# Chapter 1

# **Economy Basics**

# **Economics and Economy**

In our day to day life we use a lot of economic concepts such as goods, market, demand, supply, price, inflation, banking, tax, lending, borrowing, rate of interest etc.

Economics is the study of making decisions in the presence of scarcity of resources in the economy.

Our very existence depend on various Economic Activities that involves production, consumption and investments.

The **primary aim** of the economic activity is the production of goods and services with a view to make them available to masses.

Human activities which are performed in exchange for money are called economic activities. The environment that facilitates these activities is known as Economy.

# **Economic Agents**

Economic agents mean those individuals or institutions which take economic decisions.

They can be consumers who decide what and how much to consume.

They may be producers of goods and services who decide what and how much to produce.

They may be entities like the government, corporation, banks which also take different economic decisions like how much to spend, what interest rate to charge on the credits, how much to tax, etc.

## **Basic Economic Activities**

Production, consumption and investment (capital formation) are three basic economic activities of an economy.

These are interrelated and interdependent. These three economic activities are responsible for generating the income flows in the economy.

An increase in the production of goods and services increases the level of consumption and capital formation.

Increase in consumption is an indicator of rising standard of living of people and increase in capital formation is very important as the growth of the country depends on it.

More consumption is possible if there is more production and more production is possible if there is more capital formation.

## **Production**

Land, labour, capital and entrepreneurship are called the factors of production. These factors are owned by the households of the country.

Production of goods and services is a result of joint efforts of **four factors of production**. The producers try to produce maximum amount of goods and services by using various combination of factors of production.

## Factor incomes

Factors are paid rent, wages, interest and profits for their productive services. Rent is paid to the landlords, wages to the labourers, interest to lender for loan to buy the capital resources like Machinery, Tractor and profit to the entrepreneurs.

Since they are paid in return to their productive services, they are called factor payments and their incomes are called factor incomes.

### Non- factor incomes

There are certain money receipts which **do not involve any sacrifice** on the part of their recipients, the examples are gifts, donation etc. No production activity is involved in getting these incomes.

These income are **called transfer incomes** because such income merely represent transfer of money without any good or service being provided in return for the receipts. These incomes are **not included in national income** 

Q.1 NIOS

Who are the owner of factors of production

(a) Government (b) Rest of the world (c) Households (d) Firms and industries

### Q.2 CDS 2022

Which one of the following terms denotes the inputs in terms of tools, machines, buildings, raw materials and money in hand required at any stage of production?

(a) Fixed capital (b) Working capital (c) Physical capital (d) Human capital

#### Ans

Every production is organised by combining land, labour, physical capital and human capital, which are known as factors of production.

Physical capital means variety of inputs required at every stage during production. it consist of fixed capital and working capital. Tools, machines, buildings can be used in production over many years, and are called fixed capital. Raw materials and money in hand are called working capital.

Human capital or Entrepreneurship means knowledge and enterprise to be able to put together land, labour and physical capital and produce an output.

### Consumption

The consumption activity consists of the use of goods and services for satisfaction of human wants.

### Investment/Capital Formation

As you have read, factor owners get factor incomes in return for their productive services. They spend a large part of their incomes on goods and services such as food articles, cloth, furniture, housing, education, health care etc. However, they do not spend their entire income on these goods and services. They also save some income and deposit it in bank for future.

For example, if an individual has an income of Rs. 25000/- all of which he consumes, there is no saving. Instead if he restricts his consumption to Rs.20000/, saves Rs.5000/ and may use this money to deposit in bank for future use.

The bank, in turn, may use this money to lend an industrialist to invest in the expansion of his business.

Thus current consumption is forgone and used towards adding to existing capital stock like, plant, machinery, building etc. every year in order to expand production potential in future.

This increase in the stock of capital goods in a year is called capital formation or investment. Capital formation increase economic growth in country.

Hence Capital formation is done by refraining from present/current consumption. Saving, if kept idle, cannot constitute capital formation. If a person saves money and locks up in the house, no capital formation takes place. If only the saved money is invested in capital goods it leads to capital formation.

## To sum up, whatever is produced is disposed of either for consumption or for capital formation or both.

Q.3 IAS Prelims 2013

Economic growth in country X will necessarily have to occur if

- a. there is technical progress in the world economy
- b. there is population growth in X
- c. there is capital formation in X
- d. the volume of trade grows in the world economy

#### Q.4 NIOS

National income can be increased by

(a) Increase in population (b) Increase in the rate of investment (c) Increase in unemployment (d) Decrease in price level

## Incremental Capital Output Ratio (ICOR)

ICOR is a measure of the productivity of capital investments in the economy.

**e.g.** First year Additional Capital investment in the economy is Rs. 100000/- and additional output is **25000** units then ICOR is 4.

Next year Additional Capital investment Rs. 100000/- and additional output is 20000 unit then ICOR is 5.

A higher ICOR is an indicator of inefficiency (decline in the marginal productivity of capital) i.e. investment capital accumulated in projects is not yielding commensurate output.

The rise in ICOR can be attributed to the delay in completion of projects or the lack of complementary investments. In some cases, it can also be due to non-availability of critical inputs.

#### Q.5 IAS Prelims 1995

The main reason for low growth rate in India, in spite of high rate of savings and capital formation is (a) high birth rate (b) low level of foreign aid (c) low capital / output ratio (d) high capital / output ratio

#### Q.6 Prelims 2018

Despite being a high saving economy, capital formation may not result in significant increase in output due to a) weak administrative machinery b) illiteracy c) high population density d) high capital-outputs ratio

### **Branches of Economics**

Study of Economics is divided into two distinct branches (i) Micro Economics (ii) Macro Economics

#### Micro Economics

The word "micro" means very small. So micro economics implies study of economics at a very small level. In micro economics **we study the behavior of an individual** as a buyer and seller. So the economic decisions taken by a single individual become the subject matter of micro economics.

#### For example-

(a) As a buyer individual has to make a decision with regard to quantity of the good to be purchased at given price.

(b) As a seller individual has to take decision regarding the quantity of good to be supplied at a given price so that he can earn some profit.

(c) All of us pay price to buy a good? How does this price get determined in the market? Micro economics provides answer to this question.

(d) In order to produce a good an individual producer has to take decision as to how to combine the various factors of production so that maximum output can be produced at minimum cost.

All these are some important areas of study under micro economics.

#### Macro Economics

The word macro means very large. In comparison to an individual, the society or the country or economy as a whole is very large. So the economic decisions taken at the level of the economy as whole are subject matter of macro economics.

#### For example-

Inflation or Price rise- Inflation or price rise does not affect an individual only, but it affects the whole economy. So knowing its causes and effects as well as controlling it, come under the study of macro economics.

Similarly, problem of unemployment, economic growth and development etc. concern with the whole population of the nation and hence are covered under the study of macro economics

Type of Econ	nomies on the basis of ownership and control over resources									
The Market/ capitalist	• The capitalist or free enterprise economy is the <b>oldest form</b> of economy. It advocates minimum government intervention in the economic activities. The role of government is to help in free and efficient functioning of the markets.									
Economy	• In a capitalism system all the individuals have the right to own property.									
	• <b>Government does not coordinate production decisions of the citizens</b> . Individuals are free to choose any occupation. Freedom of enterprise implies that business firms are free to acquire resources and use them in the production of any good or service.									
	• <b>Consumers are like a king</b> . Production is guided by consumer's choices.									
	• Self-interest is the guiding principle in capitalism. Entrepreneurs know that they will own the profit or loss after the payment to all other factors of production. Therefore they are always motivated to maximize their residual profit by minimizing cost and maximizing revenue. This makes the capitalist economy an efficient and self-regulated economy									
	<ul> <li>There are no restrictions on the entry and exit of firms in a capitalism system. The large number of producers are available to supply a particular good or service and therefore no firm can earnore than normal profit.</li> </ul>									
	<ul> <li>Competition is the fundamental feature of capitalist economy and essential to safeguard agains consumer's exploitation.</li> </ul>									
	Capitalism is essentially a <b>market economy</b> where every commodity has a price. The <b>forces of</b> demand and supply in an industry determine this price. A producer will produce those goods, which give him more profit.									
	Pure capitalism is not seen in the world now-a-days. The economies of USA, UK, France, Australia etc. are known as capitalistic countries with active role of their respective government in economic development.									
The Centrally	• In the socialist or centrally planned economies <b>all the productive resources</b> are owned and controlled by the government in the overall interest of the society.									
Planned/ socialist	A central planning authority takes the decisions.									
Economy	• The decisions are taken by the government at macro level with the objective of maximization of social welfare in mind rather than maximization of individual profit.									
	• The Central Planning Authority keeping the national priorities and availability of resources in m allocates resources.									
	• Government takes all economic decisions regarding production, consumption and investme keeping in mind the present and future needs. The planning authorities fix targets for vario sectors and ensure efficient utilization of resources.									
	Countries such as Russia, China, North Korea and many eastern European countries are said to be socialist countries. But they are changing now and encouraging liberalisation in their countries for their economic development									
Mixed economies	• A mixed economy combines the best features of capitalism and socialism. The public and private sectors <b>co-exist</b> in mixed economies.									
	• The government prepares long-term plans and decides the roles to be played by the private and public sectors in the development of the economy. The <b>public sector</b> is under direct control of the government as such production targets and plans are formulated for them directly. The <b>private sector</b> is provided encouragement, incentives, support and subsidies to work as per national priorities.									
	• Government uses its various policies e.g. licensing policy, taxation policy, price policy, monetary policy and fiscal policy to control and regulate the private sector.									

Indian economy is considered a mixed economy as it has well defined areas for functioning of public and private sectors and economic planning. Even countries such as USA, UK, etc. which were known as capitalistic countries are also called mixed economies now because of active role of their government in economic development. In reality, all economies are mixed economies where some important decisions are taken by the

government and the economic activities are by and large conducted through the market.

Q.7 CDS-2009

Mixed economy means an economy where

- (a) both agriculture and industry are equally promoted by the State
- (b) there is co-existence of public sector along with private sector
- (c) there is importance of small scale industries along with heavy industries
- (d) economy is controlled by military as well as civilian rulers

### Q.8 ES-2011

- The concept of 'Mixed Economy' relates to
- (a) the coexistence of rural sector and urban sector (b) the coexistence of public sector and private sector
- (c) the coexistence of small-scale sector and large-scale sector (d) the coexistence of service sector and manufacture sector

## Type of Economies on the basis of Level of Development

# (i) Developed economy

The countries are labeled developed or rich and developing or poor on the basis of **real national and per capita income** and **standard of living** of its population.

Developed countries have higher national and per-capita income, high rate of capital formation i.e. high savings and investment. They have highly educated human resources, better civic facilities, health and sanitation facilities, low birth rate, low death rate, low infant mortality, developed industrial and social infrastructures and a strong financial and capital market.

In short, developed countries have high standard of living. Examples of Developed countries are US, UK, Canada etc.

# (ii) Developing economy

Developing countries are **low on the ladder of development**. They are sometimes also called underdeveloped, backward or poor countries. But economists prefer to call them developing countries because it gives a sense of dynamism.

The national and per capita income is low in these countries. They have backward agricultural and industrial sectors with low savings, investment and capital formation. Although these countries have export earnings but generally they export primary agicultural products. In short, they have low standard of living and poor health and sanitation, high infant mortality, high birth and death rates and poor infrastructure. **India is called Developing country**.

Open economy	Closed economy
Which has economic relations with the rest of the world.	Which has no economic relations with the rest of the
Most countries of the world are open economy.	world.
	Example of closed economy is difficult to find in
In an open economy, the demand for domestic goods is	present day world. (North Korea may be an
equal to the domestic demand for goods (consumption,	example).
investment and government spending) plus exports minus	
imports.	In closed economy Saving and investment, Gross
i.e. In an open economy, exports constitute an additional	Domestic Product (GDP) and Gross National
source of demand for domestic goods and services.	Product (GNP) are equal but in an open economy,
	they can differ.

#### Q.9 IAS Prelims 2000

In an open economy, the national income (Y) of the economy is: (C, I, G, X, M stand for Consumption, Investment, Govt. Expenditure, total exports and total imports respectively.) (a) Y = C + I + G + X (b) Y = C + I + G X + M (c) Y = C + I + G + (X - M) (d) Y = C + I + G + X - M

Q.10 IAS Prelims 2011

A "closed economy" is an economy in which ?

- (a) The money supply is fully controlled. (b) Deficit financing takes place.
- (c) Only exports take place. (d) Neither exports nor imports take place.

# **CENTRAL PROBLEMS OF AN ECONOMY**

As we have multiple wants/wishes/desires but only limited resources to fulfill them. We need different goods and services to satisfy different wants. But due to scarcity of resources, we cannot produce all the different types of goods and services for everybody in the economy at the same time. Also due to scarcity, we cannot afford to waste the resources...

Three major problems facing any economy are

1. Problem of Allocation of Resources 2. Problem of Full Utilization of Resources 3. Problem of Growth of Resources

# 1. Problem of Allocation of Resources

An economy also confronts three *fundamental* economic problems:

- 1. What goods and services shall be produced and in what quantities?
- 2. How shall goods and services be produced?
- 3. For Whom goods and services are to be produced?

These are called central problems because every economy has to face them and seek solutions to them.

# What goods and services shall be produced and in what quantities?

Whether to produce more of food, clothing, housing **or** to have more of luxury goods. Whether to use more resources in education and health or to use more resources in building military services. Whether to have more of consumption goods or to have investment goods (like machine) which will boost production and consumption tomorrow.

# How shall goods and services be produced?

Once the goods to be produced are decided, there is a problem of how to produce them. Whether to use more labour or more machines. There are many different ways of making things.

For example, clothes can be produced by employing more labour and less machines or more machines and less labour.

If goods and services are produced by employing more of labour and less of capital, it is known as **labour intensive** method of production. If goods and services are produced by employing more of capital (machinery etc.), it is called capital intensive method of production.

# For Whom goods and services are to be produced?

Who is to enjoy and get the benefit of the goods and services produced? It is not possible to satisfy everyone's want due to scarcity, so it must be decided to whose wants are to be satisfied, the poorer people or the richer people.

# Resource Allocation in a Capitalist Economy

Capitalist economy is an economic system in which factors of production are privately owned and goods and services are produced with the objective of earning maximum profit. They produce only those goods which are demanded by the consumers.

# **Resource Allocation in a Planned Economic System**

In a planned economic system, there is a central planning authority of the government which decides what to produce, how to produce and for whom to produce. In a planned system, the government wants everybody to be equal. They produce the goods **which everybody needs** and **can be shared equally by everyone**. Government decides to produce the goods and services which it thinks people should have and not what people think they should have.

## **Resource Allocation in a mixed economy**

In the mixed economic system the choice of goods and services to be produced by the private sector depends on the basis of profit motive. The choice of goods and services to be produced by the government depends on the basis of needs and requirements of the people.

# 2. Problem of Full Utilisation of Resources

The other central problem of an economy relates to full utilisation of resources- land, labour, capital.

If all the resources in the economy are fully employed, then the quantity of one commodity can be increased only by forgoing some quantity of the other. This happens when production takes place efficiently.

But in reality, most of the time production does not take place efficiently. These factors are not fully employed and the production is below the optimum capacity of economy.

For example- in our agricultural land we still grow only one crop in a year. This is not a good sign, as the resources are already scarce. If these scarce resources are also not utilized fully, it is wastage of resources. Thus it is the **duty of an economy** to ensure that the scarce resources do not remain unutilized or under-utilised.

## 3. Problem of Growth of Resources

If resources like labour, capital and technology grow over a period of time, the problem of scarcity can be addressed. Thus, for the growth of any economy, the resources available to the economy should grow. It is only through the effective growth of resources that a society can enjoy a higher standard of living.

If the resources have failed to grow, the countries continue to be underdeveloped. Thus, the economies should make efforts so that their resources grow gradually to meet the growing needs.

# Production possibility set

Resources of an economy as a whole are always limited. The collection of all possible combinations of the goods and services that can be produced from available amount of resources is called the production possibility set of the economy.

# Fixed Cost

Fixed costs are the costs which do not change with change in the level of output. Fixed cost is defined as the expenditure, on hiring or purchasing of fixed factors/inputs, which are compulsory and has nothing to do with the amount of production of the good or service.

For example: Suppose you start your own production business by taking a loan from bank and hiring an office building. Even If you do not start production, you will have to pay rent of office building and interest on loan. Hence rent of office building and interest on loan here is fixed cost.

# Variable Cost

Variable costs are the costs that directly vary with changes in the level of output. We can define variable cost as the expenditure on variable factors/inputs, such as labour, raw material which can be changed.

## **Break even point**

Is the point at which cost and revenue is equal i.e. there is no loss or profit.

Sales above the BEP will generate profit to the firm. Sales below BEP will lead to loss to the firm.

## Shut down point

When firm is incurring losses but can cover its variable cost from its revenue then it should continue the production as fixed cost will always be incurred whether to continue the production or not.

When revenue cannot even cover the variable costs of production then at this point firm should shut down the production.

## Marginal cost

Marginal cost means extra/additional cost incurred on additional unit of production.

It is dependent on the variable cost only as fixed cost remains constant on every additional production.

Output	total cost	marginal cost
1	60	-
2	80	20

### **Marginal Product (MP)**

MP is the **addition** to the output resulted due to addition of one extra unit of input.

### Law of diminishing marginal product

It says that if we keep on increasing the input (e.g. labour or raw material), with other inputs fixed, marginal product will increase initially till certain point is reached after which the resulting addition to output (i.e., marginal product of that input) will start falling.

For example- One labour is producing 80 units of a product in a 8 hour working day (i.e. 10 unit per hour) If he works overtime for another 8 hour then initially he may produce 10 unit per hour for 2 or 3 hour after which his production will fall due to overworking.

### **Social Costs**

Factories emit large amount of smoke from their chimneys into the atmosphere. This may not figure in the calculation of costs in their records. But the cost to the community may be in the form of additional washing bills for clothes and the money spent by the community on medical bills etc. These costs are social costs.

#### Real cost

Real cost has no definite money value nor it can be measured in monetary terms. A producer makes a lots of sacrifices and toils hard to set up business. The pain, discomfort, stress and strain that he/she undergoes cannot be measured in money. This is called real cost to the producer.

# Consumer's equilibrium

Consumer's equilibrium refers to a situation when he/she spends his/her money income on purchase of a commodity/bundle in such a way that yields him/her maximum satisfaction and he/she feels no urge to change.

#### Q.11 IAS Prelims 1998

A consumer is said to be in equilibrium, if

(a) he is able to fulfil his need with a given level of income (b) he is able to live in full comforts with a given level of income

(c) he can fulfil his needs without consumption of certain items (d) he is able to locate new sources of income

#### Indifference curve

When a consumer consumes various goods and services, then there are some combinations (bundles) which give him same satisfaction. The graphical representation of such combinations is termed as indifference curve.

### Marginal rate of substitution

Marginal rate of substitution refers to the rate at which consumer is willing to give up amount of other good to obtain one extra unit of the good in question without affecting total satisfaction. So, the rate of substitution of one commodity for another is called marginal rate of substitution.

### Marginal Utility

Marginal utility is the **addition** to the total utility derived from the consumption of an additional unit of a commodity

# Law of diminishing marginal utility

When we get more and more units of a commodity, the intensity of our desire for that commodity tends to diminish. The law of diminishing marginal utility also explains the same thing. It states that 'as more and more units of a commodity are consumed, marginal utility derived from each successive unit goes on diminishing.'

Suppose, a thirsty man drinks water. The first glass of water he drinks will give him maximum satisfaction (utility). Second glass of water will also fetch him utility but not as much as the first one because a part of his thirst is satisfied by drinking

the first glass of water. It is just possible that he may get zero utility from the third glass because his thirst has now been satisfied.

There will be negative utility from the fourth glass of water. Any rational consumer will not consume additional glass of water when it gives disutility or negative utility.

Q.12 CDS 2018

According to the law of diminishing marginal utility, as the amount of a good consumed increases, the marginal utility of that good tends to (a) improve (b) diminish (c) remain constant (d) first diminish and then improve

# Marginal propensity to Consume (MPC)

MPC is the ratio of change in consumption to change in income between two time Periods.

# Marginal propensity to save (MPS)

MPS is defined as the ratio of change in saving to change in income between two time Periods

# Paradox of Thrift

If all the people of the economy increase the proportion of income they save (i.e. if the mps of the economy increases) the total value of savings in the economy will not increase – it will either decline or remain unchanged. This result is known as the Paradox of Thrift – which states that as people become more thrifty they end up saving less or same as before.

Increase in saving leads to a decrease in aggregate demand and thus a decrease in gross output which will in turn lower total saving.

# Factors affecting individual demand for a commodity

The following factors affect the individual demand for a commodity:

- 1. Price of the commodity
- 2. Price of related goods
- 3. Income of buyer of the commodity
- 4. Tastes and Preferences of the buyer

# 1. Price of the commodity

## Law of Demand

a consumer's demand for a good is inversely related to the price of the good.

If price of a commodity falls, its quantity demanded increases and if price of the commodity rises, its quantity demanded falls.

## Demand curve:



### Exception to law of demand

1. **Giffen goods** -Giffen goods are special type of inferior goods (like food items e.g. Rice, Flour, Salt, Jowar and Bajra etc.) which do not follow law of demand as their demand rises when their price rises because people start buying more of these goods thinking of shortage and further increase in price in future.

2. Status Symbol Goods/Veblen Goods - Some goods are used by rich people as status symbols, e.g. diamonds, designer jewellary, luxury cars etc. The higher the price, the higher will be the demand for these goods.

When price of such goods falls, these goods are no longer looked at as status symbol goods and, therefore, their demand falls.

**3. Necessities** -Commodities such as medicines, salt, wheat etc. do not follow law of demand because we have to purchase them in minimum required quantity, whatever their price may be.

**4. Goods Expected to be Scarce -**When the buyers expect a scarcity of a particular good in near future, they start buying more and more of that good even if their prices are rising. For example, during war, famines etc. people tend to buy more of some goods even at higher prices due to fear of their scarcity in near future.

### Assumptions of law of demand

In law of demand all other factors except price of the commodity are assumed to be constant. Following are the assumptions:

1. Prices of substitute goods do not change. 2. Prices of complementary goods do not change. 3. Income of the buyer remains the same. 4. There is no change in tastes and preferences of the buyer.

Q.13 CDS 2019

- Which one of the following is not an assumption in the law of demand?
- a) There are no changes in the taste and preferences of consumers b) Income of consumers remains constant
- c) Consumers are affected by demonstration effect d) There are no changes in the price of substitute goods.

# 2. Price of related goods

## Related goods

The demand for a commodity is also influenced by the prices of its related goods. Related goods can be of two types

Substitutes	Substitute goods are those goods which can easily be used in place of each other. Goods like tea
(i.e.	and coffee are not consumed together. They are substitutes for each other.
Alternative)	If price of coffee increases, people will demand more of tea and thus demand for tea will increase.
	If price of coffee falls, people will demand more of coffee and thus demand for tea will fall. So, the demand for a commodity is directly related to the price of its substitute goods.
Complements	Goods which are consumed together are called complementary goods. E.g. tea and sugar, pen and ink.
	Since tea and sugar are used together, an increase in the price of sugar is likely to decrease the
	demand for tea and a decrease in the price of sugar is likely to increase the demand for tea.
	Hence, demand for a commodity is inversely related to the price of its complementary goods.

Q.14 CDS-2015

When two goods are interchangeable, they are

(a) Perfect substitutes (b) Perfect complements (c) Giffen goods (d) Veblen goods

# 3. Income of buyer of the commodity

### Inferior goods

Demand for inferior (affordable) goods decreases when income increases as consumers of inferior goods move to costly substitutes. When income decreases then demand for inferior goods increases

e.g. a Person is using public transport for office. When income increases he is likely to buy bike or car for that purpose.

In india, rail travel is an inferior good. When income increases Person is likely to travel by Air instead of Train.

# 4. Tastes and Preferences of the buyer

The demand for a commodity is also affected by the tastes and preferences of the buyers. They include change in fashion, customs, habits etc. Those commodities are preferred by the consumers which are in fashion. So, demand for those commodities rises which are in fashion. On the other hand, if a commodity goes out of the fashion, its demand falls because no consumer will like to buy it.

Q.15 Prelims 2021
Consider the following statements
Other things remaining unchanged, market demand for a good might increase if
1. Price of its substitute increases 2. Price of its complement increases
3. The good is an inferior good and income of the consumers increases 4. Its price falls
Which of the above statements are correct?
a) 1 and 4 only b) 2, 3 and 4 c) 1, 3 and 4 d) 1, 2 and 3

Q.16 CDS 2022

Which one of the following does not influence quantity demanded for a good? (a) Good's own price (b) Price of a complementary good (c) Price of a substitute good (d) Prices of inputs into production of the good

Note- Increase in input price has no impact on the demand of the consumers since it does not depend on the input prices directly. Therefore, the demand curve remains unchanged.

#### Shift in Demand curve

When the demand for a commodity changes due to change in any factor other than the price of the commodity, it is known as change in demand. It is graphically expressed as shift in demand curve.

Demand curve of a commodity may shift due to change in price of substitute good, change in price of complementary goods, change in income of the buyer, change in tastes and preferences, change in population, change in distribution of income, change in season and weather etc.

In case of increase in demand, the demand curve shifts towards right. In case of decrease in demand, the demand curve shifts towards left.

Q.17 CDS 2021

Which one of the following may lead to movement along the demand curve of a commodity?

(a) Change in its price (b) Change in price of the other Commodities

(c) Change in income of the consumer (d) Change in tastes and preferences of consumers

#### Ans

The demand curve is a graphical representation of the demand function. At higher prices, the demand is less, and at lower prices, the demand is more. Thus, any change in the price leads to movements along the demand curve. On the other hand, changes in any of the other things lead to a shift in the demand curve.

### Elasticity of Demand

Elasticity of demand is the degree of responsiveness of demand.

Price elasticity of demand = Percentage change in Quantity Demanded/ Percentage change in Price

Demand for food does not change much even if food prices go up. Hence demand for a necessity is likely to be price inelastic.

On the other hand, demand for luxuries can be very responsive to price changes. Hence demand for a luxury good is likely to be price elastic.

Q.18 CAPF 2018 Suppose the price of mangoes inc

Suppose the price of mangoes increases from Rs. 50 per kg to Rs. 75 per kg. Due to this, the demand for mangoes declines from 100 kg to 50 kg. Which one of the following is the price elasticity of demand for mangoes? (a) 4 (b) 3 (c) 2 (d) 1

**Ans**: Price elasticity of demand = Percentage change in Quantity Demanded/ Percentage change in Price.

Price elasticity of demand for Mangoes = 50%/50% = 1

### Law of Supply

This law states that there is a **direct relationship** between price and quantity supplied of a commodity. It says that **quantity supplied of a commodity increases with increase in price** and decreases with decrease in price.

The law of supply is based on the assumptions that the supply of commodity changes only due to change in price when all other determinant of supply remain constant.

The following are the main assumptions of the law of supply.

(i) Price of other related goods should remain the same

(ii) There should be no change in the price of inputs (factors)

(iii) Technology of production should not change.

(iv) There is no change in the taxation policy of the government.

(v) Objective of the firm should not change

Supply of a commodity is influenced by the factors (i) price of the commodity (ii) price of other related good (iii) Price of inputs/factor (iv) Technology of production (v) Taxation policy of the government (vi) Objective of the firm.

# Elasticity of supply

Price elasticity of supply measures the degree of responsiveness of quantity supplied of a commodity to change in its price. Price elasticity of supply = Percentage change in Quantity/ Percentage change in Price

The supply of perishable goods like fresh vegetables and fresh fruits is generally inelastic because it is very difficult to store them for future sale. These goods are prone to getting spoiled quickly and can not be kept for long period of time. So the supply of such goods does not change according to change in price. It is so because the seller prefers to sell them at cheaper rates than to spoil the goods totally.

On the other hand durable goods made by the industries do not get easily spoiled. If the price of such goods falls, they can easily be stored for sale when the price rises. So, the supply of such goods is more elastic to change in price.

### Durable use goods

Durable use goods are those goods, which **can be used again and again** for a long period of time. There are durable use consumer goods as well as durable use producer goods.

Durable use **consumer goods** are cloth, furniture, television, scooter etc. that can be used by consumer again and again.

Durable use **producer goods** are used in production again and again for example, machines, tools, tractors etc. this does not mean that repeated use of these goods does not make any difference to them. In fact the value of these goods gets depreciated after continuous use.

### Public goods

Public goods are those goods, which are owned and enjoyed by the society as a whole. For example roads, bridges, park, town hall, street lighting etc. are all collectively owned. They are available to all people in a society without any discrimination, i.e. no one is denied from the consumption of public goods. Both government and private entrepreneurs may produces public goods.

They display the characteristics of non-rivalry and non excludability. Non-rivalry means that consumption by one person does not reduce the amount available for another and non-excludability means that once the goods is provided it is not possible to stop people benefiting from it (e.g. lighthouses).

Q.19 CDS-2015

What is meant by 'Public Good'?

(a) A commodity produced by the Government(b) A commodity whose benefits are indivisibly spread among the entire community

(c) A Government scheme that benefits the poor households

(d) Any commodity that is very popular among general public

#### Q.20 CDS-2016

Which of the following is not a ' Public Good' ?

(a) Electricity (b) National Defence (c) Light House (d) Public Parks

### Merit goods and Demerit goods

A merit good or service is something that adds to the welfare and well-being of society when it is produced and consumed. E.g. Pharma Company producing a vaccine for children against Hepatitis B, Educational institutions etc. Government encourages the production of merit goods and hence they are taxed at very low rates.

Demerit goods or services, in contrast, are those known to cause clear harm when produced and consumed. Examples are alcohol, cigarettes, tobacco products etc. They are taxed at very higher rates to discourage the production but there contribute very much to the Govt revenue that is why Govt hesitant to ban the production.

### Hoarding

Hoarding is the practice of obtaining and holding scarce resources to create artificial scarcity, thus reducing the supply, to increase the price, so that they can be sold to customers at higher price.

# How does a firm decide how much to produce?

Maximum Profit	A firm is a profit maximizer. So, the quantity that a firm produces and sells in the market is that which maximizes its profit.
Equilibrium	Price at which both quantity demanded and quantity supplied of a commodity are equal. In this
price	way, the price of a commodity is determined by the forces of demand and supply in the market.
Equilibrium	At equilibrium price quantity demanded and quantity supplied of a commodity are equal. This
quantity	quantity is called the equilibrium quantity of the commodity.
Price change	Whenever market supply is not equal to market demand, there will be a tendency for the price to
	change
Price will rise	If demand increases and supply remains the same
Price will fall	If supply increases and demand remains the same

### Q.21 CDS-2014

Which of the following statements is / are true ?

1. If increase in demand and supply are of equal magnitude, the price will remain unchanged, but the equilibrium quantity will increase.

2. If increase in demand is of greater magnitude than increase in supply, both equilibrium price and equilibrium quantity will increase.

3. If increase in supply is of greater magnitude than increase in demand, equilibrium price will fall but equilibrium quantity will increase.

Select the correct answer using the code given below :

(a) 1 only (b) 1 and 2 only (c) 2 and 3 only (d) 1, 2 and 3

### Q.22 NIOS

Equilibrium price of a commodity is the price at which

(a) Quantity demanded and supplied, both rise (b) Supply is maximum'

(c) Demand is maximum (d) Quantity demanded and supplied are equal.

### Q.23 NIOS

Equilibrium means

- (a) The variables are changing continuously (b) Demand and supply are unequal
- (c) The variables show no tendency to change (d) None of the above

## Q.24 CDS 2019

- The working of the price mechanism in a free-market economy refers to which one of the following ?
- (a) The interplay of the forces of demand and supply (b) Determination of the inflation rate in the economy
- (c) Determention of the economy's propensity to consume (d) Determination of the economy's full emloyment output

Role of Government in production and distribution of goods and services

As explained earlier, the equilibrium price of a commodity is determined by the free play of the forces of demand and supply of the commodity without any intervention of the government.

So, sometimes the government does not allow free play of the forces of demand and supply for determination of price of some commodities in order to protect the interest of consumers or producers.

Government can fix the price of the commodity either below the equilibrium price or above the equilibrium price. Such a price is called administered price (Government determined price). Administered price may be in the form of:

(i) Control Price (ii) Support Price (iii) Token Price (iv) Dual Price

## **Control Price**

Sometimes the equilibrium price determined is very high when there is shortage of some commodity in the market (i.e. production of a commodity is less than its demand). In such a situation poor consumers can not afford to buy the commodity due to its high price.

So in order to protect the interest of consumers the government has to fix the price of the commodity which is generally lower than the equilibrium price (called control/ceiling/maximum price).

# **Dual Price**

Control price may lead to the shortage of the commodity because sellers are not willing to supply adequate quantity of the commodity at the price fixed by the government as the price is lower than the equilibrium price. This may also lead to **black marketing** of the commodity. To avoid this situation government adopts dual price policy.

Under this policy, a part of the production of the good is sold at control price **through fair price shops** popularly known as ration shops and the remaining part is sold at prevailing market price which is determined by the forces of demand and supply.

**For example-** government sells wheat, rice and sugar to BPL (Below poverty line) card holder at control price through fair price shops and the producers are also allowed to sell their remaining production at equilibrium price in open market.

## Support Price

When there is bumper crop of food grains, the price of food grains is determined at a lower level. At this price the farmers are unable to meet their cost of production even. So, the farmers are badly affected due to heavy fall in price. In such cases the government fixes the price of food grains which is higher than the equilibrium price in order to protect the interest of producers specially farmers (called Support price or minimum price).

In India low price of food grains such as wheat, rice etc. adversely affects the farmers. They may loose their interest in producing food grains. This may result in acute shortage of food grains. Therefore, the system of support price is usually followed in case of **agricultural products**. The system of support prices assures the farmers that they will be able to sell their products at least at this price.

In case of excess supply of the commodity at support price government is ready to purchase any quantity of the commodity to make buffer stock of the commodity.

## **Token Price**

There are some goods and services which are considered necessary for the existence of life e.g. medical services, health services and education services. Poor people are unable to make use of these services at prevailing market prices. Therefore, government and some private 'Charitable Institutions' provide these services at a price which is much below even their per unit cost of production. Such a price is called token price for these goods and services.

For example-The tuition fees charged in government schools is much below the cost incurred per student by the government.

Token price is charged **in order to prevent the wasteful use of these services**. Otherwise these services can be made available free of cost also. If these services are provided free some people may try to stay in hospital for a longer period in order to get free shelter and free food.

# Effect of Taxes and Subsidies on Market Price

Government imposes various types of taxes on production and sales of the commodities and also on the imports of raw material etc. in the form of Goods and Service tax (GST), Custom duty.

These taxes are paid to the government by producers, sellers and importer of these commodities. The producers, sellers and importers of these commodities recover them from the buyers of these commodities. So these taxes increase the market price of the commodities. If the government increases the rate of these taxes, the market price of the commodities will also increase.

On the other hand government gives subsidy to the producers to sell some goods at a lower price in order to make the commodity available to the common men at a reasonable price. Thus an increase in subsidy leads to decrease in market price of the commodity. For example, government gives subsidy on kerosene oil, cooking gas etc.

Structure of M	arket								
Monopoly	Monopoly is a market structure in which there is a single firm producing all the output and there is no close substitute of product sold by the monopolist, thereby ruling out any sort of competition.								
	<b>Example</b> : In India the government has monopoly in atomic energy, defence, public water supply system, railways, etc.								
	In this market the seller does not face any competition because there are no other sellers of the product he is selling. The seller is in a position to charge a high price of his product depending upon the response of the consumers.								
	It is not possible for new firms to enter in the market and compete with the single seller								
Monopolistic	Monopolistic Competition is a market structure in which there is a large number of sellers in the market of a commodity, but the product of each seller differs in some respect from the product of the other sellers. Thus, product differentiation is the cornerstone of Monopolistic Competition.								
	Monopolistic competition is like an amalgam of monopoly and perfect competition, and hence the name Monopolistic Competition. Example: Restaurants, Market for Toothpaste etc.								
Perfectly	As against monopoly market, a competitive market has large number of sellers selling the								
Competitive	homogeneous or same type of product to buyers.								
market or	There is no bar on any new firm or producer to enter the market to sell or produce the product.								
Perfect									
Competition	Example : Agriculture market/Haat where large no of farmers selling vegetables, fruits etc.								
Oligopoly	When market of a particular commodity consists of more than one seller but the number of sellers is								
	few. Example: Mobile service providers, Car industry, Airlines etc.								
Duopoly	The special case of oligopoly where there are exactly two sellers (Example: OLA, UBER Taxi)								

Q.25 CDS 2019

A market situation when firms sell similar but not identical products is termed as

a) perfect competition b) imperfect competition c) monopolistic competition d) oligopoly

### Q.26 CDS-2014

A market in which there are large numbers of sellers of a particular product, but each seller sells somewhat differentiated but close products is termed as

(a) Perfect competition (b) Monopoly (c) Monopolistic competition (d) Oligopoly

### Q.27 ES 2019

With respect to the conduct and performance of a company, 'perfect competition' refers to

- (a) Large number of small firms producing differentiated products
- (b) Complete freedom in economics life and absence of rivalry among firms
- (c) Many companies selling similar products with free entry
- (d) Sole producer selling a distinct product

Q.28 CDS 2020

#### Match List-I with List-II and select the correct answer using the code given below the Lists: List-I (Market structure) List-II (Characteristic)

- 1. Only one producer selling one commodity
- 2. Few producers selling similar or almost similar products
- B. Monopoly C. Monopolistic competition

A. Perfect competition

Many producers selling differentiated products
 Many producers selling similar products

Code :

(a) A B C D

D. Oligopoly

- 4312
- (b) A B C D
- 4132
- (c) A B C D
- 2134
- (d) A B C D 2 3 1 4

#### Q.29 CDS 2020

A market, in which there are a large number of firms, homogeneous product, infinite elasticity of demand for an individual firm and no control over price by firms, is termed as

(a) oligopoly (b) imperfect competition (c) monopolistic competition (d) perfect competition

#### Q.30 CAPF 2020

Mobile phone operators market in India is an example of

(a) Monopoly (b) Monopolistic Competition (c) Oligopoly (d) Perfect Competition

Q.31 CDS 2021

Which one of the following is a typical example of monopolistic competition? (a) Retail vegetable markets (b) Market for soaps (c) Indian Railways (d) Labour market for software engineers

Q.32 CDS 2022

Which of the following factors signify monopolistic competition?
1. Differentiated products 2. Large number of buyers and sellers 3. Barriers to entry 4. Homogeneous products Select the correct answer using the code given below :
(a) 1 and 2 only (b) 1, 2 and 3 only (c) 3 and 4 only (d) 2 and 4 only

### Parallel economy

Economy controlled by the black money is called Parallel economy. Parallel economy is a big threat to the Indian economy. It is also a cause of big loss of the tax-revenues for the government

#### Q.33 Prelims 2021

Which one of the following effects of creation of black money in India has been the main cause of worry to the Government of India?

- a) Diversion of resources to the purchase of real estate and investment in luxury housing
- b) Investment in unproductive activities and purchase of precious stones, jewellery, gold etc.

c) Large donations to political parties and growth of regionalism

d) Loss of revenue to the State Exchequer due to tax evasion

#### A subsistence economy

Is a non-monetary economy which relies on natural resources to provide for basic needs, through hunting, gathering, and subsistence agriculture.

### Economic wealth of a country does not depend on mere possession of resources

In fact the resource rich Africa and Latin America have some of the poorest countries in the world, whereas many prosperous countries have scarcely any natural wealth. The point is how these resources are used in generating a flow of production.

## **Gig economy**

Also called the "flex economy" or "mobile economy. Gig economy **involves the exchange of labour for money between individuals or companies via digital platforms** that actively facilitate matching between providers and customers, on a short-term and payment-by-task basis. For example-Freelancers, Uber Ola Driver. Once the task is complete, the worker is free to move on. Generating additional income and having work flexibility are the most common motives to work for gig economy platforms.

Though proponents of the gig economy claim people can benefit from flexible hours, it has its fair share of detractors, who consider it a form of exploitation, with very little workplace protection.

In Asia, the concept of the open-talent or gig economy is in its infancy, though it has definitely become part of a changing cultural and business environment.

The reasons are many: A slowdown in both regional and global economies, organizational downsizing and cost-cutting have contributed to the rise of professionals opting for flexible arrangements, sometimes by design and sometimes owing to the lack of other options.

## **Circular Economy**

The global population is expected to reach close to 9 billion people by 2030 – inclusive of 3 billion new middle-class consumers. This places unprecedented pressure on natural resources to meet future consumer demand.

A circular economy is an industrial system that is restorative or regenerative by intention and design. It replaces the end-of-life concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals and aims for the **elimination of waste** through the superior design of materials, products, systems and business models.

Nothing that is made in a circular economy becomes waste, moving away from our current linear 'take-make-dispose' economy. Only 9% of the global economy is circular at present.

Circular Economy enables creation of wealth from waste through the 6R strategy of Reduce, Reuse, Recycle, Recover, Redesign & Remanufacture. This approach helps in restoring the harmony between human & nature while strengthening the foundations of sustainable development.

Answe	Answers of MCQs																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
С	С	С	b	d	d	b	b	С	d	а	b	С	а	а	d	а	d
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
b	а	d	d	С	а	С	С	С	b	d	С	b	а	d			

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