

# ISC Solved Paper 2019

## Economics

### Class-XII

(Maximum Marks : 80)

(Time allowed : Three hours)

Answer all questions in Section A, Section B and Section C.

Section A consists of objective / very short answer questions.

Section B consists of short answer questions.

Section C consists of long answer questions.

The intended marks for questions or parts of questions are given in brackets [ ].

#### PART- I

[20 Marks]

Answer all questions.

1. Answer briefly each of the question (i) to (x). [10×2]

(i) What is meant by *product differentiation* in monopolistic competition?

(ii) Explain an *indifference map* with the help of a diagram.

(iii) Give two examples of each of the following:

- Revenue receipts of the government.
- Revenue expenditure of the government.

(iv) With the help of a diagram, state the behaviour of MP when:

- TP of the variable factor reaches maximum.
- TP of the variable factor falls.

(v) What is meant by *High Powered Money*?

(vi) Distinguish between *depreciation* and *devaluation*.

(vii) Explain any two precautions to be taken while calculating national income by income method.

(viii) Differentiate between *accounting cost* and *opportunity cost*.

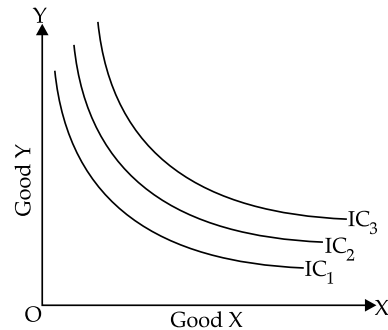
(ix) With the help of diagrams, show when the elasticity of supply is:

- greater than one
- equal to one

(x) What is meant by *investment multiplier*?

Ans. (i) Product differentiation is a characteristic feature of monopolistic competition. This characteristic means that the products sold look similar to each other, yet they are different from each other on account of taste, fragrance, ingredients, etc. Some differentiated products are potato chips, soaps, cold creams, detergents, pens, etc.

Ans. (ii) It refers to a set of indifference curves corresponding to different satisfaction levels of the consumers. An indifference curve which is to the right and above another indifference curve corresponds to higher level of income and therefore, represents higher level of satisfaction.

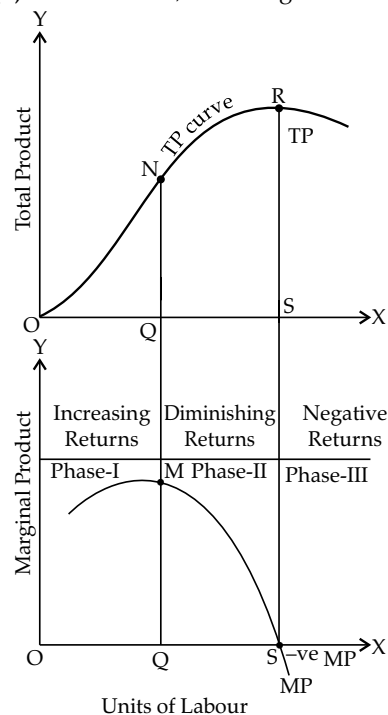


Ans. (iii) (a) **Revenue receipts** – Tax receipts and Interest receipts of the government.

(b) **Revenue expenditure** – Old Age Pensions, Salaries and Scholarships.

Ans. (iv) (a) When TP is maximum, MP is zero.

(b) When TP falls, MP is negative.



**Ans. (v)** The Central Bank money is sometimes called high-powered money or the monetary base. It consists of currency (notes and coins held by the public and the banks) and the deposits held by the banks as reserves with the Central Bank. The term high-powered reflects the fact that an increase in the Central Bank's money leads to more than one-for-one increase in the overall money supply. [2]

**Ans. (vi) Depreciation of currency :** It is the decrease in the value of domestic currency in terms of foreign currency under flexible exchange rate system. [1]

**Devaluation of currency:** It is the measure taken by Central Government of a country to decrease the value of domestic currency in terms of foreign currency under fixed exchange rate system. [1]

**Ans. (vii) Precautions while using income method**

**(Any two):**

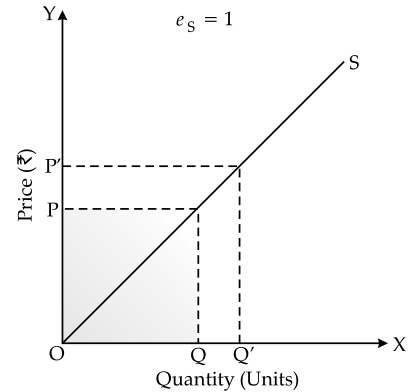
- (a) Income from illegal activities like smuggling, theft, gambling, etc. should not be included.
- (b) Corresponding to production for self-consumption as these are reward for rendering services.
- (c) Brokerage on the sale/purchase of shares and bonds is to be included.
- (d) Income in terms of wind fall gains should not be included.
- (e) Transfer earning like old age pensions, unemployment allowances, scholarships, pocket expenses, etc. should not be included.

**Ans. (viii) Accounting cost or money cost:** The money cost of producing a certain output of a commodity is the sum of all the payments to the

factors of production engaged in the production of that commodity. [1]

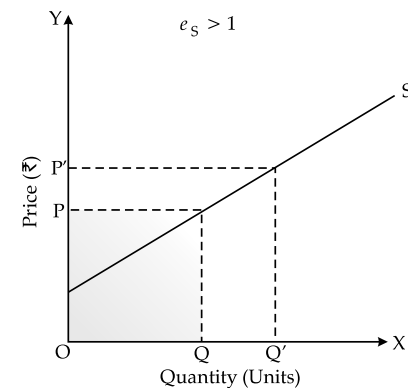
**Opportunity cost:** Opportunity cost is the cost of the next best alternative foregone. [1]

**Ans. (ix) Elasticity of supply equal to one**



[1]

**Elasticity of supply greater than one**



**Ans. (x)** It establishes relation between investment and income. It measures the change in income due to change in investment.

$$K = \frac{\Delta Y}{\Delta I} = \frac{\text{Change in Income}}{\text{Change in Investment}}$$

**PART- II**

**[60 Marks]**

Answer any five question

2. (a) How does an increase in income affect the demand for the following:

- (i) A normal good
- (ii) An inferior good [3]

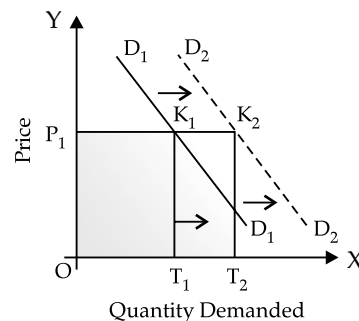
(b) Discuss any three reasons for the leftward shift of a supply curve. [3]

(c) Explain how a consumer attains equilibrium using indifference curve analysis. [6]

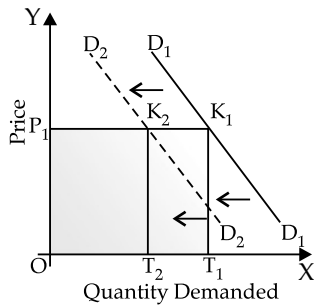
**Ans. (a) (i) Normal goods :** There is a direct relationship between income of the consumer and demand for normal goods, i.e., if income increases demand increases or income

decreases demand decreases as shown in the diagram.

**Increase in income of the consumer :**

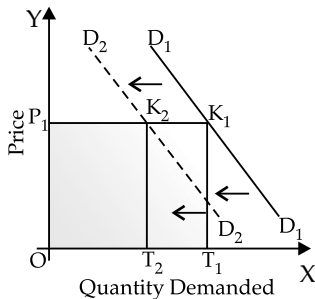


Decrease in income of the consumer :

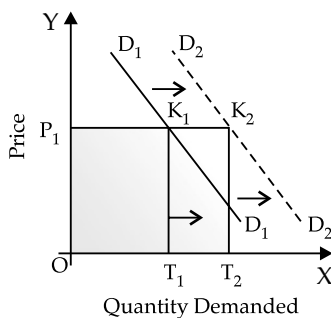


**Ans. (ii) Inferior goods:** There is an inverse relationship between income of the consumer and demand for inferior goods, i.e., if income increases demand decreases or income decreases demand increases as shown in the diagram.

Increase in income of the consumer:



Decrease in income of the consumer :

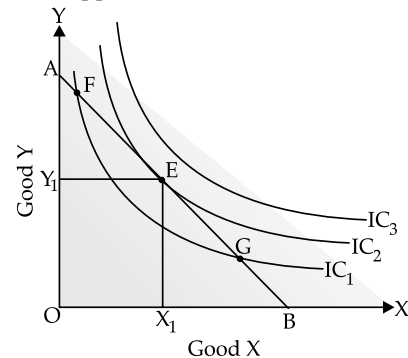


**Ans. (b) Causes of decrease in supply are :**

- (i) **Imposition of unit tax :** It raises cost. Price remaining unchanged, profits fall. This leads to 'decrease' in supply.
- (ii) **Change in technology :** Technological degradation tends to increase the marginal and average costs of production because it leads to lesser output with the same inputs. Accordingly, producers are willing to supply less at the existing price. This implies a leftward shift in supply curve. [1]
- (iii) **Change in input price:** Input price may increase or decrease. In case of increase in input price, marginal and average costs tend to rise. Accordingly, producers will supply less of the commodity at its existing

price. This implies a leftward shift in supply curve. [1]

**Ans. (c) Consumer's equilibrium through indifference curve approach.**



According to indifference curve approach, consumers equilibrium is determined if the following two conditions are satisfied:

- (i)  $MRS_{xy} = P_x / P_y$
- (ii)  $MRS_{xy}$  is declining.

$MRS_{xy}$  is the rate at which the consumer is willing to sacrifice Y to obtain one more unit of X. Thus, we can say that, "A consumer is in equilibrium at a point where budget line is tangent to indifference curve".

Slope of indifference curve = Slope of budget line i.e.,  $MRS_{xy} = P_x / P_y$

In the diagram, equilibrium is at point E, where the budget line touches the highest attainable indifference curve  $IC_2$  within consumer's budget. Bundles on the Indifference Curve  $IC_3$  are not affordable within budget.

Bundles on the indifference curve  $IC_1$  (i.e., points F and G) are lying on a lower indifference curve, i.e., will have lower utility levels as compared to the tangency point E.

Therefore, the consumer will choose only the tangency point on the budget line.

Therefore, E is a point of consumer's equilibrium where he maximises his satisfaction. Point E is also called the "Optimum Consumption Point" where he consumes  $OX_1$  of X and  $OY_1$  of Y.

If  $MRS_{xy} > MRE$  it implies that the consumer is willing to sacrifice more unit of Y than what market requires. This induces the consumer to buy more of X. When buys more of X, utility derived from X falls and is willing to sacrifice less of Y. Thus,  $MRS_{xy}$  starts declining. He continues to consume more of X, till  $MRS_{xy} = MRE = P_x / P_y$ .

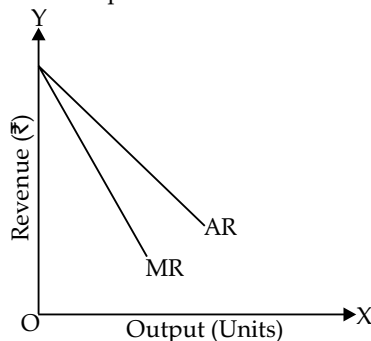
If  $MRS_{xy} < MRE$ , it implies consumer is willing to sacrifice less units of Y than what the market requires. It decreases the consumption of X. Due to this  $MRS_{xy}$  began to rise, it continues to decrease the consumption of X till  $MRS_{xy} = MRE$

3. (a) Discuss two differences between *returns to scale* and *returns to a variable factor*. [3]
- (b) With the help of a diagram, explain the relationship between AR and MR of a firm under imperfect competition. [3]
- (c) Discuss any four features of monopoly market. [6]

**Ans. (a) Returns to a Variable Factor:** It is related to short-run, when only one factor of production is variable and others are fixed. Since units of variable factors are increased continuously, so factor ratio changes in this production function.

**Returns to Scale :** It is related to long-run and all the factors are changed in same ratio. In this case, proportional relation between production and factors of production in the long-run is called Returns to Scale. Here, scale of production changes.

**Ans.(b)** The average revenue curve is downward sloping and its corresponding marginal revenue curve lies under imperfect competition. The reason for downward sloping AR and MR curves is that, the seller can increase his sales by lowering the price. Marginal revenue also falls but the rate of fall in MR is greater than in AR. This is due to the fact, that not only the additional units will be sold at lowered price but the whole units are to be sold at lower price.



**Ans.(c) The features of Monopoly are (any four):**

- (i) **Single Seller:** Under monopoly, there is a single seller selling the product. As a result, the monopoly firm and industry is one and the same thing and monopolist has full control over the supply and price of the product. However, there are large numbers of buyers of monopoly product and no single buyer can influence the market price.
- (ii) **No Close Substitutes:** The product produced by a monopolist has no close substitutes. So, the monopoly firm has no fear of competition from new or existing products. For example, there is no close substitute of

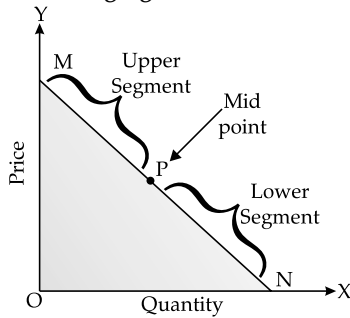
electricity services provided by NDPL. However, the product may have distant substitutes like inverter and generator.

- (iii) **Restrictions on Entry and Exit:** There exist strong barriers to entry of new firms and exit of existing firms. As a result, a monopoly firm can earn abnormal profits and losses in the long run. These barriers may be due to legal restrictions like licensing or patent rights or due to restrictions created by firms in the form of cartel.
- (iv) **Price Discrimination:** A monopolist may charge different prices for his product from different sets of consumers at the same time. It is known as 'Price Discrimination'.
- (v) **Price Maker:** In case of monopoly, firm and industry are one and the same thing. So, firm has complete control over the industry output. As a result, monopolist is a price-maker and fixes its own price. It can influence the market price by changing the supply of the product.
- (vi) **Nature of Demand Curve:** In case of monopoly, one firm constitutes the whole industry. The entire demand of the consumers for a product goes to the monopolist. Since the demand curve of the individual consumer's slopes downward, the monopolist faces a downward sloping demand curve.
- (vii) A monopolist can sell more of his output only at a lower price and can reduce the sale at a high price. The downward sloping demand curve expresses that the price (AR) goes on falling and sales are increased. In monopoly AR curve slopes downward and MR curve lies below AR curve. Demand curve under monopoly otherwise known as average revenue curve. **(Any Four)**

4. (a) Explain the various degrees of price elasticity of demand at different points on a straight line demand curve. [3]
- (b) Show with the help of a diagram, how a perfectly competitive firm earns normal profit in short run equilibrium. [3]
- (c) Explain with the help of diagrams, how equilibrium price changes when there is simultaneous increase of both, demand and supply. [6]

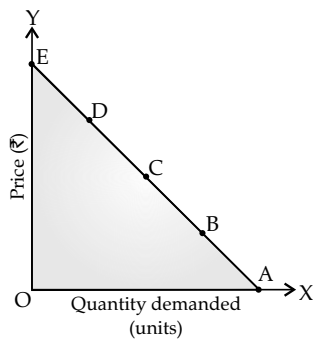
**Ans. (a)** Geometric method measures price elasticity of demand at different points on the demand curve. It is also called point method of measuring elasticity of demand.

The method can be understood with the help of the following figure:



In the mentioned figure, MN is a straight line demand curve. P is a point which divides the demand curve into two segments, viz, lower segment PN and upper segment PM. Elasticity of demand at point P is estimated as the ratio between lower segment (PN) and upper segment (PM). Thus,

$$E_d \text{ at } P = \frac{\text{Lower Segment of Demand Curve (PN)}}{\text{Upper Segment of Demand Curve (PM)}}$$



From the above diagram,

At point A,  $E_d = \frac{AA}{AE} = \frac{0}{AE} = 0$ ,

⇒ Demand is perfectly inelastic

At point B,  $E_d = \frac{AB}{BE} < 1$ ,

⇒ Demand is inelastic

At point C,  $E_d = \frac{AC}{CE} = \frac{AC}{AC} = 1$ ,

⇒ Demand is unit elastic

At point D,  $E_d = \frac{AD}{DE} > 1$ ,

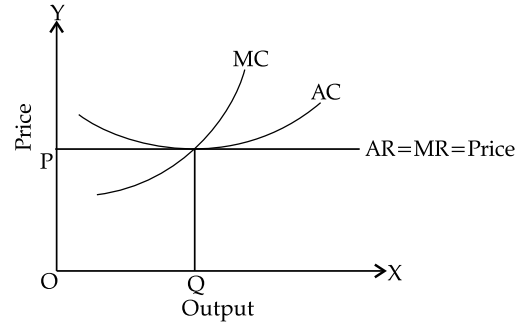
⇒ Demand is elastic

At point E,  $E_d = \frac{AE}{EE} = \frac{AE}{0} = \infty$

⇒ Demand is perfectly elastic

**Ans. (b) (i)** Perfectly competitive firms may earn normal profits in short-run where,  $MC = MR$  i.e.,  $AC = \text{Price}$  (normal profit) and  $MC$  cuts  $MR$  from below.

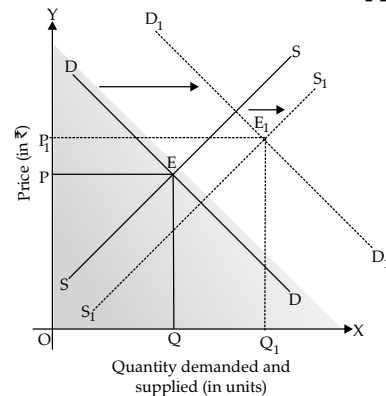
**Ans. (ii)** Because this point is break even point (no profits and no loss) and firm covers all its cost.



**Ans.(c) There are three possibilities :**

(i) If the relative (percentage) increase in demand is greater than the increase in supply, price will rise. The price will rise because of excess demand in the market. When increase in demand is proportionately more than increase in supply then rightward shift in demand curve from  $DD$  to  $D_1D_1$  is proportionately more than rightward shift in supply curve from  $SS$  to  $S_1S_1$ . The new equilibrium is determined at  $E_1$  equilibrium, price rises from  $OP$  to  $OP_1$  and equilibrium quantity rises from  $OQ$  to  $OQ_1$ .

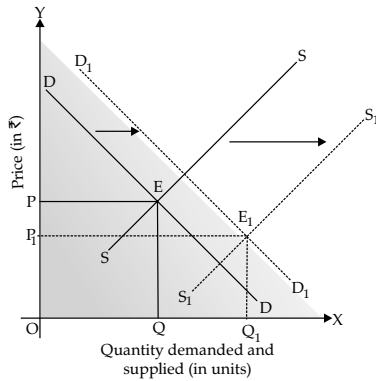
**Increase in Demand > Increase in Supply**



(ii) If the relative (percentage) increase in demand is less than the increase in supply, price will fall.

The price falls because of excess supply in market. When increase in demand is proportionately less than increase in supply, then rightward shift in demand curve from  $DD$  to  $D_1D_1$  is proportionately less than rightward shift in supply curve from  $SS$  to  $S_1S_1$ . The new equilibrium is determined at  $E_1$  equilibrium price falls from  $OP$  to  $OP_1$  whereas, equilibrium quantity rises from  $OQ$  to  $OQ_1$ .

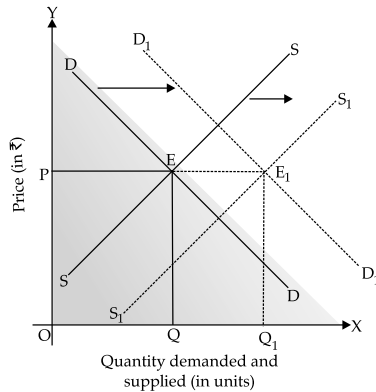
**Increase in Demand < Increase in Supply**



(iii) If the relative (percentage) increase in demand is equal to the increase in supply, price will remain unchanged.

The price will remain unchanged because there is neither excess demand nor excess supply in the market. When increase in demand is proportionately equal to increase in supply, then rightward shift in demand curve from  $DD$  to  $D_1D_1$  is proportionately equal to rightward shift in supply curve from  $SS$  to  $S_1S_1$ . The new equilibrium is determined at  $E_1$ . As both demand and supply increase in the same proportion, equilibrium price remains the same at  $OP$ , but equilibrium quantity rises from  $OQ$  to  $OQ_1$ .

**Increase in Demand = Increase in Supply**



5. (a) Discuss *any two* exceptions to the law of demand. [3]

(b) Study the cost function of a firm given below: [3]

|                |    |    |     |     |
|----------------|----|----|-----|-----|
| Output (Units) | 0  | 1  | 2   | 3   |
| TC ( ₹ )       | 30 | 90 | 110 | 120 |

Calculate:

- (i) AFC
- (ii) AC
- (iii) MC

(c) A producer is in equilibrium when  $MR=MC$ . Explain this statement with the help of a diagram. [6]

Ans. (a) Exceptions to the law of demand (any two) :

(i) **Giffen Goods:** When price of a Giffen goods falls, its quantity demanded also falls. These are special kind of inferior goods on which the consumer spends a large part of his income and their demand rises with an increase in price and demand falls with decrease in price. For example, in our country, it is often seen that when price of coarse cereals like jowar and bajra falls, the consumers have a tendency to spend less on them and shift over to superior cereals like wheat and rice. This phenomenon, popularly known as 'Giffen's Paradox', was first observed by Sir Robert Giffen.

(ii) **Consumer's Ignorance:** The law breaks down when consumers judge quality of the commodity by its price. Consumers may buy more of a commodity at a higher price when they are ignorant of the prevailing prices of the commodity in the market.

(iii) **Status Symbol Goods or Goods of Ostentation:** The exception relates to certain prestige goods which are used as status symbols. For example, diamonds, gold, antique paintings, etc. are bought due to the prestige. These are wanted by the rich persons for prestige and distinction. The higher the price, the higher will be the demand for such goods.

(iv) **Necessities of Life:** Another exception occurs in the use of such commodities, which become necessities of life due to their constant use. For example, commodities like rice, wheat, salt, medicines, etc. are purchased even if their prices increase.

(v) **Change in Weather:** With change in season/ weather, demand for certain commodities also changes, irrespective of any change in their prices. For example, demand for umbrellas increases in rainy season even with an increase in their prices. It must be noted that in normal conditions and considering the given assumptions, 'Law of Demand' is universally applicable.

(vi) **Future Changes in Prices:** Households also act as speculators. When the prices are rising, households tend to purchase large

quantities of the commodity out of the apprehension that prices may still go up. When prices are expected to fall further, they wait to buy goods in future still at lower prices. So, quantity demanded falls when prices are falling.

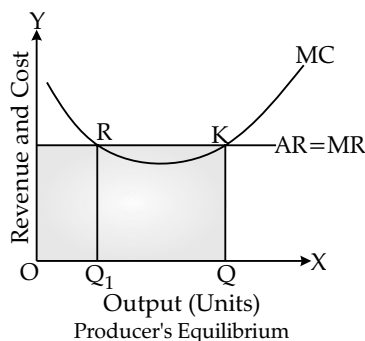
**(vii) Change in Fashion:** A change in fashion and tastes affects the market for a commodity. When a broad toe shoe replaces a narrow toe, no amount of reduction in the price of the latter is sufficient to clear the stocks. Broad toe on the other hand, will have more customers even though its price may be going up. The law of demand becomes ineffective.

Ans.(b)

| Output | TC  | FC | AFC | AC | MC |
|--------|-----|----|-----|----|----|
| 0      | 30  | 30 | –   | –  | –  |
| 1      | 90  | 30 | 30  | 90 | 60 |
| 2      | 110 | 30 | 15  | 55 | 20 |
| 3      | 120 | 30 | 10  | 40 | 10 |

Ans.(c) The producer is in equilibrium when (i)  $MR = MC$  and (ii) necessary condition  $MC$  should cut  $MR$  from below. According to this approach, the producer is at equilibrium,

(i)  $MR = MC$  (ii)  $MC$  curve should cut the  $MR$  curve from below, or  $MC$  should be rising.  $MR$  is the addition to total revenue from the sale of one more unit of output and  $MC$  is the addition to total cost for increasing the production by one unit. The basic aim of every producer is to maximize the profit. For this, a firm compares its  $MR$  with its  $MC$ .



As long as the addition to revenue is greater than the addition to cost. It is profitable for a firm to continue producing more units of output. In the diagram, output is shown on the X-axis and revenue and costs on the Y-axis. The Marginal Cost ( $MC$ ) curve is U-shaped and  $P = MR = AR$ .  $MC = MR$  at two points R and K in the diagram, but

profits are maximised at point K, corresponding to  $OQ$  level of output. Between  $OQ_1$  and  $OQ$  levels of output  $MR$  exceeds  $MC$ . Therefore, firm will not stop at point R but will continue to produce to take advantage of additional profit. Thus, equilibrium will be at point K, where both conditions are satisfied.

Two other situations may also exist are as follows:

- (i)  $MR > MC$  : When output level is less than  $OQ$ ,  $MR > MC$  which implies that firm is earning profit on the last units of output. The marginal profit provides an incentive to the firm to increase production and move towards  $OQ$  unit of output. Therefore, when  $MR > MC$ , the firm increases output to maximise its profit.
  - (ii)  $MR < MC$  : When output level is more than  $OQ$ ,  $MR < MC$ , which implies that firm is making a loss on its last unit of output. Hence, in order to maximise profit, a rational producer decreases output as long as  $MC > MR$ . Thus, the firm moves towards producing  $OQ$  units of output.
6. (a) Explain how public expenditure can be used as an instrument of fiscal policy to solve the problem of: [3]
- (i) Income inequality
  - (ii) Inflation
- (b) Differentiate between the revenue and capital components of the union budget. [3]
- (c) Discuss briefly the various components of balance of payment. [6]

Ans.(a) (i) Economic inequality is an inherent part of every economic system. Government aims to reduce such inequalities of income and wealth, through its budgetary policy. Government, through various forms of public expenditure, e.g., expenditure on social security measures, subsidies to labour incentive industries, social infrastructure, anti-poverty programmes, etc., redistribute income in favour of poor and thus, reduce inequalities.

(ii) Public expenditure is used to prevent business fluctuations of inflation to achieve the objective of economic stability. The government aims to control the different phases of business fluctuations through its budgetary policy. Public expenditure is reduced, hence, liquidity is soaked from an economy resulting in reduced aggregate demand and in this way inflationary situation is corrected by fiscal policy.

Ans. (b) **Components of a union budget:**

(i) **Revenue Budget:** It shows revenue receipts and revenue expenditure of the government.

**Revenue Receipts :** (a) Which do not cause any reduction in assets and; (b) Which do not create any corresponding liability to the government. **Example :** Tax receipts of the government.

**Revenue Expenditure :** It is that expenditure by the government. **Example :** Which does not cause an increase in government asset, and does not cause any reduction in government liability. Salary to government employees.

(ii) **Capital Budget :** It shows capital receipts and capital expenditure of the government.

**Capital Receipts :** (a) Which creates corresponding liability for the government.

**Example :** Loans by the government and; (b) Which cause reduction in assets of the government. **Example :** Disinvestment

**Capital Expenditure :** It is that expenditure by the government which causes increase in government assets, and which causes reduction in government liability. **Examples :** loan to foreign government, purchase of an machinery.

Ans.(c) **The components of the Balance of Payments Account are:**

(i) **Current Account:** Current account is that account which records imports and exports of goods, services and unilateral transfers. It includes:

(1) **Export and Import of Goods :** It refers to the import and export of all tangible goods into or out of the country as the case may be. The import of goods is shown on debit side of the account whereas export of goods is shown on the credit side of the account.

(2) **Export and Import of Services :** It refers to the import and export of all intangible services into or out of the country as the case may be. The services included here are non-factor services only.

(3) **Unilateral Ttransfers:** It refers to the receipts and payments of foreign currency which take place without exchange of goods or services. These are one-sided payments and include gifts, charity, donations, etc.

(4) **International Reserves :** It refers to the factor payments like compensation to employees and investments. Compensation to employees includes wages, salary, bonus, etc. Investment income includes receipt and payment of dividends, interest, profits, etc.

(Any Three)

(ii) **Capital Account:** It records capital transfers such as loans and investments between one country and the rest of the world which causes a change in the asset or liability status of the residents of a country or its government. These transactions include:

(1) **Foreign Loans and Advances :** Loans and advances extended beyond the frontiers of the country are included as a capital transaction. These include securities, etc.

(2) **Foreign Investment :** These are the amounts invested in business and non-business ventures of foreign countries directly or as capital portfolio.

(3) **Rupee Debt Services :** When loans are procured in the form of domestic currency like Rupee in India and the debt is repaid by export of goods to that country, such services are classified as Rupee Debt Services.

(4) **Other Transfers :** These include transfers not covered above, e.g., purchase of gold and foreign exchange from other countries.

(Any Three)

7. (a) **Discuss any two limitations of credit creation by commercial banks.** [3]

(b) **Explain two secondary functions of money.** [3]

(c) **Discuss any two qualitative methods and any two quantitative methods of credit control used by the Central Bank.** [6]

Ans. (a) **The following are the limitations of commercial banks to create credit:**

(i) **Amount of Cash:** The credit creation power of banks depends upon the amount of cash they possess. The larger the cash, the larger the amount of credit that can be created by banks. The amount of cash that a bank has in its vaults cannot be determined by it. It depends upon the primary deposits with the bank. The bank's power of creating credit is thus limited by the cash it possesses.



- (ii) **Proper securities:** An important factor that limits the power of a bank to create credit is the availability of adequate securities. A bank advances loans to its customers on the basis of a security, or a bill, or a share, or a stock or a building, or some other type of asset. It turns ill-liquid form of wealth into liquid wealth and thus creates credit. If proper securities are not available with the public, a bank cannot create credit.
- (iii) **Banking Habits of the People:** The banking habits of the people also govern the power of credit creation on the part of banks. If people are not in the habit of using cheques, the grant of loans will lead to the withdrawal of cash from the credit creation stream of the banking system. This reduces the power of banks to create credit to the desired level.
- (iv) **Minimum Legal Reserve Ratio:** The minimum legal reserve ratio of cash to deposits fixed by the Central Bank is an important factor which determines the power of banks of creates credit. The higher this ratio, the lower the power of banks to create credit; and the lower the ratio, the higher the power of banks to create credit.
- (v) **Excess Reserves:** The process of credit creation is based on the assumption that banks stick to the required reserve ratio fixed by the Central Bank. If banks keep more cash in reserves than the legal reserve requirements, their power to create credit is limited to that extent. If Bank A, for example keeps 25 % of ₹ 1000 instead of 20 %, it will lend ₹ 750 instead of ₹ 800. Consequently, the amount of credit creation will be reduced even if the other banks in the system stick to the legal reserve ratio of 20 %.
- (vi) **Leakages:** If there are leakages in the credit creation stream of the banking system, credit expansion will not reach the required level, given the legal reserve ratio. It is possible that some persons who receive cheques do not deposit them in their bank accounts, but withdraw the money in cash for spending or for hoarding at home. The extent to which the amount of cash is withdrawn from the chain of credit expansion, the power of the banking system to create credit is limited.
- (vii) **Cheque Clearances:** The process of credit expansion is based on the assumption that cheques drawn by commercial banks are cleared immediately and reserves of

commercial banks expand and contract uniformly by cheque transactions. But it is not possible for banks to receive and draw cheques of exactly equal amount. Often some banks have their reserves increased and others reduced through cheque clearances. This expands and contracts credit creation of the part of banks. Accordingly, the credit creation stream is disturbed. **(Any two)**

**Ans. (b) Secondary Functions:** These are those functions which are supplementary to the primary functions, viz., medium of exchange and measure of value. These include the following :

- (i) **Standard of Deferred Payments:** Deferred payments refer to those payments which are made in future. Money is accepted as a standard of deferred payments because,
- (a) its price remains stable,
  - (b) it has general acceptability
  - (c) it is more durable compared to other commodities.
- (ii) **Store of Value:** It is convenient to store value in terms of money because. (a) it has general acceptability, (b) stability of its value, (c) it is convenient to store money.
- (iii) **Transfer of Value:** Money serves as a convenient mode of the transfer of value, because of its general acceptability and the merit of liquidity. **(Any two)**

**Ans.(c) Quantitative Methods:**

- (i) **Bank Rate :** It is the rate at which the Central Bank of a country lends money to the commercial banks in the event of any shortfall of funds. It is increased by the central bank to control inflation and credit. This acts as a disincentive for banks to borrow from the central bank. As a result, there is less flow of the capital to the public.
- (ii) **Open Market Operations:** Open market operations refer to purchase and sale of securities (mainly government securities) in the open market by the Central Bank. The sale of government securities to the commercial banks will result in reducing their reserves. This directly reduces the bank's ability to give credit and therefore, decreases the money supply in the economy.
- (iii) **Cash Reserve Ratio (CRR):** It refers to the minimum amount of funds that a commercial bank has to maintain with the Reserve Bank

of India, in the form of deposits. For example, suppose the total assets of a bank are worth ₹ 200 crores and the minimum cash reserve ratio is 10%. Then the amount that the commercial bank has to maintain with RBI is ₹ 20 crores. If this ratio rises to 20%, then the reserve with RBI increases to ₹ 40 crores. Thus, less money will be left with the commercial bank for lending. This will eventually lead to considerable decrease in the money supply. On the contrary, a fall in CRR will lead to an increase in the money supply.

- (iv) **Statutory Liquidity Ratio (SLR):** SLR is concerned with maintaining the minimum reserve of assets with RBI, whereas the cash reserve ratio is concerned with maintaining cash balance (reserve) with RBI. So, SLR is defined as the minimum percentage of assets to be maintained in the form of either fixed or liquid assets with RBI. The flow of credit is reduced by increasing this liquidity ratio and vice-versa. In the previous example, this can be understood as rise in SLR will restrict the banks to pump money in the economy, thereby contributing towards decrease in money supply. The reverse case happens if there is a fall in SLR, as it increases the money supply in the economy. **(Any two)**

**Qualitative Measures :**

- (i) **Margin Requirements:** The commercial banks' function to grant loan rests upon the value of security being mortgaged. So, the banks keep a margin, which is the difference between the market value of security and the loan value. For example, a commercial bank grants loan of ₹ 80,000 against security of ₹ 1,00,000. So, the margin is calculated as  $1,00,000 - 80,000 = 20,000$ . When the Central Bank decides to restrict the flow of money, then the margin requirement of loan is raised and vice-versa in the case of expansionary credit policy.
- (ii) **Selective Credit Control (SCC's):** An instrument of the monetary policy that affects the flow of credit to particular sectors positively and negatively is known as selective credit control. The positive aspect is concerned with the increased flow of credit to the priority sectors. However, the negative aspect is concerned with the measures to restrict credit to a particular sector.
- (iii) **Moral Suasions:** A persuasion technique followed by the Central Bank to pressurise the

commercial banks to abide by the monetary policy is termed as moral suasion. This involves meetings, seminars, speeches and discussions, which explains the present economic scenario and there by persuading the commercial banks to adapt the changes needed. In other words, this is an unofficial monetary policy that exercises the power of talk.

- (iv) **Credit Rationing :** Credit rationing refers to the process of defining quotas for different businesses and their activities. This measure is applied by the central bank to check the flow of credit for speculation and related activities in the economy.
- (v) **Direct action :** The Central Bank issues various norms and guidelines for providing credit to the public. In case of violation of these norms and guidelines by the member banks, the Central Bank can initiate direct action on such defaulting banks. **(Any two)**
8. (a) **What is meant by average propensity to consume? Explain its relationship with average propensity to save. [3]**
- (b) **Discuss any two fiscal measures to correct a situation of deficient demand in an economy. [3]**
- (c) **Explain how equilibrium level of income can be determined with the help of saving and investment approach. [6]**

**Ans. (a) Average Propensity to Consume (APC) :** The ratio between the consumption expenditure and income is called Average Propensity to Consume.

$$APC = C/Y$$

**Relationship :** The sum of Average Propensity to Save (APS) and Average Propensity to Consume (APC) is one.

$$APS + APC = 1$$

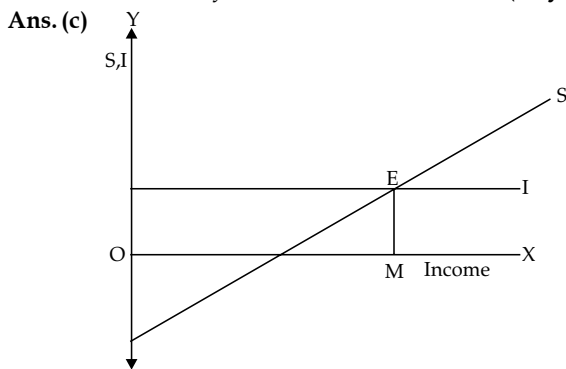
**Ans. (b) Fiscal measures to correct the situation of deficient demand are as follows (Any two):**

- (i) **Expenditure Policy (increase expenditure):** The objective of expenditure policy should be to pump more money in the system that gives a fillip to the demand. During the period of deficiency in demand, the government should make large investments in public works like construction of roads, bridges, buildings, railway lines, canals and provide free education and health facilities, although it may enlarge budget deficit. The aim is to give more money in the hands of people so that they should also spend more.

Keynes in fact advocated deficit budget to step up aggregate demand.

(ii) **Revenue Policy (reduce tax rate):** Taxes on personal incomes and corporate incomes should be reduced to encourage private consumption and investment. If possible, tax on lower income groups is abolished. This will increase their disposable income for spending. In addition, subsidies, old-age pension, unemployment allowance and grants should be given. Incentives like interest free loans, instalment schemes, etc, should be given to consumers to boost aggregate demand.

(iii) **Decrease in Public Borrowing/ Public Debt:** At the time of deficient demand, public borrowing should be reduced. People will have more money and more purchasing power. In brief, during period of deficient demand, government should adopt the pricing of deficit budget. Old taken debts from public should be finished and paid back to increase money in the market. **(Any two)**



The economy is in equilibrium at that income level at which, saving = investment. The equilibrium level of income is OM and at this level  $S = I$ .

When the economy is not in equilibrium, saving is not equal to investment : Suppose  $S > I$ , it means  $AD < AS$ . This leads to piling up of inventories with the producers. In order to bring down inventories to the desired level, producers cut down production which brings down AS. The trend continues till  $AD = AS$  again and  $S = I$ , where the economy is in equilibrium. Similarly, if  $S < I$ , then  $AD > AS$ . There is a decrease in inventories. Producers increase production, AS rises. This continues till  $AD = AS$ .

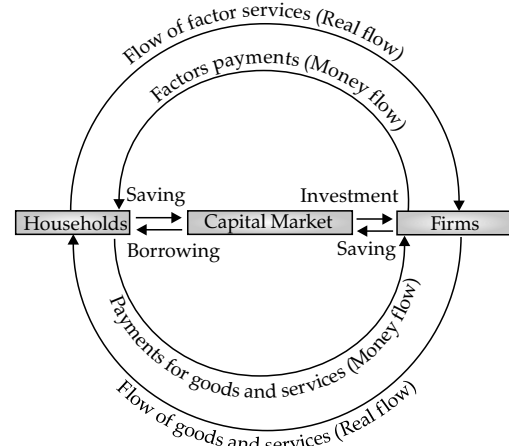
9. (a) **Draw a well-labelled diagram to show a circular flow of income in a two sector model. What happens to the flow of income when savings equals investment?** [3]

(b) **What is meant by economic welfare? Explain how GDP is an indicator of economic welfare.** [3]

(c) **From the following data, calculate national income by Output method and Income method:** [6]

| Items  | ₹(in crores) |
|--|--------------|
| (i) Value of output                            | 2500         |
| (ii) Value of intermediate consumption         | 1300         |
| (iii) Subsidies                                | 40           |
| (iv) Rent                                      | 110          |
| (v) Employer's contribution to social security | 30           |
| (vi) Profit                                    | 50           |
| (vii) Wages and salaries                       | 340          |
| (viii) Interest                                | 10           |
| (ix) Mixed income of self-employed             | 360          |
| (x) Indirect tax                               | 180          |
| (xi) NFIA                                      | (-)30        |
| (xii) Consumption of fixed capital             | 160          |

Ans. (a)



**Circular Flow Diagram : Two sector model with capital markets**

Two sector model of circular flow of income assumes that households spend their whole income on consumption of goods and services produced by firms and firms distribute all their income as factor incomes among households and thus, economy remains in equilibrium. But actually, households do not distribute all their income, they save a part of that (known as leakages) by which flow of income declines and

firms also do not distribute all of their income as factor incomes, they save a part of that as provisions for depreciation or retained earnings, etc. When savings equal to investment, economy achieves equilibrium as declined flow or level of income is raised through investment by firms (known as injections).

**Ans.(b)** Economic welfare is the level of prosperity and standard of living of either an individual or a group of persons.

Often national income is considered as an index of welfare of the people. Increase in national income increases the level of welfare of the people. Of course, here we are referring to real national income rather than nominal national income. When real national income rises, flow of goods and services tends to rise. *Ceteris paribus*, this means greater availability of goods per person, implying higher level of welfare. But there are strong exceptions to this generalisation. These are as follows:

**(i) Inequality in the Distribution of Income**

If every increase in the level of GDP distribution of GDP is getting more and more skewed, welfare level of the society may not rise. Only fewer people tend to benefit from a larger flow of goods and services. The gulf between have's and have not's may increase. In this situation the bulk of the population may have even lesser goods than before even when the overall level of GDP has tended to rise.

**(ii) Non-Monetary Exchanges :** In economy like of India, barter system of exchange is not totally non-existent. Non-monetary transactions are quite evident in rural areas where payments for farm labour are often made in kind rather than cash. But such transactions are not recorded, because they are outside the monetary system of exchange. To this extent GDP remains underestimated, and is therefore not a proper index of welfare.

**(iii) Harmful Goods:** National income does not consider whether the goods and services produced are useful or harmful to the people. For example, production of cigarettes, liquor, narcotic drugs, gutka etc. is injurious to health. But they are included in national income.

**(iv) Manner of Production :** Welfare also depends on the manner in which goods are produced. If more goods are produced by polluting the environment, or by child labour or by exploitation of workers, then economic welfare cannot increase.

**(v) Externalities :** Externalities refer to good and bad impact of an activity without paying the price or penalty for that. Example: Positive externalities occur when a beautiful garden maintained by Mr. Y raises welfare to Mr. X even when Mr. X is not paying for it. So, there is no valuation of it in our estimation of GDP. Negative externalities occur when smoke omitted by factories causes' air pollution or the industrial waste is driven into rivers causing water pollution. Environmental pollution causes a loss of social welfare. But nobody is penalised for it and hence there is no valuation of it in the estimation of GDP.

**(c) Output Method:**

National Income = Value of output – Value of intermediate consumption – Consumption of fixed capital – NIT + NFIA

$$= 2500 - 1300 - 160 - 140 + (-30)$$

$$= ₹ 870 \text{ crores.}$$

**Income Method:**

National Income = Rent + Employer's contribution to social security + Profit + Wages and Salaries + Interest + Mixed income of self employed + NFIA

$$= 110 + 30 + 50 + 340 + 10 + 360 + (-30)$$

$$= ₹ 870 \text{ crores.}$$

