

LONG ANSWERS.**Q1. Describe the Law of Diminishing marginal utility, its limitations and importance.**

Ans. The Law of diminishing marginal utility was explained by Hermann Heinrich Gossen in 1854. It is also called Gossen's first law. In 1890 Alfred Marshall popularised this law.

**Definition:** According to Marshall "The additional benefit which a person derives from a given increase of his stock of a thing diminishes with every increase in stock that he already has".

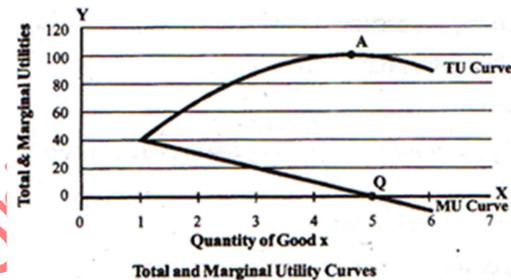
The law says that as a consumer takes more units of a good, the extra satisfaction that he derives from extra unit of a good goes on falling.

**The law is base on following Assumptions:**

- 1. Rationality:** Consumer is a rational man which means he always tries to get maximum satisfaction.
- 2. Cardinal measurement of utility:** Utility is a cardinal concept. i.e., utility can be measured and compared numerically.
- 3. No time lag:** There should not be any time lag between the consumption of one unit and other
- 4. Homogeneous:** Units of the commodity are similar in quantity, size, taste and colour.
- 5. Divisibility:** The commodity is divisible into small units:
- 6. Constant Tastes:** The consumer wants, tastes and preferences should remain the same.

Given these assumptions, the law can be illustrated with the following diagrammatic representation.

Units of X apples	Total utility	Marginal Utility ( $TU_n - TU_{n-1}$ )
1	40	$40 - 0 = 40$
2	70	$70 - 40 = 30$
3	90	$90 - 70 = 20$
4	100	$100 - 90 = 10$
5	100	$100 - 100 = 0$
6	90	$90 - 100 = -10$



In the diagram 'X' axis measures units of apples and OY axis measures total utility and marginal utility. TU curve represents total utility and MU curve represents marginal utility. TU curve is maximum at 5<sup>th</sup> unit where MU curve will become zero. TU curve slopes downwards from 6<sup>th</sup> unit, while MU will become negative.

**The relationship between total utility and marginal utility is explained as follows:**

1. When Total utility increase at diminishing rate, marginal utility falls.
2. When total utility is Maximum, marginal utility becomes zero.
3. When total utility decreases, marginal utility becomes negative

**Limitations:**

- 1. Hobbies:** The law does not operate in the case of hobbies like collection of stamps, old paintings, coins etc. Greater the collection of a person, greater is his satisfaction. Marginal utility will not diminish.
- 2. Size of the goods:** The law of diminishing marginal utility is not subject to the size of the goods if the goods are too big or too small.
- 3. Miser:** The law does not apply to money. The more money a person has the greater is the desire to acquire more of it.
- 4. Constant Income, Taste and Preference:** This law does not hold good if any change in income, of the consumer, tastes and preference.
- 5. Durable goods:** In the case of durable goods, it is not possible to calculate their utility.

**Importance of the Law:**

1. The law of diminishing marginal utility is the basic law of consumption.
2. The explains the theory of value that the price of a good falls when supply increases.
3. Diamond - water paradox can be explained with the help of this law.
4. This law helps the government while formulating taxation policies.
5. The changes in design, pattern and packing of goods will be brought by the producers by keeping this law in the view.

**Q2. Explain the meaning of perfect competition. Illustrate the mechanism of price determination under perfect competition.**

**Ans. Perfect competition:** Perfect competition is a market structure characterized by a complete absence of rivalry among the individual firms. It is a market situation in which large number of buyers and sellers are engaged in buying and selling homogeneous products without any artificial restrictions. Therefore, single price rules the market.

**Price Determination under Perfect Competition:** Under perfect competition, sellers and buyers cannot decide price, Industry decides the price of the good.

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.

The following schedule and diagram help us to understand changes in supply, demand and equilibrium price.

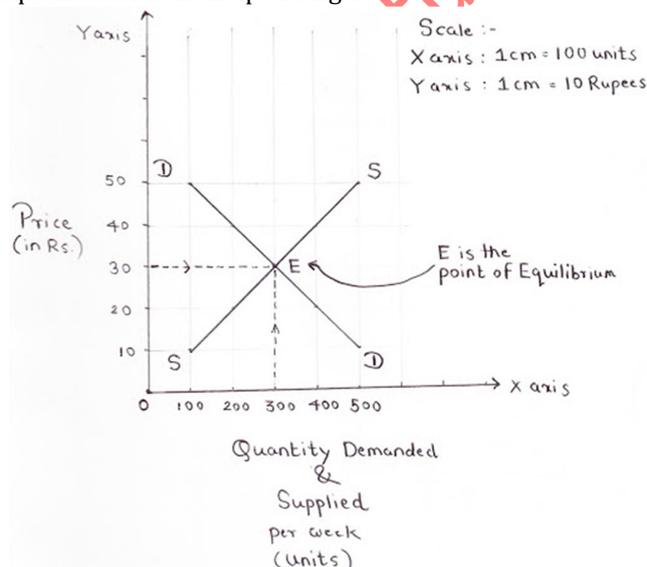
**Demand and supply schedule.**

Price (in Rs)	Quantity supplied (in KGs)	Quantity Demanded (in KGs)
10	20	60
20	30	50
30	40	40
40	50	30
50	60	20

The above table show the demand and supply schedules of a good. Changes in price always lead to change in supply and demand. As price increases, there is a fall in the quantity demanded. It means, price and quantity demanded have negative relationship. At the same, if price of a commodity increases there is an increase in the quantity supplied. Therefore, the relation between price and supply of goods is positive.

It can be observe from the table that when the price is Rs 10/-, market demand is 60kgs and supply is 20kgs. When price increase to Rs 20/-, the supply increases to 30kgs and demand falls to 50kgs. If the price increases to Rs 50/-, the supply increases to 60kgs and demand is only 20kgs. When the demand is less price tends to decrease towards equilibrium price. When the price is Rs 30/-, the demand and supply are equal to 40kgs. This is called equilibrium price which is Rs 30/-, and equilibrium output and demand is 40kgs.

This process is explained with the help of a figure.



In the figure, the demand and supply of a commodity are shown on OX axis and the price of the commodity on OY axis. As per the diagram, the equilibrium price is found at appoint where both demand and supply curves intersect each other at point E i.e. OP price is the equilibrium price and OQ is the equilibrium supply and demand.

**Q3. Explain the Keynesian theory of employment.**

**Ans.** John Meynard Keynes in his famous book ‘The General theory of Employment’, ‘Interest and Money’ (1936) stated his employment theory, which deals with all levels of employment.

According to this theory, the point of effective demand which is determined by the aggregate supply and aggregate demand denotes the level of employment.

**Aggregate supply Schedule:** The aggregate supply schedule shows the various amounts of the commodity that will be offered for sale at a series of price. As the level of output increases with the level of employment. The aggregate supply price also increases with every increase in the level of employment. The aggregate supply curve slopes upwards from left to right. But when the economy reaches the level of the full employment, the aggregate supply curve becomes vertical.

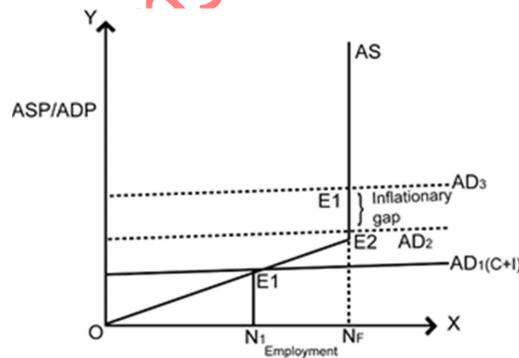
**Aggregate demand Schedule:** The various aggregate demand prices at different level of employment is called aggregate demand price schedule. As the level of employment rises, the total income of the community also rises and therefore the aggregate demand price also increases. The aggregate demand curve slopes upward from left to right.

**Equilibrium Level of Income:** The two determinants of effective demand aggregate demand, aggregate supply and aggregate demand prices combined schedule is shown in the following table.

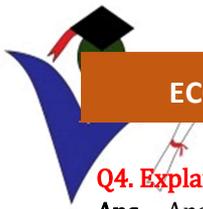
Level of employment (in lakhs of workers)	Aggregate supply price (in crores of Rs)	Aggregate demand price (in crores of Rs)
20	200	175
30	250	225
40	300	300 AD = AS
50	350	325
60	400	425

The table shows that as long as the demand price is higher than the aggregate supply price, the level of employment 40 lakh workers aggregate demand price is equal to aggregate supply price i.e., 300 crores. So effective demand in the above table is Rs 300 crores.

This can be shown in the following diagram.



In the diagram ‘X’ axis represents the employment and ‘Y’ axis represents price, AS is aggregate supply curve AD is aggregate demand curve. The point of intersection between the two ‘E<sub>1</sub>’ point. This is effective demand where all workers are employed at this point the entrepreneur expectation of profits are maximised. At any other points the entrepreneurs will either incur losses or earn sub-normal profits.



**Q4. Explain various Methods of calculating National Income.**

**Ans.** National Income is the market value of all goods and services that are produced by a country during a given period of time. It is one of the important concept in macro economics.

**Meaning:** It is defined as the total market value of all final goods and services produced by the people of a country during a year.

**Definition:** According to Marshall, "Labour and capital of a country acting on its natural resources produce annually a certain net aggregate of commodities, material and immaterial, including services of all kinds", is called National Income.

**There are three methods of measuring National Income.**

**1. Product method or Output method:** It is also known as Inventory method or commodity service method. In this method, we find the market value of all final goods and services produced in a country during a period of time. The entire output of final goods and services are multiplied by their respective market prices to find out the **Gross National Product**.

$$NI = (P_1 Q_1 + P_2 Q_2 + \dots + P_n Q_n) - \text{Depreciation} - \text{Indirect taxes} + \text{Net Income from abroad.}$$

Where NI = National Income, P = Price of good or service, Q = Quantity of good or service produced, 1,2,...,n = the various commodities.

Here we find the value added in the different sectors like agriculture, government, professionals, industry and other service sectors.

**Precautions:**

- a) Only final or finished goods should be taken into account.
- b) Unfinished goods and raw material are excluded.

**2. Income Method:** In this method the income earned by all factors of production are added to get the national income of a country. The four factors of production receive incomes in the form of wages, rent, interest and profits.

$$NI = W + I + R + P$$

Where: NI = National Income, W = Wages, I = Interest, R = Rent, P = Profit.

**Precautions:**

- a) Only net interest, wages, and profit are to be considered.
- b) Non - productive factor payments are to be exclude from national income.
- c) Transfer payments are to be excluded from national income.
- d) Undistributed profits are to be included in the national income.

**3. Expenditure Method:** In this method, the expenditure on final goods and services by individual, firms and Government etc., is considered for estimating the national income.

$$NI = EH + EF + EG + \text{Net exports} + \text{Net income}$$

Where NI = National Income, EH = Expenditure of Households, EF = Expenditure of firms, EG = Expenditure of Government

**Q5. Explain the law of variable proportions.**

**Ans.** The law of variable proportions is called the Law of Diminishing Marginal Returns. It refers to the short run where factors are of two types i.e. fixed factors and variable factors. In the short run, changes in fixed factors are not possible or variable factors can be changed in order to increase output.

**Definition:** According to Alfred Marshall, "an increase in capital and labour applied in the cultivation of land cause in general less than proportionate increase in the amount of produce raised, unless it happens to coincide with an improvement in the arts of agriculture".

**Assumption:**

1. The state of technology remains constant.
2. The analysis relates to short period.
3. The law assumes labour in homogeneous.
4. Input prices remain unchanged.

**Explanation of the Law:** Suppose a farmer has 4 acres of land he wants to increase output by increasing the number of labourers, keeping other factors constant. The changes in total production, average product and marginal product can be observed in the following table.

Units of variable factor	Total product	Average product	Marginal product	Stages of output
1	50	50	50	1 <sup>st</sup> Stage Increasing returns
2	110	55	60	
3	135	45	25	
4	150	37.50	15	2 <sup>nd</sup> Stage Diminishing returns
5	160	32	10	
6	165	27.50	5	
7	165	23.50	0	3 <sup>rd</sup> Stage Negative returns
8	160	20	-5	

In the above table total product refers to the total output produced per unit by all the labourers employed. Average product refers to the product per unit of labour. Marginal product refers to additional product obtained by employing an additional labour.

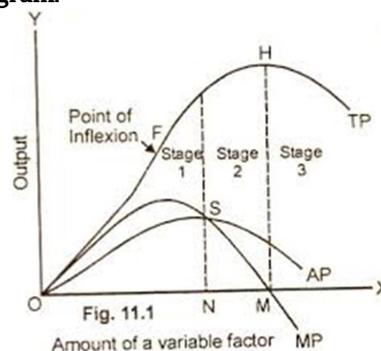
**In the above table there are three stages of production.**

**1<sup>st</sup> Stage** Increasing returns at 2 units, Total output increases, Average product increases and Marginal product reaches maximum.

**2<sup>nd</sup> Stage** Diminishing returns from 3<sup>rd</sup> unit onwards Total product increases diminishing rate and reaches maximum, Average product decreases continuously, Marginal product becomes zero

**3<sup>rd</sup> Stage** Negative returns from 8<sup>th</sup> unit Marginal product becomes zero decreases, Average product declines and Marginal product becomes negative.

**This can be explained in the following diagram.**



In the diagram on OX axis shows units of labourer and OY axis shows Total Product (TP), Average Product (AP) and Marginal Product (MP).

1<sup>st</sup> stage TP, AP increases MP is maximum, In the 2<sup>nd</sup> stage TP is maximum. AP decreases, MP is zero. At 3<sup>rd</sup> stage TP declines, AP also declines and MP becomes negative

**Q6. Explain Ricardian Theory of Rent.**

Ans. **Meaning :** David Ricardo a classical English economist of 19th century presented the classical theory of rent. David Ricardo defined rent as follows. "Rent is that portion of the produce of earth which is paid to the landlord for the use of the original and indestructible powers of the soil".

**Ricardian Theory of Rent:**

The theory is based on the assumption of perfect competition where cost of production of a unit of factor is equal to its revenue. Rent is a differential surplus above the price.

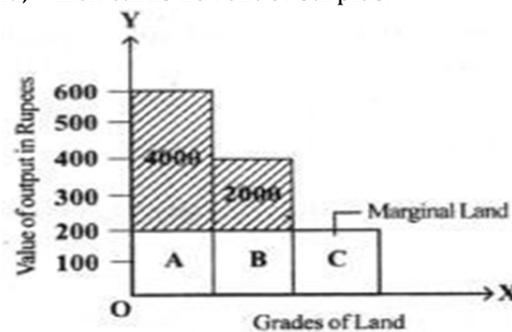
**Example:**

A batch of settlers go to a new country. They first settle on A grade land which is best for cultivating corn. They spend Rs. 300 and produce 20 quintals of corn. Thus per unit cost of corn is Rs. 15 ( $300/20$ ). The price of corn is fixed at Rs. 15, per quintal to cover the cost of cultivation.

If another batch of settlers come, demand for corn will increase. The next best land i.e., B grade land is brought under cultivation Rs. 300 is spent on B grade land it yields 15 quintals of corn cost of cultivation on 'B' grade land rises to Rs. 20 ( $300/15$ ) hence price increases to Rs. 20. There is no surplus on B grade land. On A grade land 5 quintals ( $100 (5 \times 50)$ ).

If demand for corn rises further, C - grade land will be cultivated which yields only 10 quintals of corn by spending Rs. 300, cost of cultivation increases further to Rs. 30 ( $300/10$ ), price also increases to Rs. 30. There is no rent on C - grade land.

- i) Rent on A grade land is 10 quintals or Rs. 300 ( $10 \times 30$ )
- ii) Rent on B grade land is 5 quintals or Rs. 150 ( $5 \times 30$ )
- iii) C - grade land is a marginal land, which earns no rent or surplus.



shaded area represents the rent or differential surplus. Rent arises on 'C' grade as it is a Marginal Land.

**Assumptions of the Theory:**

- i) There is perfect competition in the economy.
- ii) It has no cost of production.
- iii) Land is fixed in supply.
- iv) Land is heterogeneous.
- v) Land is subject to the law of diminishing returns.

**Q7. Critically examine the classical theory of employment.**

Ans. The theory of output and employment developed by economists such as Adam Smith, David Ricardo, Malthus is known as classical theory. It is based on the famous "Law of markets" advocated by J.B. Say. According to this law "supply creates its own demand". The classical theory of employment assumes that there is always full employment of labour and other resources. The classical economists ruled out any general unemployment in the long run. These views are known as the classical theory of output and employment.

The classical theory of employment can be three dimensions.

1. Goods market equilibrium.
2. Money market equilibrium.
3. Equilibrium of the labour market.

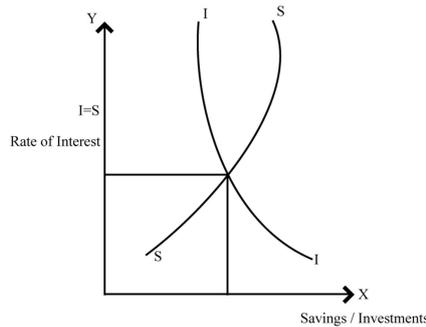
**1. Goods market equilibrium:** The 1<sup>st</sup> part of Say's law market explains the goods market equilibrium. According to Say "supply creates its own demand". Say's law states that supply always equals demand. Whenever additional output is produced in the economy. The factors of production which participate in the process of production. The total income generated is equivalent to the total value of the output produced. Such income creates additional demand for the sale of the additional output. Thus there could be no deficiency in the aggregate demand in the



economy for the total output. Here ever thing is automatically adjusting without need of government intervention.

The classical economists believe that economy attains equilibrium in the long run at the level of full employment. Any disequilibrium between aggregate demand and aggregate supply equilibrium adjusted automatically. This changes in the general price level is known as price flexibility.

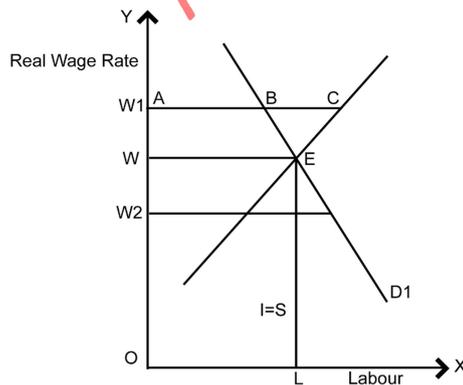
**2. Money market equilibrium:** The goods market equilibrium leads to bring equilibrium of both money and labour markets. In goods market, it is assumed that total income spent. The classical economists agree that part of the income may be saved. But the savings is gradually spent on capital goods. The expenditure on capital goods is called investment. It is assumed that equality between savings and investment is brought by the flexible rate of interest. This can be explained by the following diagram.



In the diagram savings and investment are measured on the 'X' axis and rate of interest on 'Y' axis. Savings and investment are equal at 'O<sub>i</sub>' rate of interest. So money market equilibrium can be automatically brought through the rate of interest flexibility.

**3. Labour market equilibrium:** According to the classical economists, unemployment may occur in the short run. This is not because the demand is not sufficient but due to increase in the wages forced by the trade unions. A.C. Pigou suggests that reduction in the wages will remove unemployment. This is called wage – cut policy. A reduction in the wage rate results in the increase in employment.

According to the classical theory supply of and demand for labour are determined by real wage rate. Demand for labour is the inverse function of the real wage rate. The supply of labour is the direct function of real wage rate. At a particular point real wage rate, the supply of and the demand for labour in the economy become equal and thus equilibrium attained in the labour market. Thus there is full employment of labour. This can be explained with the help of diagram.



In the above diagram supply of and demand for labour is measured on the X axis. The real wage is measured on the Y axis. If the wage rate is OW<sub>1</sub> the supply of labour is more than demand for labour. Hence the wage rate falls. If the real wage is OW<sub>2</sub> the demand for the labour is more than supply of labour. Hence the wage rate rises. At OW real wage rate , the supply and demand are equal. This is equilibrium.

**Assumptions:**

1. There is no interference of government
2. Perfect competition in commodity and labour market.
3. Full employment.

**Q8. Explain the Law of returns to scale.**

**Ans.** The law of returns to scale relate to long run production function. In the long run it is possible to alter the quantities of all the actors of production. If all factors of production are increased in given proportion the total output has to increase in the same proportion, keeping the factor proportions constant. According to returns to scale concept, these possibilities are known as: **1. Increasing returns to scale:** It arises when a given percentage increase in inputs leads to greater percentage increase in output.

**2. Constant returns to scale:** It arises when the percentage increase in output will be equal to the percentage increase in input.

**3. Decreasing returns to scale:** It arises when the percentage increase in output is less than the percentage increase in inputs.

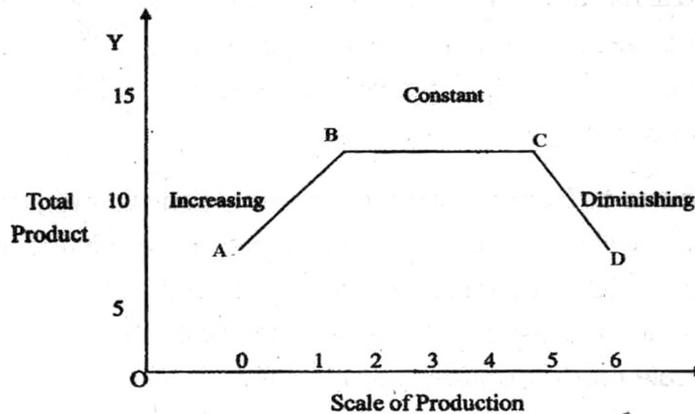
**Assumptions:**

1. All inputs are variable.
2. State of Technology remains the same
3. There is perfect competition in the market.
4. Production is measured in physical quantities.

The returns to scale is explained with the following table and diagram

Units	Combination of inputs	Total product	Marginal product	Returns
1	10 units of labour + 1 unit of capital	9	9	Increasing returns
2	20 units of labour + 2 units of capital	20	11	
3	30 units of labour + 3 units of capital	32	12	Constant returns
4	40 units of labour + 4 units of capital	44	12	
5	50 units of labour + 5 units of capital	55	11	Diminishing returns
6	60 units of labour + 6 units of capital	65	10	

The above table shows the three patterns of returns to scale. In the 1<sup>st</sup> place, when the scale is expanded upto 3 units, the returns are increasing. Later upto 4<sup>th</sup> units, it remains constant and finally from 5<sup>th</sup> unit onwards the returns go on diminishing.



In the diagram OX axis shows scale of production. OY axis shows total product, RR<sub>1</sub> represents increasing returns, R<sub>1</sub>-S constant returns, SS<sub>1</sub> represents diminishing returns

**SHORT ANSWERS.****Q1. What is barter system? What are its difficulties.**

Ans. Prior to the introduction of money, the barter system was in vogue. In that system one commodity was exchanged for another commodity. Under this system no one was able to produce all goods at their disposal. As a consequence they used to exchange commodities among themselves.

**Difficulties of barter system**

- 1. 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. If there is no such coincidence direct exchange between the buyer and the seller is not possible.
- 2. Lack of store value:** Some commodities are perishable. They perish within a short time. It is 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.
- 3. 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.
- 4. Lack of common measure of value:** Under the barter system there was no common measure value. To make exchange possible it was necessary to determine the value of every commodity in terms of every other commodity.
- 5. Difficulty in making deferred payments:** Under barter system future payments for present transaction was not possible because future exchange involved some difficulties.

**Q2. Explain Primary and Secondary functions of Money.**

Ans. Crowther defined money as "anything that is generally acceptable as a medium of exchange and which at the same time acts as a measure and store of value".

**Primary Functions of Money:**

- 1. Medium of Exchange:** Money serves as a medium of exchange. It removes the inconveniences of barter system in which exchange of goods was possible if only there was double coincidence of wants. Any commodity can be exchanged for money. People can exchange goods and services through the medium of money.
- 2. Measure of value:** Money serves as a measure of value of goods and services. As common measure of value it has removed the difficulties of barter system and has made transactions simple and easy. The value of each commodity is expressed in the units of money.

**Secondary Functions of Money:**

- 1. Store of value:** The value of commodities and services can be stored in the form of money. Certain commodities are perishable. If they are exchanged for money before they perish, their value is preserved in the form of money. Otherwise they perish and their value is lost forever. Even in the case of durable commodities, their value may diminish over a period of time. But their value can be stored, without any decline, in the form of money by exchanging them for money.
- 2. Standard of Deferred Payments:** Money serves as a standard of deferred payments. In modern economies, most of the business transactions take place on the basis of credit. An individual consumer or a businessman may now purchase a commodity and pay for it in future as this function makes it possible to express future payments in terms of money. Similarly one can borrow certain amount of money now and repay it in future.
- 3. Transfer of Money:** Money can be transferred from one person to another at any time at any place.

**Q3. Define Inflation. Explain its types.**

Ans. Inflation means a general rise in the prices. It is rapid upward movement of prices.

**Definition:** According to Samuelson: "Inflation denotes a rise in the general level of prices".

**Types of Inflation:**

- 1. Creeping inflation:** When rise in the prices is very slow and small, it is called creeping inflation.
- 2. Walking inflation:** This is the second stage of inflation. The inflation rate will be between 2% and 4%.
- 3. Running inflation:** When the rate of inflation is in the range of 4-10% per annum, it is called running inflation.
- 4. Galloping inflation or hyper inflation:** If the inflation rate exceeds 10%, galloping inflation occurs. It may also be called hyper inflation.

**Q4. Explain different kinds of deposits accepted by commercial banks.**

Ans. Commercial banks play a very important role in economic growth of a country. Commercial banks are the most important source of institutional credit in the money market.

Commercial banks receive public money in the form of deposits. The deposits mainly are of the following types.

- 1) Current deposits: These deposits have two characteristics:
  - a) There are no restrictions with regard to the amount of the withdrawal and number of withdrawals.
  - b) Banks normally do not pay any interest on current account deposits.
- 2) Savings deposits: The sole aim of the bank in receiving these deposits is to promote the habit of thrift among low income groups. They have the following characteristics:
  - a) Two or three withdrawals per week are permitted.
  - b) Banks pay 4% to 5% interest per annum on savings deposits.
- 3) Recurring deposits: people will deposit their money in these deposits as monthly instalments for a fixed period of time. The bank after expiry of the said period will return the total amount with interest. The rate of interest will be higher than the savings deposits.
- 4) Fixed deposits: Deposits in fixed accounts are called fixed or time deposits. They are left with the bank for a fixed period. The following are the characteristics:
  - a) The amount cannot be withdrawn before expiry of fixed period.
  - b) Banks pay high rate of interest than any other deposits.

**Q5. "Supply creates its own demand". Explain the statement of J.B.Say.**

Ans. Classical theory of employment or the theory of output and employment developed by economists such as Adam Smith, David Ricardo, Robert Malthus etc. It is based on the J.B. Say's law of market. According to this law 'supply creates its own demand'. The classical theory of employment assumes that there is always full employment of labour and other resources.

According to this law the supply always equals to demand it can be expressed as  $S=D$ . Whenever additional output is produced in the economy the factors of production which participate in the process of production earn income in the form of rent, wages, interest and profits.

The total income so generated is equivalent to the total value of the additional output produced. Such income creates additional demand necessary for the sale of the additional output.

**Q6. What are the functions of RBI**

Ans. Central bank is the apex institution of the banking system in a country. It controls, regulates and supervises the activities of the country's banking system. RBI is our central bank. It was established on 1<sup>st</sup>, April 1935 with a share capital of Rs. 5 crores. It was originally owned by private shareholders but was nationalised by the Government of India in 1949. It performs all the important functions of the central bank under the Reserve Bank of India Act, 1934.

**Functions of RBI**

- 1. Note Issue:** Reserve Bank of India has the monopoly of note issue in the country. It maintains gold and foreign exchange reserves of a minimum Rs 200 crores of which gold should be worth Rs 115 crores. There is a separate issue department to issue currency notes. At present RBI issues currency notes of the denomination RS 2000, Rs 500, Rs 100, Rs 50, Rs 20, Rs 10. Coins are issued by the Finance Ministry of the Government of India but circulated by the RBI
  - 2. Banker to the Government:** RBI acts as the banker, agent and advisor to the Government of India and all the state governments except the Government of Jammu and Kashmir. It receives money and makes payments on behalf of the government and keeps the cash balances as deposits without any interest. It assists the government in floating new loans and the management of public debt. It acts as an advisor to the Government in all financial matters.
  - 3. Banker's Bank:** RBI serves as a banker not only to the government but also to the banks. According to Banking Regulation Act, 1934 all the scheduled banks are bound by the law to maintain with the RBI a part of their total deposit amount as cash balances. This ratio is called the cash reserve ratio (CRR). RBI provides financial assistance to the commercial banks in times of their financial stringency by giving loans or for settlement of inter-bank accounts.
  - 4. Lender of last Resort:** In the times of financial stringency the scheduled banks can approach the RBI as last resort. The RBI grants them loans against the securities such as the treasury bonds, treasury bills and other approved securities. It may also provide financial assistance by rediscounting the eligible bills of exchange.
  - 5. Clearing House:** Businessmen and other customers get cheques of bank in which they do not have account. He has to deposit the cheque received in his bank which collects the amount from the bank on which the cheque has been issued.
2. Its termed as Inter-bank settlement of accounts.

3. All commercial banks maintain deposit accounts with Reserve Bank of India. RBI clears all the cheques to settle inter-bank transactions and make appropriate entries in accounts of commercial banks.
4. For this RBI has established clearing houses at different places.

**Q7. What is Public revenue. What are the sources of Public revenue.**

Ans. Government needs huge revenue to perform all its functions. Revenue received by government from different sources is called as Public revenue. It is classified into **1] Tax revenue and 2] Non- tax revenue.**

**1] Tax revenue:** Revenue received through collection of taxes from the public by centre and state government is tax revenue. Tax revenue is again divided into two types

**A] Direct taxes:** Taxes on income and expenditure ex: personal income tax.

Taxes on property and capital assets ex: Wealth tax, estate duty.

**B] Indirect taxes:** Taxes levied on goods and services. Ex: service tax, customs duty.

**2] Non-tax revenue:** Revenue received by government from sources other than taxes is called as non-tax revenue

**A] Administrative revenue:** Government receives money for administrative services ex: Licence fees, penalty etc.

**B] Commercial revenue:** Government receives revenue from public sector units which produce goods and services. Ex: Bharat Sanchar Nigam limited, Indian oil Corporation etc.

**C] Loans and advances:** When revenue is not sufficient to meet the requirements, government may receive loans from financial institutes within the country also from foreign government and international financial institutions.

**D] Grants-in-aid:** State government receives such grants from Central government. They are repaid. Central government receives it from foreign government. Grants are of two types:

**1] General grant:** They are given in general without specifying any purpose.

**2] Specific grant:** They are given for a specific purpose ex: Education grant.

**Q8. Point out the Redemption methods of public debt.**

Ans. When expenditure of Government exceeds revenue it resorts to public debt. Public debt is of two types. Internal debt [The debt raised from the public and institutions within the country] External debt [the debt raised from public and institutions and governments of other countries]. The public debt can be repaid in the following manner:

1. **Surplus Budget:** It means government revenue is more than government expenditure. Surplus budget can be used to repay public debt.
2. **Refunding:** It means issue of fresh bonds and securities so that matured loans can be used to repay.
3. **Annuities:** It means debt is cleared in instalments regularly till debt is completely cleared.
4. **Sinking fund:** It is best method for repayment of public debt. Government creates separate fund called sinking fund for repaying public debts.
5. **Conversion:** Existing loans are converted into new loans before date of their maturity. Its advantageous when interest rate on new loans is less than interest rate on existing loan.
6. **Additional taxes:** New taxes are imposed to raise funds for repayment of debts.
7. **Capital levy:** It's a one-time tax on capital assets.

**Surplus balance of payments:** Here Exports exceed imports by which foreign reserves can be utilised for repayment of public debt.

**Q9. What are the characteristics of federal finance.**

Ans. Finance of the state government, central government and the relationship between the two is called as Federal finance.

**Federal finance features:** 1. Sources of income and heads of expenditure are distributed among centre and state government according to constitution.

2. In federal system centre provides financial assistance to states.

3. Although state has administered autonomy yet it remains sub-ordinate to centre. No state is free to fall apart from centre on its own.

4. In case of any financial disputes among centre and state governments, solution is sought according to provisions of constitution.

5. Constitution should spell distinctly functions to be performed by respective governments and each government should be provided competent sources of raising revenue to discharge its functions.

6. In short financial independence and adequacy is backbone of federal finance system.

**Q10. Write a note on Finance Commission**

Ans. The Finance commission of India came into existence in 1951. It was established under article 280 of Indian Constitution by President of India. It was formed to define financial relationship between centre and state. As per

constitution commission is formed for every five years and consists of chairman, secretary and four other members.

The Finance Commission advises the president what percentage of Income tax should be retained by the centre and what principles should be adopted to distribute pool of income tax among states. The first Finance commission submitted its report in 1952. Till date fourteen Finance Commissions have submitted their reports.

**Functions of Finance Commission:** 1. Distribution of net proceeds of taxes among centre and states as per their contribution to taxes.

2. Determine factors governing grants in aid to states and the magnitude of the same.

3. To make recommendations to president as to measures needed to augment the consolidated fund of a state to supplement the resources of the panchayats and municipalities in the state on the basis of recommendations made by finance commission.

**Q11. What are the factors that determine the Demand.**

Ans. Demand: Demand is the desire up by willingness and ability to pay a sum of money for some quantity of goods or services.

The following are some of the important factors that determine demand:

1. Price of the commodity.
2. Prices of Substitutes and Complementaries.
3. Income of the consumer.
4. Tastes and preferences.
5. Population.
6. Technological changes.
7. Changes in weather.
8. State of business.

**Q12. What are the exceptions to Law of Demand.**

Ans. The law of demand states that there is an inverse relationship between price and demand for the commodity. If the price of the good increases then demand decreases and if the price of the good decreases then demand increases other things being constant.

**Exceptions to law of demand:**

1. **Giffen paradox:** Sir Robert giffen observed that poor people will demand more of inferior goods even though the prices of those goods increases. He observed that poor people buy more bread instead of less meat in Britain. These goods are known as giffen goods.
2. **Veblen effect:** Veblen stated that some goods like diamond, cars are demanded by rich people to maintain their social prestige. If the price falls they will not buy it as they will lose prestige. In this case demand curve slopes left to right upwards.
3. **Speculation:** When prices are expected to increase in future people will buy more of it today even if its price is increasing at present. It is found in case of shares. Hence demand curve slopes left to right upwards.

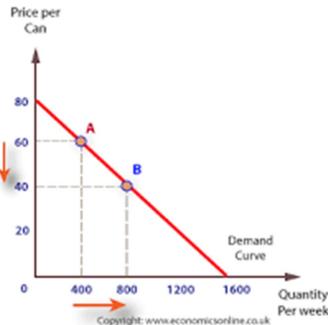
**Illusion:** Some consumers have a false idea that high priced goods will have a better quality instead of low priced goods, they will purchase only when prices are high. Hence demand curve slopes left to right upwards.

**Q13. What are the reasons for negative slope of demand curve.**

Ans. The demand curve in case of normal goods slopes from left to right downwards. The negative slope in demand curve is due to inverse relationship between price and the quantity demanded for the commodity.

1. **Old and new buyers:** If the price of the commodity falls, real income of the old consumer will increase and the demand for the commodity will increase. New buyers who were unable to buy the commodity at a higher price will now be able to buy it after a fall in price. As a result, demand curve slopes from left to right.
2. **Income effect:** A fall in price of the commodity increases his real income although his income remains constant. For example, if a consumer spends his income of rs.10 on a commodity whose price is rs.2, he will get 5 units. If the price of that good decreases to rs.1, he can now buy 10 units. Hence if price of commodity falls real income of consumer increases. This is called as Income Effect.
3. **Law of Diminishing Marginal Utility:** The law of diminishing marginal utility states that "the additional benefit that a consumer derives from given increase in his stock of a thing diminishes with every increase in the stock that he already has". Thus, he will purchase more at lower price and less at higher prices.

4. **Substitution effect:** If the price of a commodity falls, he will buy more of this commodity by reducing the purchase of substitute goods. For instance, if the price of Colgate paste rises in relation to Close up paste then consumer will substitute Close up paste in place of Colgate paste.
5. **Multiple uses of commodity:** Some commodities like milk, electricity, coal etc have multiple uses. If the prices of these goods fall demand will increase for these goods and will be used for all purposes which were restricted only for a particular use.



**Q14. What are the basic determinants of price elasticity of demand.**

Ans. Price elasticity of demand is the ratio of percentage change in quantity demanded of a good and percentage change in its price.

**The following are the basic determinants of price elasticity of demand:**

1. Availability of substitutes
2. Complementary goods
3. Multiple uses of commodity
4. Postponement of purchases
5. Proportion of income spent
6. Period of time
7. Price level
8. Goods leading to Addiction
9. Income group

**Q15. Explain concept of Indifference curve. What are its Assumptions.**

Ans. Indifference curve can be defined as "Locus of points each representing different combinations of two goods, which gives same level of satisfaction". It is also called ISO – utility curve or equi – utility curve.

**Assumptions:**

1. Consumer should act rationally to maximise satisfaction.
2. There are two goods X and Y.
3. The prices of two goods are given.
4. The consumer should have complete information of prices of goods in the market.
5. Consumer prefers more of X to less of Y.
6. Goods are divisible
7. Consumers taste, habits and preference and income should be constant.

**Q16. Explain concept of Indifference curve. Explain its properties.**

Ans. Indifference curve can be defined as "Locus of points each representing different combinations of two goods, which gives same level of satisfaction". It is also called ISO – utility curve or Equi – utility curve.

**Properties of Indifference curves:**

1. Indifference curve slopes from left to right downwards: It slopes from left to right downwards because when amount of one good in indifference combination is increased, the amount of other good is reduced. It neither slopes positive towards up nor horizontal / vertical.
2. Indifference curve is always convex to origin: It implies diminishing marginal rate of substitution.
3. Indifference curves never intersect each other: Two IC curves never intersect each other because if they intersect each other it represents different level of satisfaction.
4. Higher Indifference curve represents higher level of satisfaction: High indifference curve gives high level of satisfaction than low indifference curve because IC to right represents more satisfaction.

Indifference curve neither touches X-axis nor Y-axis.

**Q17. Explain the concept of law of equi-marginal utility. Point out its assumptions.**

**A. Law of Equi-Marginal Utility**

This is an important law of consumption and derived from the law of diminishing marginal utility. It is known by various names such as the law of equi-marginal utility, the law of substitution, the law of maximum satisfaction etc. It is also called Gossen's Second Law as its formulation is associated with the name of HH. Gossen.

**Definition of the Law**

"If a person has a thing which can be put to several uses, he will distribute it among these uses in such a way that it has the same marginal utility in all. If it has a greater marginal utility in one use than in another, he would gain by taking away some of it from the second and applying it to the first" – Alfred Marshall.

**Statement of the Law**

**Equalization of marginal utilities will maximize the consumer's satisfaction and consumer attains equilibrium.**

**Here,  $MUX$ ,  $MUy$ ,  $MUz$  and  $MUm$  are marginal utilities of commodities  $x$ ,  $y$ ,  $z$  and money, and  $Px$ ,  $Py$  and  $Pz$  are prices of  $x$ ,  $y$ ,  $z$  goods.**

**Assumptions of the Law**

The law of equi-marginal utility depends on the following assumptions:

1. Cardinal measurement of utility is assumed.
2. Rationality on the part of the consumer so as to get maximum satisfaction and to attain equilibrium is also assumed.
3. Marginal utility of money remains constant.
4. The income of the consumer is given and remains constant and he spends entire amount on different goods.
5. The prices of goods are given and constant.
6. Utilities are independent.

**Q18. Illustrate the consumer's equilibrium using indifference curve.**

**Ans.** A consumer is said to be in equilibrium when he secures maximum satisfaction out of his minimum expenditure.

**Assumptions :**

- 1) There will be no change in the income of the consumer.
- 2) There is no change in taste and fashion of consumer.
- 3) The consumer is rational.
- 4) Goods are homogeneous
- 5) Consumer has an "Indifference Map" showing his "Scale of Preferences".

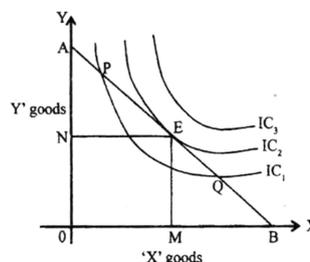
**Conditions :**

A consumer is in equilibrium only when he follows the two conditions.

- 1) The budget or price line must be tangent to the indifference curve.
- 2)  $MRS_{xy} = \frac{P_x}{P_y}$

**Illustration of Consumer's Equilibrium :**

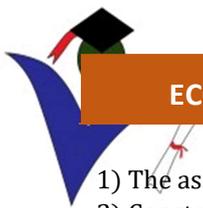
In the given diagram 'OX' axis refers to 'X' goods and 'OY' axis refers to 'Y' good. 'AB' is the consumers budget/price line. IC1, IC2, IC3 a set of indifference curves.



It depicts the consumer's **Superiority of Indifference curve analysis** of two goods, and the budget line shows various combinations which he can afford to buy with his given money income and prices of two goods. In the above diagram IC1, IC2, IC3 are shown together the budget line AB for good 'X' and 'Y' combinations PEQ cost the same to the consumer.

The consumer aim is to maximise his satisfaction and for this he tries to reach highest indifference curve.

**Superiority of indifference curve analysis :**



- 1) The assumption of ordinal measurement of utility is less restrictive and more realistic.
- 2) Constant Marginal Utility of money is not assumed in IC analysis.

**Q19. Scarcity definition of economics?**

Ans. Scarcity definition of economics was given by Lionel Robbins. According to Lionel Robbins, "Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses".

**Features of Scarcity definition:**

- 1. **Human wants are Unlimited:** When one want is satisfied, new wants takes its place.
- 2. **Means are scarce:** the means of a person to satisfy his wants are limited. It leads to economic problems as all wants cannot be satisfied.
- 3. **Alternative uses:** Resources are not only scarce but have alternative uses. For example, a piece of land can be used to produce rice or wheat. Here man has to make decision for alternative use.
- 4. **Problem of choice:** Man has to make a choice between wants.

**Q20. ] Differences between Micro and Macroeconomics?**

Ans. Micro economics studies particular firm, particular household, individual price whereas Macro economics studies national income not individual income, general price level not individual price.

**Following are the differences between Micro and macro economics**

MICRO ECONOMICS	MACRO ECONOMICS
1. It is derived from the Greek word "micros" which means "small"	1. It is derived from the Greek word "macros" which means "large"
2. It studies the economy as individual unit	2. It studies the economy as a whole
3. It is known as "price theory"	3. It is known as "Income and employment" theory
4. It is developed by Alfred Marshall	4. It is developed by J.M. Keynes
5. It studies individual income, individual prices	5. It studies National income instead of individual income and general price level instead of individual price.

**Q21. What is utility. What are its types.**

Ans. The want satisfying capacity of a commodity at a point of time is called as Utility. Utility is a subjective concept. There are four types of utility:

- 1. **Form utility:** If a commodity satisfies a consumer by its shape, colour, size etc. it is termed as Form utility.  
Example: A wood converted into chair.
- 2. **Place utility:** Some goods have utility because of place  
Vegetables have no utility at place of production but when brought to market they get utility. Example:
- 3. **Time utility:** Some goods get utility because of time.  
Umbrella have utility during monsoon season. Example:
- 4. **Service utility:** Services also satisfy human wants.  
Example: Teacher helps student to build his career.

**Q22. Characteristic features of wants**

Ans. Human wants are basis for economic activity. Human wants depend on social and economic conditions of an individual.

- 1. **Wants are unlimited:** when one want is satisfied another want takes its place.
- 2. **Only one want is satiable:** All wants cannot be satisfied, only one want can be satisfied. Ex: Thirst can be satisfied by drinking water.
- 3. **Wants are competitive:** As wants are unlimited and resources are limited. Wants compete among themselves.
- 4. **Wants are alternative:** It means if a person is hungry, he can satisfy his hunger by eating rice or fruits.
- 5. **Wants recur:** Wants always reoccur though satisfied completely at particular time.
- 6. **Wants turn into habit:** If a want is satisfied regularly, it becomes a habit.
- 7. **Wants vary:** Wants vary from person to person, time to time, place to place.

**Q23. What are the internal economies of the scale**

Ans. Economies of large scale production can be grouped into two headings: Internal economies and external economies.

**Internal economies:** Internal economies are those economies which accrue to the firm itself when it expands in production.

1. **Technical economies:** Large firm will have more resources. They can install machinery at low cost of production. Technical economies are of four types:  
A. Large scale machines B. Linking process C. Superior techniques D. Increased specialisation.
2. **Managerial economies:** When scale of production increases, firm can benefit by specialisation in managerial department. Each department is under the charge of an expert. A small firm lacks of specialisation.
3. **Marketing economies:** As firm increases its scale of production, benefits accrue to it in marketing due to its large scale and sale.
4. **Financial economies:** A large firm is better known to financial institutions and stock markets. Thus, it has a better credit access and can borrow more.
5. **Risk bearing economies:** Large firms will be in a position to bear risks or avoid risks. As they have diversified markets, the loss of one market can be covered by the profit of other market.
6. **Economies of research and development:** Large firms invest more in research and development than small firms which results in internal benefits to firms.

**Economies of welfare:** A large firm has large number of employees. Each employee is given a job which he is fit for. Therefore, workers get skilled and saves production time and encourages new ideas.

**Q24. What is law of supply? Explain the factors that determine supply?**

Ans. The law of supply explains the functional relationship between price of a commodity and its quantity supplied. The law of supply can be stated as follows " other things remaining the same, as the price of a commodity rise its supply is extended and as the price falls its supply is contracted".

**Factors that determine supply:**

1. **Price of the commodity:** The supply of the commodity depends upon the price of that commodity. When price falls, supply falls and when price rises, supply also rises. Thus price and supply are directly related
2. **Factor prices:** The cost of production of a commodity depends upon the prices of various factors of production
3. **Prices of related goods:** The supply of the commodity depends upon the prices of related goods. If the price of a substitute goods goes up, the producer will be induced to divert their resources.
4. **State of technology:** Technological improvements determine supply of a commodity. Progress in technology leads to reduction in the cost of production which will increase supply.
5. **Government policy:** Imposition of heavy taxes as a commodity discourages its production. Hence production decreases.

**Q25. Explain the relationship between Average Cost and Marginal Cost**

Ans. **Average cost (AC):** It is the sum of average variable cost (AVC) and average fixed cost (AFC). It is total cost divided by the number of units produced. In short, cost per unit is known as average cost

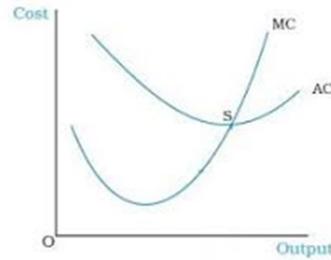
**Marginal cost (MC):** It is the additional cost to produce an additional unit of a commodity.

**Properties of AC and MC**

- (i) Both AC and MC curves are U shaped.
- (ii) As output increase, both AC and MC decrease in the beginning.
- (iii) MC curve cuts AC curve from its minimum point, at which point AC = MC.
- (iv) Both AC and MC increase after certain level of output.

$MC = \text{change in total cost} / \text{change in output} = \Delta TC / \Delta Q$  or  $MC_n = TC_n - TC_{n-1}$ .

As per the nature of costs, both AC and MC curves gradually decrease, reach to minimum and gradually increase there after along with increase in level of output. It is to be noted that both AC and MC curves will have 'U' shape implying three phases i.e decreasing, minimum and increasing. This is shown with the help of figure.



In figure output is measured on OX axis and costs OY axis. It can be seen from this graph that in the beginning as output increases, both AC and MC decrease but the rate of decrease in MC is more than the decrease in AC. At point A,  $AC=MC$  and after this point both AC and MC increase but rate of increase in MC is greater than the rate of increase in AC.

**Q26. What is monopoly? Explain how price is determined under monopoly?**

Ans. **Monopoly:**

The word Monopoly is derived from the Greek words 'Mono' meaning 'Single' and 'Poly' means 'Seller'.

Monopoly is said to exist when one firm is the sole producer of a product which has no close substitutes.

Monopoly is a firm of imperfect market structure. A Monopolist can either control price or output but not both at same time.

**Definition:**

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

**Characteristics of Monopoly:**

1. A single firm produces the good in the market.
2. No close substitutes to this good.
3. Strong barriers exist for the entry of new firms into the market.
4. Industry and firm is one and same.
5. Produce can control either price or quantity of the good. But he / she cannot determine both price and quantity of the good simultaneously.

**Q27. Explain the classification of Market based on Time and Area.**

Ans. Market is a place where the activities of purchasing and selling of goods and services takes place. It refers to the conditions and commercial relationship facilitating transactions between buyers and sellers.

**Classification of Markets**

**1. Time Based Markets:** On the basis of time, markets are divided into three types:

**a) Very Short Period Market:** This is a period where producer cannot make any changes in the supply of goods. Hence the supply remains fixed.

**b) Short Period Market:** It is a period in which supply can be changed to a little extent. It is possible by changing certain variable inputs like labour.

**c) Long Period:** The market in which the supply can be changed to meet the increased demand by making change in the long period is called long period market.

**2. Area Based Market:** On the basis of area, markets are classified as follow:

**a) Local Market:** When a commodity is sold at its produced area it is called local market. Perishable goods like vegetables, flowers, fruits, etc. May be produced and marketed in the same area.

**b) National Market:** When a commodity is demanded and supplied by the people throughout the country it is called national market. Ex: wheat, rice cotton etc.

**c) International Market:** When buying and selling of commodities takes place all over the world, then it is called international market. Ex: gold, silver, petrol etc.

**Q28. What are the factors that determine National Income**

A. National income is the total market value of all goods and services produced in a country in a year.

**1. Natural resources:** Natural resources such as land, forest, rivers etc determine National income. National income will be high if natural resources are more and National income will be less if natural resources are less.

**2. Labour:** National income is also determined by labour. Production depends not only on labour but also his efficiency.

**3. Capital:** It's a key factor for determining National income. National income will be high if supply of capital and application of capital in production is high.

**4. Organisation:** Organisers introduce innovations and coordinate factors of production to maximise profits. Hence National income also depends on organisers.

**Technology:** Natural resources are fully utilised with advanced technology. Output can be increased with same capital with advanced technology.

**Q29. What is NNP at market price and NNP at factor price.**

Ans. National income is the total value of all goods and services produced in a country in a year.

The net values of all goods and services produced in a country in a year is called as NNP. NNP can be obtained by deducting depreciation on capital goods from GNP.

**So  $NNP = GNP - \text{Depreciation charges}$ .**

It is the total income received by the four factors of production in the form of rent, wages, interest, profits.

The NNP is directly not available for distribution among factors of production. The amount of indirect taxes paid by the firms to the Government should be deducted and similarly companies also receive subsidies from the Government i.e. a part of the production cost is borne by the Government. Hence goods are sold in market at a price lower than the actual cost of production. Hence these subsidies are to be added to NNP

**$NNP \text{ at Factor Price} = NNP \text{ at market price} - \text{Indirect taxes} + \text{Subsidies} - \text{profits of Govt. owned firms}$ .**

**Q30. What are Real wages. What are the determinants of real wages.**

Ans. Real wages refers to amount of goods and services that can be purchased with the money wage at any particular point of time. Real wage is the purchasing power that a labour gets through his money wage.

1. Method of payment: Besides money wage if the labourer gets extra facilities given by management like free or subsidised lunch, free housing, free medical facilities. The real wage of a labour will high.

2. Purchasing power of money: Purchasing power determines real wage. Increase in general price level result in fall of real wage. On the other hand, decrease in general price level rises real wage.

3. Nature of payment: Some occupations are dangerous and reduce life of workers which shortens the earning period of the worker. Real wage in such occupations will be low though money wage will be high.

4. Future prospects: People will like to join in organisations which have future prospects even at low money wage because real wage will be high.

Regularity of employment: Real wages will be low if employment is temporary, irregular. If employment is permanent and regular, real wages will be high.

**Q31. Point out the assumptions and limitation of marginal productivity theory.**

Ans. **Assumptions of the theory:**

The theory is based on the following assumptions. (any 5 points)

1. There is a perfect competition in the factor market and commodity market.
2. All the units of a factor are homogenous.
3. The theory assumes full employment of the factors.
4. There is perfect mobility of the factors of production.
5. Substitution is possible between the factors.
6. The entrepreneurs are motivated by the profits,
7. Various units of the factors are divisible.
8. The theory is applicable in the long run.
9. It is based on the law of variable proportions.
10. Marginal production of a factor can be measured.

**Criticism: (any 5 points)**

The marginal productivity theory of distribution is based on unrealistic assumptions. Hence it has been criticized.

1. There is no perfect competition in the factor market and commodity market.
2. All the factors units are not homogenous.
3. Factor are not fully employed.
4. Factors are not perfectly mobile.
5. Substitution is not always possible between the factors.
6. Profit motive is not the main motive.
7. All factor are not divisible.
8. This theory is not applicable in the short run.
9. Production is not the result of one factor alone.



10. The sum of factor payment is not equal to the value of product.

**Q32. What is Statistics? Explain its relation with Economics.**

Ans. There is close relationship between statistics and economics. In the words of Tugwell “The science of economics is becoming statistical in its method”. All the economic laws are pronounced on the basis of statistical facts and figure. Statistics helps the economics to become an exact science.

In the study of economics, the application and use of statistical methods are of great importance. Most of the doctrines of economics are based on the study of a large number of units and their analysis. This is done through statistical methods. Law of demand was formulated because of statistical methods.

Statistics and economics are closely related to understand qualitative and quantitative facts of economic problems like poverty, unemployment, inflation, etc. The increasing importance of statistics in the study of economic problems resulted in new branch of study called Econometrics”.

**Q33. Calculate median for the following data.**

<b>Wages</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>80</b>	<b>90</b>
<b>workers</b>	<b>5</b>	<b>8</b>	<b>12</b>	<b>20</b>	<b>30</b>	<b>16</b>	<b>10</b>	<b>7</b>	<b>8</b>

Ans.

Wages(x)	Workes (f)	Cumulative frequency (c.f)
10	5	5
20	8	5 + 8 = 13
30	12	13 + 12 = 25
40	20	25 + 20 = 45
50	30	45 + 30 = 75
60	16	75 + 16 = 91
70	10	91 + 10 = 101
80	7	101 + 7 = 108
90	8	108 + 8 = 116

$$\text{Median} = \frac{N+1}{2} \quad \text{where } N = 116$$

$$\text{Median} = \frac{116+1}{2} = \frac{117}{2} = 58.5^{\text{th}} \text{ item.}$$



VERY SHORT ANSWERS

**Q1. What is Micro Economics**

- Ans. The word 'Micro' is derived from Greek word 'Micros' which means 'small'.
- 2. It was developed by Marshall.
- 3. It is the study of individual units like demand, price, supply etc.

**Q2. Economic goods.**

Ans. **Economic goods:** Man made goods are Economic goods. They do have cost of production. They also have a price. Supply of economic goods is always limited. Economic goods have value in use and also value in exchange. Examples: Book, Bag, Car etc.

**Q3. Capital goods**

- Ans. Goods which are used in the production of some other goods are called as Capital goods.
- 2. These goods satisfy human wants indirectly.
- 3. Examples for Capital goods: Machinery, Buildings etc.

**Q4. What is wealth.**

- Ans. Wealth means Stock of assets held by an Individual that has potential for yielding income in some form.
- 2. Wealth includes Money, Land, Shares of Companies etc.
- 3. Wealth has following four properties: utility, scarcity, transferability, value in exchange.

**Q5. Cardinal Utility.**

- Ans. Alfred Marshall developed Cardinal utility analysis.
- 2. According to this analysis, utilities derived from consumption of goods can be measured in terms of units called 'Utils'.
- 3. Utility can be expressed in terms of numbers such as 1,2,3,4 and so on.

**Q6. What is price line / budget line**

Ans. Price line / Budget line shows all possible combinations of two goods that a consumer can buy with given income of the consumer and the prices of two goods.

**Q7. Marginal Rate of Substitution (MRS)**

Ans. In economics, the marginal rate of substitution (MRS) is the rate at which consumer can give up some amount of one good in exchange for another good while maintaining the same level of utility.

**Q8. Demand function**

Ans. Demand function is a mathematical expression that shows the relationship between quantity demanded of a commodity and factors that determine it.

2. Demand function can be expressed as

$$D_x = f [P_x, P_1, \dots, P_n, Y, T]$$

Where  $D_x$  = Demand for commodity X.

$f$  = Functional relationship.

$P_x$  = Price of commodity X

$P_1 - P_n$  = Prices of substitutes and complementary goods

$Y$  = Income of consumer

$T$  = Taste of consumer.

**Q9. Giffen goods or Giffen Paradox**

- Ans. Giffen goods means necessary goods.
- 2. Sir Robert Giffen in mid - 19<sup>th</sup> century observed that the poor people in England purchased more bread by decreasing purchase of meat even when the prices of bread increased.
- 3. The increase in demand for bread when price of bread increased is an exception to the law of demand.

**Q10. Veblen goods or Prestigious goods.**

- Ans. This concept was explained by Veblen.
- 2. Veblen explained that some goods like diamonds, precious stones and car are demanded by rich people just to maintain their social prestige. If the prices of these goods fall they will not buy it because they will lose its prestige value.
- 3. Hence the demand curve for Prestigious goods slopes from left to right upwards.

**Q11.. Price Elasticity of Demand.**

Ans. Price Elasticity of Demand is the percentage change in quantity demanded of a commodity because of change in its price.

$$E_d = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}}$$



Percentage change in price

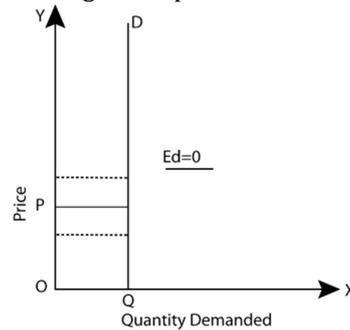
**Q12. Types of Price elasticity of demand.**

Ans. Price Elasticity of Demand is the ratio of percentage change in quantity demanded of a good and the percentage change in the price of the good. Following are the types of price elasticity of demand:

1. Perfectly elastic demand.
2. Perfectly inelastic demand.
3. Unitary elastic demand.
4. Relatively elastic demand.
5. Relatively inelastic demand

**Q13. Perfectly inelastic demand.**

Ans. A great rise or fall in the price but the quantity demanded of the commodity remains unchanged or inelastic. The demand curve is a vertical straight line parallel to Y-axis.



**Q14. External Economies**

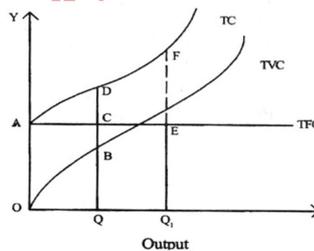
Ans. External economies are those economies which accrue to each member firms as a result of expansion of the industry as a whole.

2. External economies accrue due to following reasons:

- a. Economies of concentration.
- b. Economies of Information.
- c. Economies of specialisation and d. Economies of welfare.

**Q15. Total fixed cost curve.**

Ans. The fixed costs of a firm are those costs that do not vary with the size of its output. The best way of defining fixed costs is to say that they are the costs which a firm has to bear even when it is temporarily shut down E.g. Costs of plant and equipment.



**Q16. Production function.**

Ans. Production Function explains the relationship between inputs and outputs within the given period of time.

2. Production Function can be expressed as

$$P = f [N, L, K, O, T]$$

Where P = Output, f = Functional relationship, N = land, L = Labour, K= Capital, O = Organisation, T = Technology.

**Q17. Supply function**

Ans. Supply of commodity depends upon a number of factors, the important among these can be presented in the form of supply function. It explains the functional relationship between supply of a commodity and other determinants of supply of the commodity. This can be explained as follows:  $S_x = f (P_x, P_y, P_f, T, G_f, G_p)$  where  $S_x$  = supply of commodity x, f = Functional relationship,  $P_x$  = Price of good x,  $P_y$  = Price of related good, T = Technical progress,  $G_f$  = Goal of the producer,  $G_p$  = Government Policy.

**Q18 Opportunity cost**

Ans. It is also called as alternative or economic cost. It arises because of scarcity and alternative use of resource. It is the cost of a factor that is forgone from the next best alternative use.

**Q19 Law of Supply**

Ans. Supply means quantity which is brought to market for sale.

2. The law of supply explains the relationship between price of the commodity and its quantity supplied.
3. Law of supply explains when price increases, supply increases and when price falls supply also falls.
4. There is a direct relation or positive relation between price and supply, other things remaining constant.

#### Q20. Average product or Marginal Product

Ans. **Marginal product**

It is the additional product by employing an additional labour  $MP = \frac{\Delta TP}{\Delta L}$

#### Average Product

It refers to the product per unit of labour. It is obtained by dividing total product by the number of labourers employed  $AP = \frac{TP}{L}$

#### Q21. Selling Cost

Ans. When a firm makes expenditure on sales like advertising in journals, newspapers, electronic media etc. to improve sales is called as Selling costs.

2. Selling cost is also called as Publicity costs

#### Q22. Duopoly

Ans. Duopoly is a market where only two producers exist.

2. Goods produced may be homogeneous or differentiated.
3. Example: Pepsi & coca cola, Canon & Nikon etc.

#### Q23. Product differentiation.

Ans. Product differentiation is one of the main features of monopolistic competition.

2. It's a market situation where there are many firms of a particular product, but the product of one firm is some way or the other different from the product of the other firm.
3. Product differentiation may take the form of brand name, trade mark etc.

#### Q24. Market

Ans. Market is a mechanism where the activities of selling and purchasing of goods and services takes place. Edwards defined market as a mechanism by which buyers and sellers are brought together.

#### Q25. Contract rent

Ans. Contract rent is a periodical payment for the use of durable commodities.

2. Example: Rent of cycle, rent of a house etc.
3. Contract rent is a periodical payment and a rental income

#### Q26. Economic rent.

Ans. Economic rent is a pure rent payable as a reward for utilising the productivity of land.

2. It is derived by subtracting the elements like interest, wages, profits and depreciation from the gross rent or contract rent.
3. Economic rent is Economic surplus i.e. the earning of a factor of a product in excess of the minimum amount required to keep it in its present position

#### Q27. Real wages.

Ans. Real wages refers to the amount of goods and services that can be purchased with the money wage.

2. It is the amount of purchasing power received by the labourer through his money wage

#### Q28. Time wages.

Ans. If the wages are paid on the basis of time element, they are called as "Time wages"

2. Time wages are paid either daily or weekly or monthly or yearly, irrespective of their contribution to production.
3. Example: Rs. 10000/- paid to an employee per month

#### Q29. Net interest.

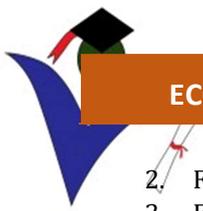
Ans. It is the payment made to the lender of capital for the service of capital only in the process of production.

2. Net interest = Gross interest - [reward for risk taking + reward for inconvenience + reward for management]

#### Q30. Net profit.

Ans. Net profit is the reward for the organisers. It's a reward for:

1. Risk bearing



2. For coordination
3. For marketing services
4. For innovation and 5. Wind fall gains.

**Q31. National Income**

Ans. The total value of all goods and services produced in a country in a year is called National Income.

**Q32. Disposable income.**

Ans1. Personal income totally is not available for spending.

2. People have to pay direct taxes such as income tax, property tax etc from their personal income.
3. Disposable income is the income left out after deducting income tax and property tax from the personal income.
4. Disposable income = Personal income – Personal taxes.

**Q33. Transfer payments**

Ans. The government may provide social security allowances like pensions, unemployment allowances, scholarships etc. These are incomes for some sections of the society even though no productive services are made by them. These are called transfer earnings

**Q34. Barter System**

Ans. In Barter system one commodity was exchanged for another commodity. Under this system no one was able to produce all goods at their disposal. This system had many difficulties.

**Q35. GST**

Ans. Goods and service tax is an indirect tax which has replaced many indirect tax in India. This Act was passed in the Parliament on 29<sup>th</sup> March, 2017. GST is a comprehensive, multi-stage, destination based tax that is levied on every value addition.

**Q36. Real per capita income.**

Ans. Dividing real national income in a particular year by population of that year we will get real per capita income.

$$\text{Real per capita income} = \frac{\text{Real national income}}{\text{population}}$$

**Q37. Components of budget**

Ans. The budget consists of both receipts (income) and expenditure of the government. It has two main components

- 1) Budget Receipts: (a) Revenue receipts (b) Capital receipts
- 2) Budget Expenditure: The budget expenditure is classified into plan expenditure and non- plan expenditure.

**Q38. Capital levy**

Ans. It is a heavy onetime tax on the capital assets and estates.

**Q39. Fiscal deficit.**

Ans. Fiscal deficit is the difference between the total expenditure and total revenue plus market borrowings.

2. Fiscal deficit = [Total revenue – Total expenditure] + Market borrowings and other liabilities.

**Q40. Clearance house.**

Ans. Businessmen and other customers get cheques of bank in which they do not have account. He has to deposit the cheque received in his bank which collects the amount from the bank on which the cheque has been issued.

2. Its termed as Inter-bank settlement of accounts.
3. All commercial banks maintain deposit accounts with Reserve Bank of India. RBI clears all the cheques to settle inter-bank transactions and make appropriate entries in accounts of commercial banks.
4. For this RBI has established clearing houses at different places.

**Q41. Net Banking**

Ans. Net Banking is also called as Internet Banking or Online Banking.

2. It's a process of conducting banking transactions over the internet.
3. Viewing bank statements, status of bank account online comes under the definition of Net banking.

**Q42. Savings deposits**

Ans. These are the deposits made into savings bank account

2. Savings deposit is convenient to small businessmen, salaried employees, people belonging to low and middle class.
3. Interest paid on savings deposits is comparatively low and is around 4% p.a.
4. Money deposited in savings account can be withdrawn as and when required but the bank may impose restrictions on the amount and number of withdrawals.

**Q43. Types of Inflation.**

Ans. Inflation refers to persistent increase in general price level of commodities over a period of time.

2. Following are the types of inflation:

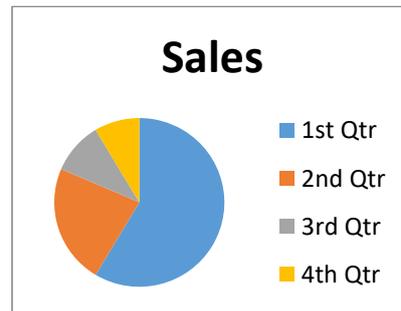
- a. Creeping Inflation      c. Running Inflation      e. Cost – Push Inflation
- b. Walking Inflation      d. Hyper Inflation      f. Demand – Pull Inflation

**Q44. . What is a Pie - Diagram**

Ans. A pie diagram is also called as pie chart.

2. Circle is divided into as many parts as there are components by drawing straight lines from the centre to the circumference.

	Sales
1st Qtr	8.2
2nd Qtr	3.2
3rd Qtr	1.4
4th Qtr	1.2

**Q45. Compute Median 5,7,7,8,9,10,12,15,21**

Ans. 5,7,7,8,9,10,12,15,21

Ascending order: 5,7,7,8,9,10,12,15,21

No. Of observations = 9

Median =  $N+1/2$

$9+1/2 = 10/2 = 5^{\text{th}}$  term

Therefore, median = 9

**Q46. Concept of mode.**

Ans. Mode is that value in series which occurs most frequently.

2. Mode can also be divided into "bi-modal" series and "multi-modal" series.

3. Example: 5,7,7,7,8. Therefore Mode is 7.