares, debentures, government securities on behalf of the customers.

iv) Acting as **trustees** and keeping their funds in safe custody, acting as executors and executing the will of the customers after their death.

v) Making payments such as **insurance** premium, income-**tax**, subscriptions etc. on behalf of their customers as per their advice.

GENERAL UTILITY FUNCTIONS

Besides the above agency functions, the commercial banks provide certain general utility services to their customers.

i) Provide **locker facility** for the safe custody of the silver, gold ornaments, important and valuable documents.

ii) **Transfer money** of the customers from one bank to the other by way of demand drafts, mail transfer.

iii) With the use of computers and internet facility, now-a-days the banks are facilitating online transfer of money from one bank to the other.

iv) Issue **letters of credit** to enable the customers to purchase commodities on the basis of credit.

v) Endorse and provide **guarantee** to the shares issued by the joint stock companies and help them in rising capital.

vi) **Traveler's cheques** are issued by the commercial banks to avoid the risk of carrying of cash.

vii) Provide **foreign exchange** to the customers for exports and imports in connection with their business.

viii) Convey information on behalf of their customers to the businessmen operating in other places and also collect information of such businessmen and provide it to the customers.

ix) The commercial banks have also been establishing **ATMs** (Automated Teller Machines) at different locations so as to enable their customers to withdraw cash from their accounts at any ATM at any time in a day.

PRINCIPLES OF COMMERCIAL BANKS:

a) **Principle of liquidity:**

Deposits are repayable on demand or after expiry of a certain period. Everyday depositors either deposit or withdraw cash. To meet the demand for cash, all commercial banks have to keep **certain amount of cash in their custody**.

b) **Principle of profitability:**

The **driving force** of commercial enterprise is to generate profit. So it is true in case of commercial bank also.

c) **Principle of Solvency:**

Commercial bank should be financially sound and **maintain a required capital** for running the business.

d) **Principle of safety:**

While investing the fund, banks are to be cautions because bank's money is **depositor's money.**

e) **Principle of collection of savings:**

This is a very important principle for today's banking business. Commercial banks always seek huge amount of **idle money** from the clients. Now a day's banks fix up the target for their employees to generate more savings from the people.

f) **Principle of loan and investment policy:**

The main earning sources of commercial banks are **lending and investing** money to

the viable projects. So commercial banks always try to earn profit through sound investment.

g) **Principle of economy:**

Commercial banks never go for any unnecessary expenditure. They always try to maintain their functions with economy that increase their yearly profit.

h) **Principle of providing services:**

A better service brings great **reputation** for the bank.

i) **Principle of secrecy:**

Commercial bank maintains and keeps the clients accounts secretly. Nobody except the legitimized person is allowed to see the **accounts of the clients**.

j) **Principle of modernization:**

It is the age of science and technology. So, to cope up with the advanced world the commercial bank has to adopt modern technical services like **online banking**, credit card etc.

k) **Principle of specialization:**

It is an age of specialization. Here commercial banks segments their whole functions into various parts and place their human resources according to their efficiency.

l) **Principle of location:**

Commercial banks choose a suitable site where the **availability of customers** is large.

m) **Principle of relation:**

Commercial banks always try to maintain a good relation with their clients and **potential customers.**

n) **Principle of publicity:**

It is an age of publicity. If you would like to earn more money, you have to give more **advertisement** through various media. In that case, commercial banks follow this kind of principles to **increase their customers**

PART III

CENTRAL BANK

INTRODUCTION:

a) A central bank is a **national financial institution** that manages a country's monetary system and stabilizes the economy.

b) It functions differently from commercial banks by **serving the government** and **supervising the financial system** rather than directly serving the general public.

c) The main objective of a central bank is to **ensure financial stability**.

d) Depending on the country, central banks might have other objectives such as **controlling inflation, unemployment, interest rates, or exchange rates**. However, all these objectives are in line with the main objective of ensuring financial stability.

e) Central Bank is the apex of the banking system in a country.

f) It controls, regulates and **supervises the activities of the banks** and the country's banking system.

g) In our country, the Central Bank was established in 1935 under private management. It was nationalized by the Government in 1949 and named as RBI.

Objectives of the Central Bank:

The Central Bank functions with the objectives given below:

a) To **maintain internal value** of currency.

b) To **preserve external value** of currency.

c) To ensure **price stability**.

d) To **promote financial institutions**.

e) To promote **economic development**.

Functions of a Central Bank:

A Central Bank has the following functions:

a) **Note Issue:**

The Central Bank alone is authorized to **issue the currency notes in a country**. It has the **monopoly of note issue** as no other bank is permitted to do so. It also enables the Central Bank to control the supply of money as per the requirements of the economy.

b) **Banker to Government:**

The Central Bank acts as a **banker, agent and financial advisor to government** in the following ways:

i) It maintains the accounts of the government funds.

ii) It receives money and makes payments on behalf of the government.

iii) It gives 'ways and means' advances to the government.

iv) It issues new loans on behalf of the government.

v) It manages the public debt.

vi) It undertakes foreign exchange transactions on behalf of the government.

vii) It acts as the agent of the government in dealing with the international financial institutions like IMF and World Bank.

viii) It advises the Government on all financial matters.

c) **Banker's Bank:**

The Central bank acts as a banker's bank in the following manner.

i) Every bank maintains a certain minimum of cash reserves with the Central Bank as a statutory obligation.

ii) It serves as a lender of last resort. This helps the commercial banks to overcome the

problems of liquidity and will be able to meet the demand for withdrawals even in times of financial stringency.

iii) It acts as a clearing house for the commercial banks to settle their inter-bank accounts. This is possible because all commercial banks have account with the Central Bank in which the Central Bank keeps their cash balances.

d) **Lender of last resort:**

The Central Bank serves as the lender of last resort not only to commercial banks but also to discount houses, and other credit institutions. They may approach the central bank when they face the problem of liquidity.

e) **Controller of credit:**

This is the most important function of the Central Bank. It controls the **volume of credit in the economy through appropriate monetary policy**. It takes steps to reduce the credit in case of inflation.

f) **Custodian of foreign exchange reserves:**

The Central bank maintains the reserves of foreign exchange and regulates their use. It has the responsibility to maintain the stability of the exchange rate of the native currency in terms of the foreign currency.

Distinction between the Central Bank and the Commercial Bank

Feature	Central Bank	Commercial Bank
Primary Objective	Economic stability and public welfare	Profit maximization for shareholders
Clientele	Government and commercial banks only	General public and business organizations
Currency Issuance	Sole authority to issue/print currency	No authority to issue currency
Number of Banks	Usually only one per country (e.g., RBI in India)	Numerous banks operate within a country
Ownership	Generally state/government-owned	Can be privately or publicly owned
Monetary Policy	Formulates and implements monetary policy	No role in policy formulation

FINANCIAL INSTITUTIONS

a) **Industrial Finance Corporation of India (IFCI) – 1948**

It was established in **1st July 1948**.

The main objective of IFCI is to make medium and long term credit to the **industrial units.**

Functions:

- ✓ Granting **loans and advances** for a period of 25 years.
- ✓ **Subscribing to the shares and debentures** floated by industrials concerns.
- ✓ Granting loans in foreign currencies.
- ✓ Guaranteeing for differed payments in respect of import of capital goods.

b) **State Financial Corporation (SFC) – 1953**

The first SFC was established in 1953 in Punjab, at present there are 18 SFC's.

The main object of the establishment of SFC is to meet the **requirements of medium and small-scale industries in various states.**

c) **Industrial Credit and Investment Corporation of India (ICICI) – 1955**

It was established in 1955 and the main aim of the ICICI is to develop the industries under the private sectors only. It is a private bank.

d) **State Industrial Development Cooperation (SIDC) – 1960**

The main object for the establishment of SIDC is to achieve the rapid industrialization in the state. At present there are 28 SIDC's in India.

e) **Unit Trust of India (UTI) – 1964**

It was established in **1st February 1964**.

The main objective of the UTI is to **encourage and mobilize the savings of the community and channelize them into productive corporate investment**.

Functions of UTI:

- ✓ Mobilizes the saving of the relatively small investors.
- ✓ Channelizes these small savings into productive investments.
- ✓ Distributes the large scale economies among small income groups.

f) **Industrial Development Bank of India (IDBI)-1964:**

It was established in July 1964.

It is the apex bank in the industrial credit, upto 1976 it was the subsidiary bank to RBI but after 1976 it was formed as an **autonomous cooperation**.

Functions of the IDBI:

- ✓ It can establish the co-operation & co-ordination among the industrial financial institutions.
- ✓ It provides, the direct finance to industrial units.
- ✓ It saves the weaker industrial units through the development assistant fund.
- ✓ It assists in the creation, expansion & modernization of industrial units under private sectors.
- ✓ It also provides the export finance.

g) **Export and Import Bank of India (EXIM bank)- 1982:**

It was established in 1st March 1982.

It is a **non-bank financial intermediary (NBFI)**, confined its area of operations to

foreign trade of India.

It also performs other functions.

- ✓ Export rediscounting
- ✓ Re-finance supply credit
- ✓ Bulk import finance
- ✓ Foreign currency pre-shipment credit.
- ✓ Product equipment finance programme.
- ✓ Business advisory technical assistance (BATA)

h) **National Bank for Agriculture and Rural Development (NABARD)-1982**

It was established in July 1982 on the basis of the recommendations' of CRAFI CARD.

- ✓ It is the **apex body** in the **agricultural credit**
- ✓ It takes over the functions of agriculture credit department of RBI and Agriculture re-finance development corporation (ARDC).
- ✓ It provides all sources of refinance to the cooperatives, commercial banks and regional rural banks (RRB) It also promote the research in agriculture and **rural development.**

i) **Life Insurance Corporation of India (LIC) – 1956**

It was established in 1956 by nationalizing 245 private insurance companies.

The primary object of nationalization was to protect the interest of the policy holders and avoid the misuse of funds secondly, the object of nationalization was to direct the investments of funds in government security (87.5%), leaving a small part for private sector (12.5%).

j) **General Insurance Company (GIC)-1972**

It was formed as Government Company in 1972.

Before nationalization a few big companies and about 100 small companies were in this business.

At present, GIC is provided to 4 companies. They are:

- ✓ National Insurance Company (NIC)
- ✓ New India Assurance Company (NIAC)
- ✓ Oriental Fire and General Insurance Company
- ✓ United India Fire and General Insurance Company

The main feature of GIC is to sell insurance services against some forms of risk like loss of physical assets of various kinds i.e. The fire accident, and against personal sickness and accidents.

k) **Securities and Exchange Board of India (SEBI) – 1988**

It was **setup in 1988**. It got **statutory reorganization in 1992**.

The main purpose of the SEBI is **regulating** business in **stock markets** & other securities market.

l) **Private Insurance Companies**

This millennium has witnessed the insurance sector a journey extending to nearly 200 years. In 1993, the Government set up a committee under the chairmanship of RN Malhotra, former Governor of RBI, to propose recommendations for reforms in the insurance sector. According to the recommendation of the committee, huge opening was for the private companies in home and away. Besides the public companies, the others are the private insurers (both life and general) who have done a joint venture with foreign insurance companies to start their insurance businesses in India. Some of the private Life Insurance Companies are Aegon Life Insurance Co. Ltd., Aviva Life Insurance

Co. India Ltd., Bajaj Allianz Life Insurance Co. Ltd., and some of the General Insurance Companies are Aditya Birla Health Insurance Co. Ltd., Bajaj Allianz General Insurance Co. Ltd. and Bharti AXA General Insurance Co. Ltd.

m) **SWIFT**

Behindhand most international money and **security transfers** are the **Society for Worldwide Interbank Financial Telecommunications (SWIFT) system**. SWIFT is a **huge messaging network banks** and other financial institutions use to rapidly, precisely, and securely send and obtain information, such as money transfer instructions.

It is a protected financial message carrier which can evade fraudulent transactions. Specifically, it carriages messages from one bank to another bank, say from Bank X reaches Bank Y only.

n) **BIS**

In the globalized world under the interlinkages between the domestic economies banking and financial operations with the rest of the world, international cooperation in terms of smooth running of the banking and financial system is required.

The **Bank for International Settlements (BIS)** is an **international financial institution owned by central banks** that "fosters international monetary and financial cooperation and serves as a bank for central banks".

The mission is to **support central banks' pursuit of monetary and financial stability through international cooperation**, and to **act as a bank for central banks**. Currently, sixty central banks or monetary authorities are members of the Bank for International Settlements (BIS).

Reserve Bank of India is also a member of the organisation.

o) **MUDRA Bank**

India's economic growth largely depends upon the small and medium enterprises. But the banks and the financial institutions are mostly reluctant to provide loans to these sectors in the seamless manner.

Micro Units Development and Refinance Agency Bank is a public sector financial institution in India.

It delivers loans at **low interest rates and simplest terms** to the **micro-finance institutions** and non-banking financial institutions **which then provide credit to medium and small enterprises (MSMEs).**

It was launched by the Honourable Prime Minister of India on 8 April 2015. The minimum age of the applicant must be 18 years and the maximum Mudra Loan age limit is set to 65 years. Loans can be availed by **non-farm income-generating businesses in manufacturing, trading and services.**

The requirement of credit must **be ₹ 10 Lakh or lower.**

p) **Alternative Investment Funds (AIFs)**

There is the usual existence of investment funds in India in conventional forms, though there are some alternative funds. Alternative Investment Fund (AIF) is one type of investment fund in India. It is an investment that differs from conventional investments such as debt securities, stocks, etc.

It **consists of investment funds that are privately pooled** and which invest in private equity, venture capital, hedge funds, managed funds, etc.

q) **Bad Bank**

The history of bank operations in India reveals that there are huge non-refunded funds from the borrowers to the banks which is termed as **non-performing assets (NPA)** or

bad debts or bad loans.

The banks could not recover the major part by their own instruments and legal supports. Therefore, the Government of India recommended for an autonomous body to help in recovering these funds.

By the term 'bad bank' it is referred to an **Asset Reconstruction Company (ARC)** or an Asset Management Company (AMC) that **takes over the bad loans of commercial banks, manages them and finally recovers the money over a period of time**. The bad bank is not involved in lending and taking deposits, but helps commercial banks clean up their balance sheets and resolve bad loans. India's bad bank, National Asset Reconstruction Company (NARCL) will acquire and aggregate the identified NPA accounts from banks and India Debt Resolution Company Ltd (IDRCL) will handle the debt resolution process.

r) **Hedge Fund**

Hedge fund is a **pooled investment fund** that trades in relatively liquid assets and is able to make widespread use of more complex trading, portfolio-construction, and **risk management methods** in an effort to advance performance, such as leverage, short selling, and derivatives.

Some samples of hedge funds are Munoth Hedge Fund, Forefront Alternative Investment Trust, Quant First Alternative Investment Trust and IIFL Opportunities Fund, etc.

s) **Price-Earnings Ratio**

The price-earnings ratio, also known as PE ratio, is the ratio of a company's share price to the company's earnings per share.

The ratio is used for valuing companies and to find out whether they are overvalued or undervalued. **PE ratios are used by investors and analysts to derive the relative value**

of a company's shares in an apples-to-apples comparison. It is also used to compare a company against its own historical record or to compare aggregate markets against other companies and/or over time.

t) **Venture capital (VC)**

It is a type of private equity financing that is provided by venture capital firms or the provisioning of funds to start-ups, early-stage, and emerging companies that are believed to have high growth potential or which have established high growth in terms of annual revenue, number of employees, scale of operations, market power, etc.

u) **Asian Development Bank (ADB) – 1966**

It was established in 1966.

The main aim for the establishment of ADB is **to promote the socio and economic progress of number countries in Asia & Pacific.**

It is owned by governments of 37 countries form region and 16 countries from outside the region.

Its Head Quarters is in Manila, Philippines

Poverty reduction is now the main mission of ADB

v) **International Monetary Fund (IMF) – 1947**

It was established in March 1947.

One of the outcomes of **Breton Wood Conference** was IMF.

The main object of IMF is to administer a code of fair practice in the sphere of foreign exchange and to make loans to the economies experiencing temporary deficits in their balance of payments.

Quota:

It is the membership contribution fixed in terms of its national income and internal trade members are required to subscribe quota partly in gold (25%) partly in domestic currency (75%).

Exchange rate:

Members of IMF had to declare the par value of national currency in terms of gold or American dollars. Once the par value of different currencies is fixed it becomes easy to determine the rate of exchange between two countries.

Special Drawing Rights (SDRs) – 1969:

SDR's was first introduced in 1969.

It is the special currency issued by IMF. For two reasons IMF created SDR. They are:

- ✓ To overcome the shortage of gold in the world economy
- ✓ To avoid the movement of gold across national boundaries.

SDRs are in Coupons:

It is used in the place of gold. Hence it is **called paper gold.**

w) **World Bank:**

It was established in 1947 one of the outcomes of Breton wood conference was establish of World Bank.

The main aim of the establishment of World Bank is to help **re-construction of the member countries damages due to the Second World War**. The original name of World Bank is The International Bank for Reconstruction and Development (IBRD).

x) **International Development Association (IDA)**

It was established in 1960 and it is affiliated to World Bank.

The main aim for the establishment of IDA is to **provide assistance to low developed countries (LDC)** whose per capita income in less than (dollar) $ 520 (1975). It also grants the credit on cheap terms compared to World Bank loans.

PART IV

MEASURES OF CREDIT CONTROL

CREDIT CREATION BY COMMERCIAL BANK

a) A commercial bank is called a dealer or creditor.

b) It can **create credit i.e. can expand the monetary base of a country.**

c) It does so not by issuing new money but by its **loan operations**.

d) Banks create money on the basis of the cash deposits.

e) The process of credit creation is that the depositors think they have so much money with banks and borrowers from bank say they have so much money with them.

f) Summing the two, we find an amount more than the cash deposit.

How it Works ?

Suppose a bank receive a sum of ₹ 1,000 as deposit, keeps with it 20% (₹ 200) as CRR (cash reserve ratio) and lends the rest, that is 80% or ₹ 800.

⇩

Depositor will claim he has ₹ 1,000 and bank borrower too possesses ₹ 800.

⇩

Thus total money supply appears to be ₹ 1,800 only. It is the credit creation by a single bank.

⇩

The above example can be extended to cover the banking system as whole. Suppose ₹ 800 is deposited to another bank.

⇩

This bank's base will now expand. It will keep 20% of ₹ 800 (₹ 160) as cash reserve and will lend ₹ 640.

This sum is redeposited to a third bank which keeps 20% of ₹ 640 (₹ 128) and grants a loan of ₹ 512.

This process will continue and the mount of fresh deposit will go on falling

A time will come when deposited sum will be equal to CRR. The process will then come to an end.

Limitations of Credit Creation:

Size of the cash reserve ratio:

Much depends on the mix of the cash reserve ratio. Credit creation is inversely related to CRR.

CRR (Cash Reserve Ratio) is a minimum fraction of the total deposits of customers, which **commercial banks are required to hold as reserves either in cash or as deposits with the central bank**. It is set as per the guidelines of the central bank of the country.

Amount of loan given:

Credit creation depends upon the amount of loan given. If borrowers cannot offer security against loan, bank cannot lend.

Size of the cash deposit:

Size of the cash deposit is also important in this context. The smaller the cash base the smaller scope a bank gets for credit creation. If people prefer physical assets or prefer to keep cash in their hand, bank deposits suffer much, so bank cannot lend much.

Acceptable securities:

A bank can lend money against acceptable securities. A borrower gets a loan from a bank only against some securities the value of which must be equal to the amount of the loan.

Controlled by the Central Bank:

A Central Bank possesses certain instruments. By the use of these it can increase or decrease the volume of credit created by banks.

CREDIT CONTROL BY CENTRAL BANK

Bank Rate Policy:

a) As a banker's bank, a central bank lends money or rediscounts the bills of commercial banks.

b) The rate of interest charged by the central bank is known as Bank rate or Discount rate.

c) By manipulating bank rate, central bank can regulate the credit creating power of member banks.

How it works?

If bank rate is raised by the central bank, commercial banks are to borrow at a higher cost.

⇩

Then they will increase their lending rate. This rate is known as the market rate.

⇩

The difference between market rate and bank rate is the profit margin of commercial

banks.

When bank rate rises market rate also rises and vice versa.

Demand for bank loan will reduce.

On the other hand, for credit expansion, bank rate is reduced.

d) The effectiveness of this technique depends on the extent to which commercial banks depend on central bank for loan and rediscounting.

e) If banks can collect funds from other sources at relatively cheaper rate, they need not depend on central bank credit.

f) Again if investment opportunities are not present, the market demand for credit will be weak, a fall in the bank rate may not raise the level of bank credit.

g) A central bank possesses a number of instruments for controlling credit money.

h) These are of two types – Quantitative and Qualitative.

i) Quantitative techniques seek to regulate total quantity of credit while qualitative measures affect the availability of credit.

Moral Suasion:

a) Moral suasion is a **qualitative technique**.

b) The central bank 'requests' banks to lend more or not to lend in some sectors.

c) There is no legal compulsion behind their acceptance.

d) Generally, if a request is not carried out by the number bank, the guardian of the banking system may take such steps as banks are forced to accept.

e) The central bank is often empowered to issue directives to member banks.

f) Such direct orders are in the form of directional control, prohibiting loans of particular type of giving advice to grant loan to priority sectors.

Open Market Operations:

a) It implies **purchase and sale of securities in the stock market**.

b) When the central bank appears in the market as a seller of government securities, people buy such securities by withdrawing money from banks or the banks themselves invest in such securities instead of granting loan to public.

c) In either case the powers of creating credit will be restricted.

d) On the other hand, if central bank buys securities money flows out thus enlarging the cash base of members banks.

e) Through open market purchase and sale of govt. bonds, the Central Bank can decrease and increase the supply of money. But at the same time the effective rate of interest of the govt. bond gets changed automatically which the Central Bank cannot prevent.

Example: Suppose, the govt. bond in question bears a rate of interest 10% with a face value of ₹1000.This implies a yearly return of ₹100. If the Central Bank wants to purchase this govt. bond in unlimited amount for say, ₹ 2000, the effective rate of interest gets changed to 5% automatically which was no part of the intension of the Central Bank.

f) **Credit expansion depends upon external business environment** and **borrowers attitudes** over which banks have no influence.

Variation of Reserve ratio:

a) Commercial banks are legally bound to keep a portion of their deposits in the form of

cash reserve.

b) It is the most liquid asset in their hand and at the same time it is zero earning assets.

c) Naturally, by altering the CRR, the central bank can expand or reduce the funds bank can lend.

d) There exists an inverse relation between the size of cash reserve and the amount of credit given by a bank, assuming a given amount of deposit.

e) In under developed money market, this technique is more suitable than open market operation or bank rate policy.

PART V

MONEY MARKET

INTRODUCTION:

a) The Financial Markets act as the foundation of a country's economic system. It **manages the financial resources** from individuals and institutions that have surplus funds to those who are in the need of capital.

b) The Financial Market is referred to as platform where **buyers and sellers meet to trade financial assets** such as equities, bonds, currencies and derivatives. Its main purpose is to **transfer funds from investors to borrowers** who is need of capital.

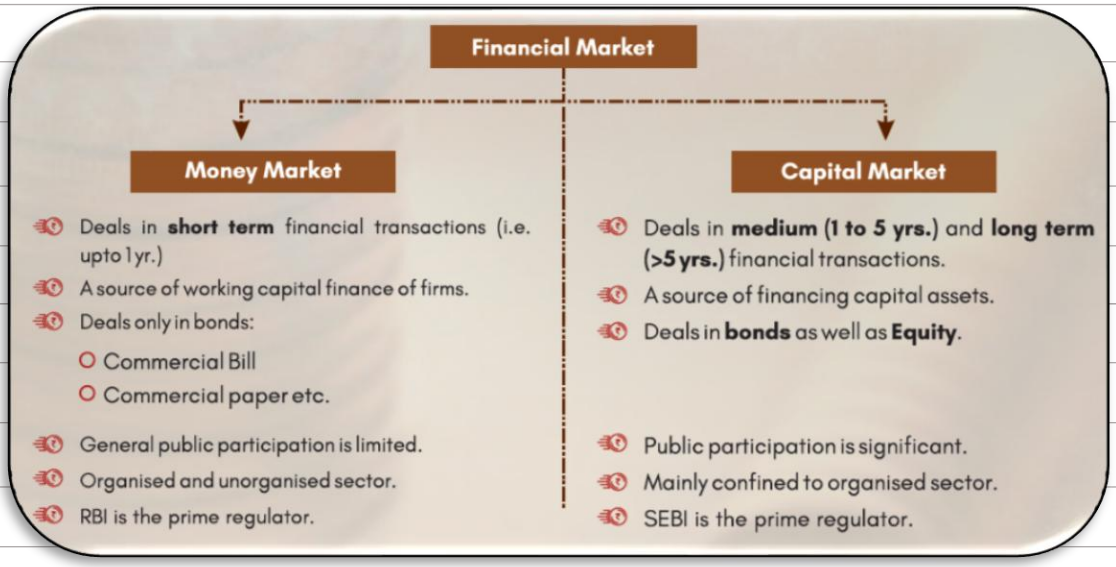
c) Financial markets are functionally classified into:

- ✓ Money market and
- ✓ Capital market.

d) This classification is on the basis of the term of credit, i.e., whether the credit is supplied for a short period or long period.

e) Money, market refers to institutional arrangements which **deal with short- term funds**. Capital market, on the other hand deals in long-terms funds.

f) Money market is a short-term credit market which deals with relatively liquid and quickly marketable assets such as, short-term government securities, treasury bills, bills of exchange, etc.,



DEFINITION:

a) According to **Crowther**, "The money market is a collective name given to the various firms and institutions that deal with various grades of near- money".

b) The **Reserve Bank of India** defines money market "as the center for dealing, mainly of a short-term character, in monetary assets; it meets the short-term requirements of borrowers and provides liquidity of cash to the lenders.

OBJECTIVES OF MONEY MARKET:

A well-developed money market serves the following objectives:

a) Provides an equilibrium mechanism for ironing out **short-term surplus and deficits**.

b) Provides a focal point for the intervention of the central bank for **influencing liquidity in the economy**.

c) Provides **access to user of short-term money** to meet their requirements at a reasonable price.

FEATURES OF MONEY MARKET:

Indian money market has major features:

a) **Short-term funds** are borrowed and lent.

b) **No fixed place** for conduct of operations. Transactions are conducted even over the phone.

c) Dealing may be conducted with or without the help of brokers.

d) The short-term financial assets that are dealt in are close substitutes for money.

e) Funds are loaned for a **maximum period of 1 year**. Presence of a large number of sub-markets such as, call money, notice money, repo's, term money, treasury bills, commercial bills, certificate of deposits, commercial papers, etc.

FUNCTIONS OF MONEY MARKET:

a) It **links lenders and borrowers** of short-term funds. It is purely a market for short term funds or financial assets.

b) It **provides working capital requirements** of industry, trade and agriculture.

c) It **provides financial assets** with a high degree of liquidity- call money, treasury bills, commercial bills etc.

d) It **helps trade and commerce** by developing a bill market, and acceptance market.

e) It enables the Government to raise short-term loans with Treasury bill market.

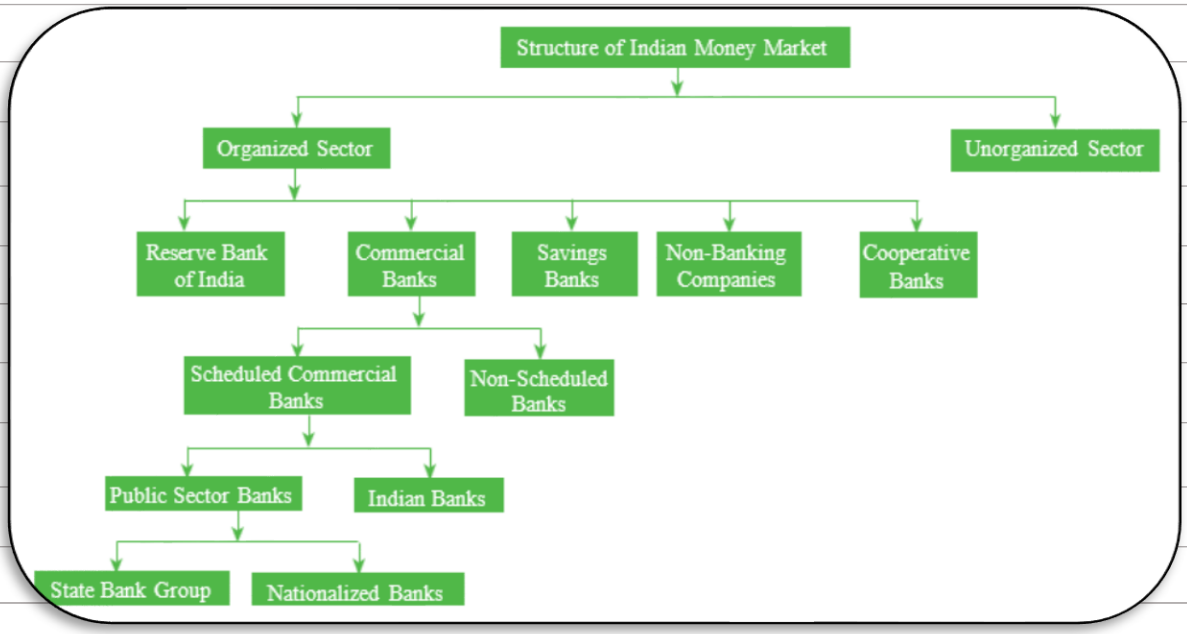
f) It is controlled and **regulated by RBI**.

g) It makes the monetary policy effective.

h) It provides opportunities for lending the surplus funds of individuals, banks and other institutions.

i) It helps the central bank in **maintaining stability of the value of the currency unit**.

A well developed money market can perform the above functions effectively



CONSTITUENTS OF MONEY MARKET: LENDERS & BORROWERS

Money market is a center where short-term funds are supplied and demanded.

*Thus, the main constituents of money market are the **lenders who supply** and the **borrowers who demand** short-term credit.*

a) Supply of Funds:

There are two main sources of supply of short-term 'funds in the Indian money market:

- ✓ *unorganized indigenous sector, and*
- ✓ *organized modern sector.*

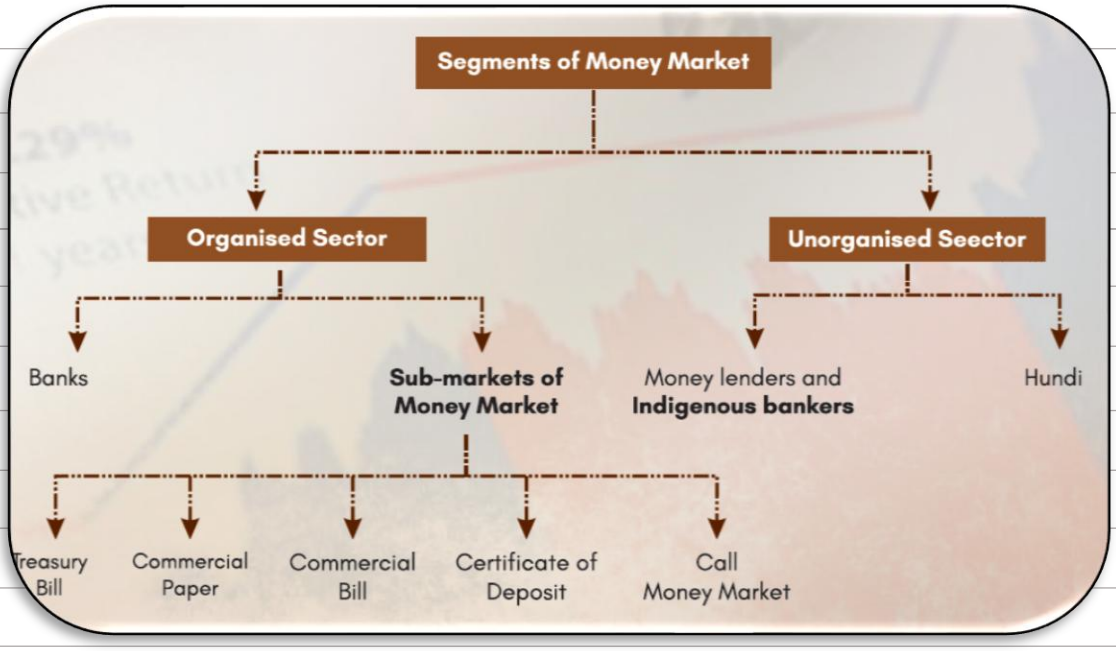
b) Demand for Funds:

In the Indian money market, the main borrowers of short-term funds are :

- ✓ *Central Government,*

- ✓ State Government,
- ✓ Local bodies, such as municipalities, village panchayats, etc.,
- ✓ traders, industrialists, farmers, exporters and importers, and
- ✓ general public.

SEGMENTS OF MONEY MARKET:



ORGANIZED SECTOR:

*It is called organized because its activities are **systematically coordinated by the RBI**.*

The principal intermediaries in the organized segment are:

- ✓ The commercial and other banks,
- ✓ Non-banking finance companies and
- ✓ Co-operative societies.

The primary activity of these intermediaries is to accept deposits from the public and lend them on a short-term basis to industrial and trading organizations.

In recent years, they have extended their activities to rural areas to support agricultural operations. There is also an active inter-bank loan market as part of the organized money market.

UNORGANIZED SECTOR:

It is unorganized because activities of its parts are **not systematically coordinated by the RBI.**

The principal participants in the unorganized money market are:

- ✓ Money Lenders,
- ✓ Indigenous Bankers,
- ✓ Nidhis (mutual loan associations) and
- ✓ Chit Funds.

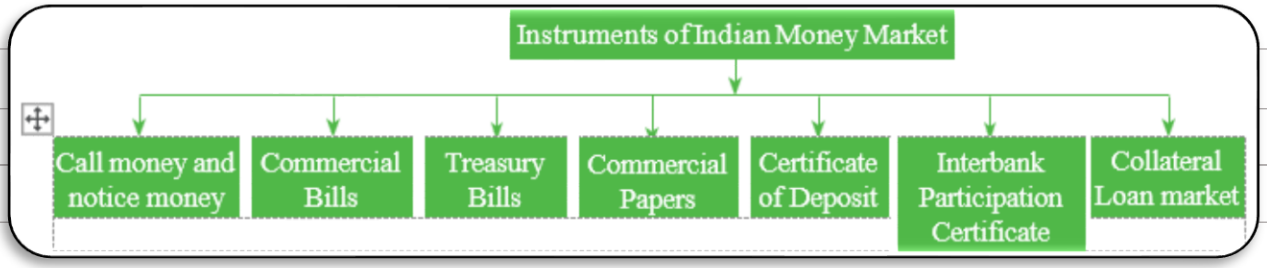
They lend primarily to borrowers who are not able to get credit from the organized money market.

The characteristics of the unorganized money market are:

- ✓ informal procedures,
- ✓ flexible terms,
- ✓ attractive rates of interest to depositors and
- ✓ high rates of interest to borrowers.

The size of the unorganized money market is difficult to estimate, though it appears to be large. However, its importance relative to that of the organized money market is declining. This is a welcome development from the point of view of the Reserve Bank of India because the existence of a large unorganized market frustrates its efforts to control credit

MONEY MARKET INSTRUMENTS:



a) **Call and Notice Money Market:**

- ✓ Call money market, or inter-bank call money market, is a segment of the money market where **scheduled commercial banks lend or borrow on call** (i.e., overnight) or at short notice (i.e., for periods upto 14 days called notice money) to manage the day-to-day surpluses and deficits in their cash- flows.
- ✓ However, under **notice money market**, funds are transacted for a period between **two days and fourteen days.** These day-to-day surpluses and deficits arise due to the very nature of their operations and the peculiar nature of the portfolios of their assets and liabilities.

b) **Commercial Bill Market:**

- ✓ These are Bills of exchange dawn by the seller (drawer) on the buyer (drawee and acceptor) for the value of goods sold.

- ✓ Once the bill is accepted by the buyer of goods (drawee), it becomes a legal document acknowledging indebtedness. It is a negotiable instrument.
- ✓ Such bills are drawn **generally for 90 days**.
- ✓ During the tenure of the bill, if the holder is in need of cash he can discount it with a commercial bank.
- ✓ The bank will deduct interest (called a negotiated discount rate) for the period the bill is yet to run. The bank will receive the face value on the due date from the drawee. Meanwhile, if the bank is in need of funds, it can rediscount it in the commercial bill rediscount market at the market-related discount rate. Banks arrange their bill portfolio in such a manner that some bills mature every day. These trade bills (commercial bills) are considered liquid assets as they can be converted in to cash quickly by rediscounting.

c) **Treasury Bills Market:**

- ✓ Treasury bills are **short-term promissory notes issued by the G.O.I** at discount generally for a period of **91 days.**
- ✓ They are issued to meet **short-term financial needs of the Government**.
- ✓ Since November 1986, **182 days** Treasury Bills were issued by the R.B.I. Longer maturity Treasury Bills with varying maturities upto **364 days** were introduced in April 1992.
- ✓ These bills were issued as a part of public debt operations of G.O.I.
- ✓ They are **issued at discount** and therefore do not carry interest payment obligation.

d) **Commercial Paper:**

- ✓ CPs are **unsecured and negotiable promissory notes** issued by high rated corporate entities to raise short-term funds for meeting working capital requirements directly

from the market instead of borrowing from banks. Its period ranges from **7 days to 1 year**. CP is generally issued at discount to face value and is transferable by endorsement and delivery.

✓ Commercial Paper (CP) has its origin in the financial markets of America and Europe. The concept of CPs originated in the USA in the early 19th century when commercial banks monopolized and charged high rate of interest on loans and advances. In India, the CP was introduced in January 1990 on the recommendation of Vaghul Committee subject to various conditions. When the process of financial dis-intermediation started in India in 1990, RBI allowed issue of two instruments, viz., the Commercial Paper (CP) and the Certificate of Deposit (CD) as a part of reform in the financial sector.

✓ Denomination of CP – **Rs. 5 lacs or multiples thereof**

e) **Certificate of Deposit:**

✓ The CDs are **negotiable term deposits accepted by commercial banks** from bulk depositors at market-related rates. CDs are usually issued in demat form or as a Usance Promissory Note. A Usance Promissory Note is a promissory note which is payable after a **pre-decided definite period.**

✓ The CDs can be issued for a **minimum amount of Rs. 1 lakhs** to a single investor and **multiples of Rs. 1 lakh thereafter**. There is, however, no limit on the total quantum of funds raised through CDs.

f) **Inter-bank Term Money Market:**

✓ This is a market in which banks alone, both commercial and co-operative banks participate. They borrow and lend funds from and to each other for a period over 14 days and generally upto 90 days.

✓ **No collateral security** is insisted upon.

✓ The **rates of interest are market determined**. Deposited receipts are exchanged. As per the Indian Banks Association (I.B.A) rules, lenders cannot prematurely call back these loans. Hence, this instrument is not liquid.

g) **Collateral Loan Market:**

It deals in collateral loans- These loans backed up by security. In this market, commercial banks provide loans against the Government securities and bonds.

DEFECTS OF INDIAN MONEY MARKET

The Indian money market is **inadequately developed**, **loosely organized** and suffers from many weaknesses. Major defects are discussed below:-

a) **Dichotomy between Organized and Unorganized Sectors:**

The most important defect of the Indian money market is its division into two sectors: (a) the organized sector and (b) the unorganized sector. There is little contract, **coordination and cooperation between the two sectors**. In such conditions, it is difficult for the Reserve Bank to ensure uniform and effective implementations of its monetary policy in both the sectors.

b) **Predominance of Unorganized Sector:**

Another important defect of the Indian money market is its predominance of unorganized sector. These indigenous bankers, which constitute a large portion of the money market, remain outside the organized sector. Therefore, they seriously restrict the Reserve Bank's control over the money market.

c) **Wasteful Competition:**

Wasteful competition exists not only between the organized and unorganized sectors, but also among the members of the two sectors. The relation between various segments of the money market is not cordial; they are loosely connected with each other and generally follow separatist tendencies. Similarly, competition exists between the Indian commercial banks and foreign banks.

d) **Absence of All- Indian Money Market:**

Indian money market has not been organized in to a single integrated all-Indian market. It is divided into small segments mostly catering to the local financial needs. For examples, there is little contract between the money market in the bigger cities. Like, Mumbai, Chennai, and Kolkata and those in smaller towns.

e) **Inadequate Banking Facilities:**

Indian money market is **inadequate to meet the financial needs of the economy**. Although there has been rapid expansion of bank branches in recent years particularly after the nationalization of banks, yet vast rural areas still exist without banking facilities. As compared to the size and population of the country, the banking institutions are not enough.

f) **Shortage of capital:**

Indian money market generally suffers from the shortage of capital funds. The availability of capital in the money market is insufficient to meet the needs of industry and trade in the county.

g) **Seasonal Shortage of Funds:**

A major drawback of the Indian money market is the seasonal stringency of credit and higher interest rates during a part of the year. On the contrary, during the slack season, from July to October, the demand for credit and the rate of interest decline sharply.

h) **Diversity of Interest Rates:**

Another defect of Indian money market is the multiplicity and disparity of interest rates. The interest rates also differ in various centers like Mumbai, Kolkata etc. Variations in the interest rate structure are largely due to the credit immobility because of inadequate, costly and time-consuming means of transferring money. Disparities in the interest rates adversely affect the smooth and effective functioning of the money market.

i) **Absence of Bill Market:**

The existence of a well- organized bill market is essential for the proper and efficient working of money market. Unfortunately, in spite of the serious efforts made by the Reserve Bank of India, the bill market in India has not yet been fully developed. The short-term bills form a much smaller proportion of the banking finance in India as compared to that in the advanced countries.

MEASURES TO IMPROVE INDIAN MONEY MARKET:

In view of the various defects in the Indian money market, the following suggestions have been made for its proper development:

a) The activities of the indigenous banks should be brought under the **effective control of the Reserve Bank of India.**

b) **Hundies** used in the money market should be **standardized** and written in the uniform manner in order to develop an all-India money market.

c) Banking facilities should be expanded especially in the unbanked and neglected areas.

d) **Discounting and rediscounting facilities** should be **expanded** in a big way to develop the bill market in the country.

e) For raising the efficiency of the money market, the number of the **clearing houses** in the country **should be increased** and their working improved.

f) Adequate and **less costly remittance facilities** should be provided to the businessmen to increase the mobility of capital.

g) Variations in the **interest rates** should be reduced.

ECONOMIC AND BUSINESS ENVIRONMENT

PART I

BUSINESS ENVIROMENT

WHAT IS BUSINESS?

The term business means **any activity** comprising of **manufacturing**/producing of products and/or **services**, purchase of raw materials and marketing the finished goods in order to **earn profits.**

Profit is the **reward** or remuneration for **risk taking** and organizing the production and sales process, just like the worker earns wages.

OBJECTIVES OF BUSINESS

The purpose of business is to **create market** with the **aim of expanding** it.

In a broader sense, the purpose of business is to **cater to the material needs of the society.**

Through business the society can have economic expansion, growth and development.

The multiple objectives of business are related to:

- ✓ profitability
- ✓ sales maximization
- ✓ productive efficiency
- ✓ stability and growth
- ✓ technological excellence
- ✓ self- reliance
- ✓ competitive strength
- ✓ customer satisfaction
- ✓ financial solvency
- ✓ product quality
- ✓ diversification
- ✓ welfare of the employees etc.

MEANING OF ECONOMIC AND BUSINESS ENVIRONMENT

a) Business organization operates under its own unique environment.

b) Environment always influence the business and vice-versa. So, business cannot ignore environmental impacts.

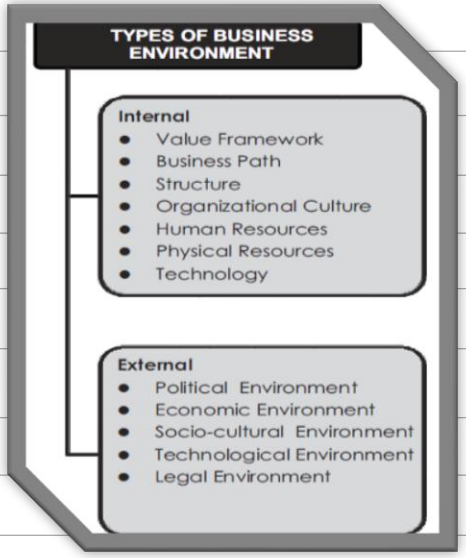
c) In modern economy, the nature and techniques of business are rapidly changing along with the change in environment.

d) With the revolution in the Information Technology (IT) sector, the pattern of business has undergone a sea-change. The concept of e-commerce, e-bay were non-existent in the past. Extensive use of internet in business has reduced the entire world into a single village and the physical boundaries between nations have vanished in thin air.

e) Recently, the worldwide attack of Corona virus has further changed the pattern of business.

f) Contactless business has made us more dependent on internet. Covid-19 pandemic has opened up new avenues of business particularly in the education and health sector.

g) The **environment in which an enterprise functions** could be divided into **two parts – external and internal environment.**



The **internal environment** includes **factors** which are **under the control of the firm**.

External environment, on the other hand , includes **factors** which are **beyond the control of the firm**

A) INTERNAL ENVIRONMENT

An organization in business is defined by the forces that exist inside it.

These include the managerial style, the level of machinery utilised, and the work environment. The main internal elements that influence the business environment are listed below.

a) Value Framework

This is basically the business functional process and **how the value in a business is judged**. The value framework of a business defines the manner in which its employees will perform their roles. And, how their **work culture** will be regulated.

b) Business Path

Every company has a reason to exist and a purpose to serve. These two factors along with how the business sees itself in the future constitute the business path. These define the changes that will be enforced into the business framework.

c) Structure

The **hierarchical or non-hierarchical structure** of a business that defines each employee's and management's role is one of the central aspects of the internal business environment. There are various business structures such as matrix, bureaucratic, functional, etc.

d) Organizational Culture

Although undefinable in exact terms, every business has a unique culture that it adheres to. This includes the treatment of employees, resources, clients, etc.

e) **Human Resources**

A relatively recent idea that has taken over the business world is human resources. Human resources is responsible for managing personnel on a micro level while firms get bigger every day. As a result, it is crucial in establishing the business environment.

f) **Physical Resources**

Every business needs resources to function, and how these resources are managed has a significant impact on the environment inside the company.

g) **Technology**

A corporate environment is constantly defined by technology, both internally and externally. It is dependent on both the technology being used by the business on the inside and the technology being utilised by its rivals on the outside.

B) EXTERNAL ENVIRONMENT

PESTLE is a phrase frequently used to describe elements in the external business environment. Political, economic, social, technological, legal, and environmental factors are all represented by this acronym.

a) **Political Environment**

From the political climate of the business' geography to the international relations it holds, every aspect of politics affects a business. Many countries have laws that facilitate some businesses, others have laws that restrict businesses. The condition of local politics and its relation to other countries highly affect the business condition.

The main components of Political Environment are:

- ✓ The Constitution of the Country.
- ✓ Political organization including the philosophy of political parties, ideology of the government, nature and extent of bureaucracy, influence of primary groups etc.
- ✓ Political stability including the structure of Military and police force, election system, Law and order situation etc.
- ✓ Image of the country and its leaders.
- ✓ Foreign policy alignment or non-alignment.
- ✓ Law Governing Business

b) **Economic Environment**

The current economic condition in most countries is highly volatile. And this is relevant to every business large and small. However, the presence of the open market has been highly beneficial towards businesses as well. Since the global economy is volatile most big business has to be careful of its impact at all times.

The main components of Economic Environment are:

- ✓ Economic system i.e., capitalist, socialist and mixed economic system.
- ✓ Economic policies such as, monetary policy, fiscal policy, supply side policy etc.
- ✓ Economic indices such as, Gross Domestic Product, Consumer Price index, Per Capita Income etc.
- ✓ Financial markets such as, share market, money market, capital market etc.
- ✓ Industrial infrastructure etc.

c) **Socio-cultural Environment**

Every society has its unique requirements and choices. These shape regional business personas and are one of the primary external factors for all businesses worldwide.

For example: let's see the current trend towards a western lifestyle throughout the world. This has led to a rise in demand for western food and fashion.

The main components of social and cultural environment are:

- ✓ Demographic Forces: includes Size, Composition and Mobility of Population.
- ✓ Social Institutions and Groups.
- ✓ Caste Structure and Family Organisation.
- ✓ Educational System and Literacy Rate.
- ✓ Customs, beliefs, values and life styles.
- ✓ Tastes and Preferences of People.
- ✓ Entrepreneurial Spirit.

d) ***Technological Environment***

Technology is one of the primary drivers in today's world. Businesses that are unable to match up to the current technological progress are having a hard time establishing their existence. And the businesses that are using tech to their advantage are moving ahead of their competitors. IT itself has become a leading business in the past few decades.

The main components of Technological Environment are:

- ✓ Rate of Technological change and Diffusion.
- ✓ New approaches to the production of goods and services.
- ✓ Use of New processes and equipment.
- ✓ Transfer of Foreign Technology.
- ✓ Impact of Technology on cost, quality and value chain.

e) **Legal Environment**

There are laws for businesses in every country in the world and every business has to abide by these laws. So, regulations are a primary factor that every business needs to consider in its external environment. But there are also regulations that help businesses thrive.

Example: A cigarette-selling company compulsorily has to put the slogan "smoking is injurious to health" on every packaging

The main components of Legal Environment are:

- ✓ Current Legislations.
- ✓ International Legislations.
- ✓ Regulatory bodies and processes.
- ✓ Tax Regulations.
- ✓ Competitive Regulations.
- ✓ Industry Specific Regulations.
- ✓ Government Regulations.

f) **Environmental Environment**

The world is currently facing an environmental crisis. As a result, all businesses are expected to adhere to a process that harms the environment in the least way possible. Also, certain environmental conditions in areas affect businesses.

For Example: a cold season might bring down the agricultural business, but it will boost tourism.

The main components under natural environment are:

- ✓ Climatic Conditions.
- ✓ Agriculture, Commercial, and other Natural Resources.
- ✓ Ecological System.

✓ Levels of Pollution.

Sub Classification of External Business Environment

This external business environment can be **classified into two – micro environment and macro environment.**

I. **Micro Business Environment**

The **activities** of customers, suppliers, competitors, marketing agencies, etc.in the immediate **neighbourhood of a business firm** create the micro business environment of that firm.

The micro environment of any particular firm may be different from that faced by the other firm within the same industry.

Components of Micro Business Environment

The principal components of micro business environment of any business firm are as follows:

a) **Customer**

The customer is king in business. Every business strives to provide the highest quality goods and services at the most competitive costs. Customers are enticed with additional freebies and discounts. In every market area, keeping track of client feedback and understanding their needs is becoming more and more crucial. With such a tactical approach, any company may win over the hearts of their clients and generate financial profits as a result. In other words, the majority of companies operate largely to fulfill the demands and desires of their clients. The goal of the business is to please customers while making money.

b) **Competitors**

Any business faces intense rivalry due to the enormous number of rivals in the same industry. As a result, you need to have a strategy for dealing with the opposition. It will let you gain control of monopolies and prosper in any business segment. To differentiate your product from others on the market, it needs not only have the USP but also the UPB. An essential aspect of the competitive environment that any organization must comprehend is the need to stand out from the crowd. Regardless of how large a company is, monopolies do not exist in the commercial world.

c) **Employees**

Before conquering the market, it is essential to win the workplace. Any organization's workforce has a significant impact on both the micro and macro business settings. The number of workers has a direct impact on output rate. They so determine the success or failure of any organisation directly. Every successful company strives to consistently improve and train each employee's skills. Additionally, an organisation never stops praising talent that inspires and motivates workers. The market is much larger than the sum of its consumers. Therefore, the company needs engage the best employees to assess the market's current size, development potential, and attractiveness.

d) **Shareholder**

Any firm, whether little or huge, needs money and capital to establish themselves and develop. Investors called shareholders to donate money to the business. Shareholders now own the company's shares, i.e., they invest in the firm, and in exchange, the corporation distributes profits to its shareholders. Thus, the appropriate equation between any organisation and its shareholders is established.

Shareholders are the owners of the corporation in addition to being investors. They are, in a sense, the owners of the company because they have equity in it. This suggests that they have some influence over how a company is run.

e) **Suppliers**

A supplier is a business that offers the raw materials and other inputs needed for the mass production of goods. Any successful business has a close, mutually beneficial connection with its suppliers. As a result, both entities profit from the positive and cooperative connection. The situation where a company runs out of raw materials and the entire manufacturing and supply process is delayed can also be used to understand it.

f) **Media**

The media is an effective tool for promoting any brand's goods and services. The direct consumer contact concept is practical. Consequently, maintaining a cordial relationship with the media is equally essential. Any unfavourable comments or press coverage could severely harm the brand's reputation in addition to causing financial losses. In order to use the power of the media for the promotion and growth of a business, organisations recruit experts like PR managers. If you were to own a business, for instance, you would require media in order to promote your name and sell your products.

II. Macro Business Environment

Macro business environment is entirely external to the firm and thus beyond the direct influence and control of the organization, but which exerts powerful influence over its functioning.

The principal components of the macro business environment are the economic environment, political and regulatory environment, socio-cultural environment, demographic environment, technological environment and natural environment.

The success of the business firm depends to a large extent on its adaptability to these dynamic forces of macro business environment. The business opportunities and threats to any business firm depend to a large extent on those forces of themacro business environment.

By analyzing the macro business environment, a firm can formulate its strategic policies to grab the opportunities and can take firm decisions to stay away from the threats.

Components of Macro Business Environment

The following are the components of macro business environment:

a) **Demographic Environment:** Business is heavily dependent on population's size, age structure, geographic distribution, ethnic make-up and distribution of income. Demographic characteristics and its change has far reaching implications on the future competitiveness of the company and also on the formulation of its strategic policy.

b) **Economic Environment:** The economic environment refers to the nature and direction of the economy in which the company operates.

The purchasing power in an economy depends on current income, prices, savings, circulation of money, debt and credit availability. Income distribution pattern and the propensity to consume together determine the marketing possibilities. Economic prospect of the country and its inflation rate has far reaching impact on the operations

of the firm.

c) **Political-Legal Environment:** Business is controlled by Govt. policies viz., fiscal, monetary, industrial, labour and export-import policies etc. a business strategist follows the changes in the regulatory framework and their impact on business.

Firms prefer to operate in a country where there is a sound legal system. Firms must be conversant with the relevant laws relating to company, consumer protection, competition, intellectual property, foreign exchange, labour etc.

Also lack of political stability creates uncertainty in business environment

d) **Socio-Cultural Environment:** Socio-cultural environment comprises of social traditions, values and beliefs, level and standards of literacy and education, the ethical standards and state of society, the extent of social stratification, conflict and cohesiveness and so forth. The core beliefs of a particular society tend to be persistent. It is difficult for businesses to change these core values, which becomes a determinant of its functioning.

e) **Technological Environment:** The level of technological development, type of technology in use, the speed with which newly invented technologies are adopted and diffused, the R & D activities for the innovation of new technologies etc., determine the technological environment of any economy.

With the introduction of "Green Revolution" in Indian agriculture, India could create a wide domestic market for modern agricultural implements like power tillers, tractors, pump sets, threshers, bulldozers etc. On the other hand, with the increase in the generation and distribution of electricity, the demand for various electrical home

appliances has increased in India.

Technology can bring opportunity or pose a threat to the business. When organizations adopt technological innovations quickly and set the business strategy, it will act as an advantage. But if they fail to adopt innovations to their advantage, it will be a threat. With the revolution of "Information Technology", extensive use of internet has enabled a huge number of employees to work from home and provided strategists with access to richer sources of information through "Google search machine". It has also provided customers with access to online shopping through internet.

f) **Global Environment:**

Today's dynamic competitive landscape of the business world requires that companies must analyse global environment as it is rapidly changing. The new concept of global village has changed how individuals and organizations relate to each other. New migratory habits of the work force and increased offshore operation are changing the dynamics of business operation.

SWOT ANALYSIS

a) Business **firms pursue SWOT analysis** to understand the external and internal environment.

b) SWOT is the **acronym for strength, weakness, opportunity and threat**. Through such an analysis, an effective organizational strategy can be formulated which capitalizes on the opportunities by using strengths and neutralizes the threats by minimizing the impact of weaknesses.

c) This SWOT analysis is important for **indicating the competitive strength and viability of any business firm**.

d) A **strength** is the **positive aspect** of the internal environment which the firm can use to **gain strategic advantage** over its competitors.

e) A **weakness** is the **negative aspect** of the internal environment which causes a strategic disadvantage for the firm.

f) An **opportunity** is a **favourable condition** in the external environment which helps the firm to consolidate and have a sound footing in the market.

g) A **threat** is an **unfavourable condition** in the external environment which creates a risk for the firm that leads to huge loss.

IMPORTANCE OF BUSINESS ENVIRONMENT

For any organisation, the business environment offers both possibilities and threats. A good manager of a business not only recognises and assesses the environment, but also responds to these outside factors.

If we take into account the following details, we can clearly see how important the business environment is:

a) **Enables to Identify Business Opportunities:**

Not all changes are bad. If recognised and assessed, they may contribute to a company's success. Finding a change and utilising it as a tool to address a population or business's challenges is crucial.

Example: the Indian need for ticket booking bothered Mr. Phanindra Sama. He used to drive a long way to his travel agency to make his reservation, but even then, he wasn't sure if his seat was guaranteed. In response to the issue, he recognised a chance to create an app and joined forces with another person to create the online ticketing platform known as "redBus."

b) **Helps in Tapping Useful Resources:**

Utilizing the beneficial resources needed for the firm requires careful examination of the business environment. It aids the business in managing these resources and transforming them into products and services.

c) **Coping with Changes:**

The company needs to be aware of the constant changes in the business environment, including shifts The firm can implement a response to deal with those changes if it is aware of these predictable developments.

Example: Nokia failed to adapt to the change by not incorporating Android OS into its smartphones at a time when the market for Android OS was booming and consumers were choosing Android devices for its user-friendly interface and apps. They lost a great deal of market value by failing to adapt.

d) **Assistance in Planning:**

This is yet another facet of how crucial the corporate environment is. Planning only refers to the future tasks that must be completed. It is up to the business to select what plan it needs to develop in order to address the future, solve the problem, or take advantage of the opportunity when the business environment offers a problem or an opportunity. The business can incorporate plans to combat the modifications for a secure future after assessing the developments that have been offered.

e) **Helps in Improving Performance:**

Businesses that are actively monitoring their surroundings not only adapt to the changes but also thrive in them. Adapting to external influences enables a company

to increase performance and remain competitive.

f) **Risk Management:**

The business environment is dynamic and often unpredictable. By monitoring external factors such as economic fluctuations, regulatory changes, and technological advancements, businesses can anticipate risks and take proactive measures to minimize their impact.

g) **Compliance and Governance:**

Businesses operate within a complex regulatory environment. Understanding and complying with relevant laws, regulations, and industry standards are essential for avoiding legal issues, reputational damage, and financial penalties.

PART II

EMERGING DIMENSIONS OF VUCAFU

a) **VUCA** is an acronym, **first used in 1987** based on the **Transformational leadership theories of Warren Bennis and Burt Nanus (1985)**, to describe or to reflect on the **volatility**, **uncertainty**, **complexity and ambiguity** of the external environment.

b) Because of this new and completely unpredictable environment, it is almost impossible to predict threats or opportunities.

c) However, at the same time the potential for disruption is very high.

d) The **US army war college** introduced the concept of VUCA to describe the volatile, uncertain, complex and ambiguous multilateral world perceived as resulting from the end of the "Cold war". It was vital to establish an ability for defense amidst complete uncertainty.

e) With the onset of **Covid 19 pandemic** which engulfed the entire globe like wild fire, two more letters have been added to VUCA which are FU to represent the "**Fear of unknown and unprecedentedness**".

f) As the corona virus (COVID – 19) pandemic sweeps across the world, it is causing unprecedented widespread concern, fear and stress, all of which are natural and normal reactions to the unknown and uncertain situation that everyone find themselves in. The strategists of most of the organizations are at a loss as to how to cope with such a fearful unprecedented situation.

Volatility

Volatility is a statistical measure on one hand, which describes **an amount of uncertainty**. On the other hand, it is a concept that refers to the **speed, volume, nature and magnitude of a change** that may or may not be in a pattern form.

The change may occur in an industry, in a market or in the world in general. The more volatile the world is, the more and faster things change. The challenge is unexpected and unstable and may be of unknown duration.

For example: violent fluctuations in prices after a natural disaster catch the supplier on the wrong foot. Here the solution may lie in the stock piling of the inventory. Other examples may include fluctuations in the stock market and innovations in technology and digitalization. Proper risk management may solve the stock market fluctuations, while quick adoption of new technology will help the organization grow at a faster pace and will retain its competitive advantage.

Uncertainty

Uncertainty refers to the extent to which we can confidently predict the future. Keeping in mind volatility, uncertainty becomes the ability to predict or not to predict what will happen amidst volatility. When there are no concrete trends or patterns, it becomes more and more difficult to establish what will happen next and to make decisions based on that. **Uncertainty is lack of clarity to evaluate a situation properly to identify challenges and opportunities.**

However, decision making under uncertainty by the strategist of the business firm is possible with the help of "Game Theory". The condition of uncertainty occurs when the decision maker has no information about the probability of the occurrence of different states of nature. The **"Minimax rule"** put forward **by Neumann and Morgenstern** states that the decision maker should minimize the maximum loss. Similarly, the "**Maximax rule**" states that that strategy should be chosen which **maximises the maximum possible profit.** The Bayes' rule is another method which the strategist of a business firm adopts in making decisions under uncertainty.

For example, the launching of the product of a prospective competitor may destroy the business of an established product and the future of its market plunges into uncertainty. In order to tackle such a problem, the business firm should invest in collecting, interpreting and sharing information so that it can pre-empt. Information analysis networks help reduce the effect of uncertainty.

Complexity

When environment is volatile and uncertain, the situation as such automatically becomes more complex. This happens because the **cause and effect are no longer linear**. So, it becomes a challenge to discern which development has led to which consequence. Complexity describes the amount of diversified states a system can get into at a certain point of time. The more diversified states a system can get into, the harder it gets to manage these states. Particularly, when it comes to long term events. It is often impossible to determine when or why a particular development took place and what factors influenced it. Under high complexity, it is impossible to fully analyze the environment and come to rational conclusions. The more complex the world is, the harder it is to analyze. Suppose, a multi-national company is doing business in many countries, all with unique regulatory environment, tariffs and cultural values. The strategists would like to restructure and develop specialists and build up resources which will be adequate to address the complexity.

At the same time a complex environment may be created when an action that is deliberately taken, has led to multiple and very different outcomes not in conformity with the expectation, for example, organizational alliance. This may involve complex legal implications.

Ambiguity

When a **situation cannot be clearly interpreted**, its meaning not discerned and the causality not determined – such a situation is termed as ambiguous. This may happen when **information is incomplete**, contradictory or too inaccurate to draw clear conclusions. **Ambiguity does not imply a lack of clarity – rather it describes a situation where multiple interpretations are possible and all are equally valid**. In other words, there is no right solution. This is because there may be many possible solutions and there is no analytical way to establish which one is the correct way to follow. Suppose, a business firm decides to sell its product in an immature or emerging market or decides to launch products outside the core competencies. As a solution to this problem, the strategists would like to conduct experiments. Understanding cause and effect requires generating hypotheses and testing them. The experiments should be designed in such a way that the lessons learned can be applied fruitfully.

In practice, the four terms volatility, uncertainty, complexity and ambiguity are related. The more complex and volatile an environment is, for example, the harder it is to predict and therefore, more uncertainit will be. Yet, all the four represent distinct elements that make our environment – the world, a market or an industry – very difficult to grasp and control.

Fear of Unknown and Unprecedentedness

When the external environment is such that the business firms are engulfed by a fear of unknown dimension because of an unprecedented catastrophe that their strategists are completely dumb founded which renders them extremely helpless. The classic example of this is COVID-19 (corona virus borne disease) pandemic.

The impact of COVID-19 pandemic is being felt by all the business firms around the

world. The entire globe is reeling under the third wave of the pandemic in the early 2022. This is because of the fact that the "Novel Corona virus" which started spreading the disease from China in late 2019, is mutating continuously and changing the nature of the virus. The different strains of corona virus are Alpha, Beta, Gamma, Delta, Omicron etc. Scientists and doctors have failed to predict how many waves of the pandemic are yet to come.

As COVID-19 has created unprecedented economic uncertainty and loss, maximizing returns, managing risk and ensuring the continued health of the business, demands a deep understanding of changing market conditions and Govt. policy. Infrastructure investments might pave the way to post-pandemic recovery reinforced by sustainable and resilient growth.

For example, "PM- Gati Shakti" – a new project has been introduced in Indian Budget 2022, to boost up the infrastructure in a big way..

The outbreak of the virus is spurring the adoption of contactless digital payments and there has been a surge in digital payment volumes across online grocery stores, retail outlets, online pharmacies etc. National Payments Corporation of India (NPCI) has been pivotal to the emergence of the digital payment ecosystem in India. Indian Finance Minister has assured that Central Bank Digital Currency will be issued very soon which will give a big boost to digital economy.

In order to overcome this unprecedented situation, business leaders are navigating a broad range of interrelated issues that span from keeping their employees and customer safe through "work from home" and "contactless transaction" respectively, providing support of cash and liquidity, re-orienting operations and navigating complicated government support programmes.

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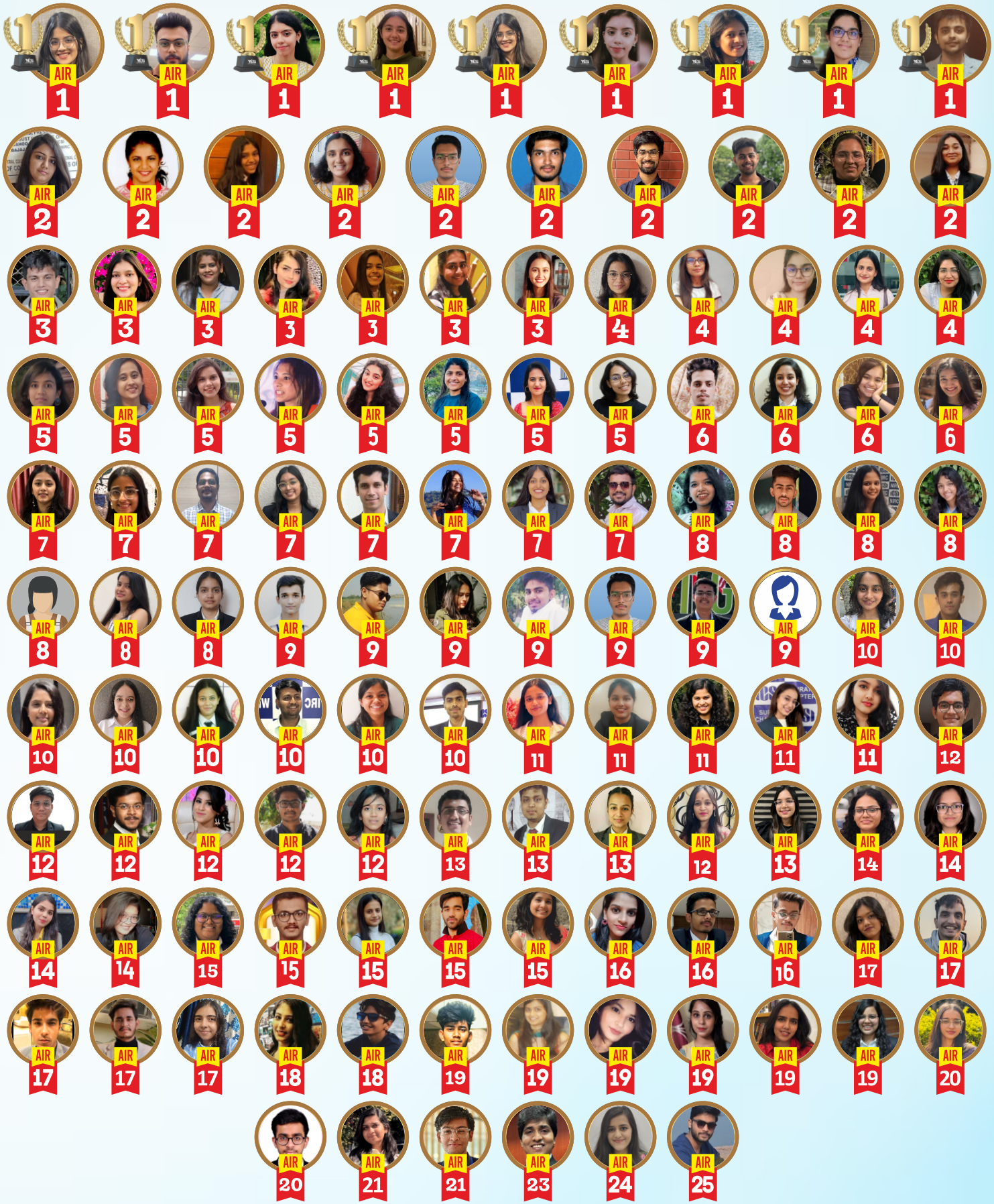

& many more

CS Vasudev Gyanchandani

As a committed professional and educator, he strongly believes that effective learning is achieved when theoretical knowledge is seamlessly integrated with practical application. His teaching philosophy focuses on building a strong understanding of corporate governance, legal compliance, and commercial awareness, enabling students to connect academic concepts with real-world practice.

With extensive experience across corporate, legal, and academic domains, he has worked with reputed organizations, including Tata Group entities and leading corporate law firms, handling a wide range of legal, secretarial, and treasury compliances. His industry exposure brings valuable practical insights into the classroom, enriching students' overall learning experience.

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