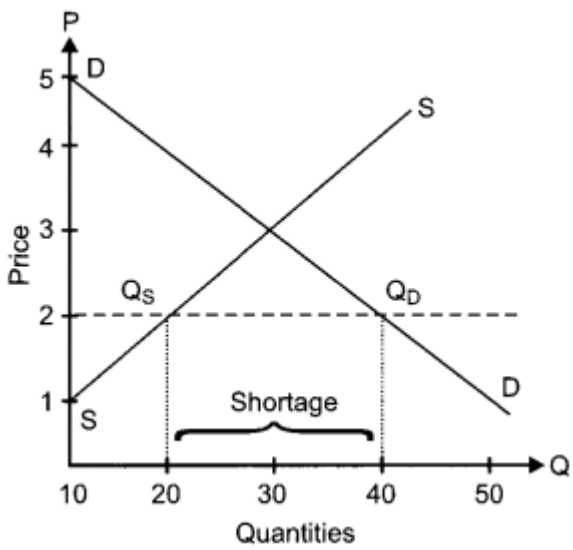


Economics Class 12

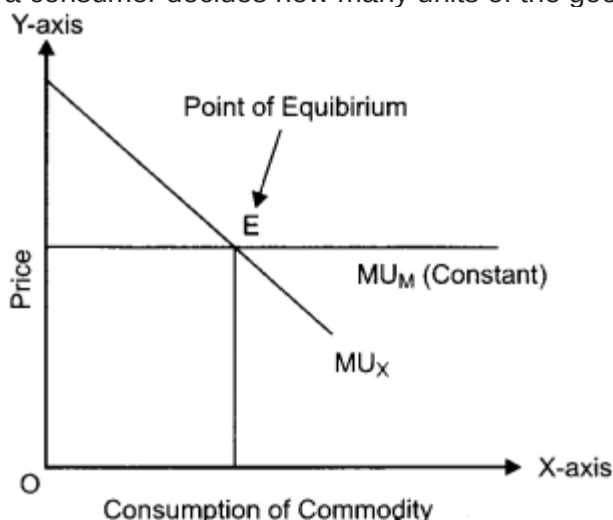
Solution 2018

	Section A - Microeconomics	
1	(d) ₹ 330	1
2	(a) Equal to AP	1
3	Increasing the interest rate to encourage people to save is an example of positive economics.	1
4	Fixed costs are those costs which do not vary with the level of output. For e.g. Rent of factory.	1
5	The problem of “choice of technique” is the second major central problem faced by the economy ever. Basically, there are two choices of techniques i.e., - Capital-intensive technique: This is the technique, in which capital is required more than the labour. - Labour-intensive technique: This is the technique in which labour is required more than the capital. OR An economy faces a major central problem i. e., for whom the production is to be done? Production/Income is distributed either on the basis of the purchasing powers of the consumers or on the basis of requirements of the individuals. Two types of distribution are: - Functional Distribution - Personal Distribution	3
6	Elasticity is a measure of the responsiveness of the quantity demanded to a change in its price. Inelastic demand means that the demand for a product does not increase or decrease corresponding to the fall or rise in its price. In this case elasticity is less than 1, as percentage change in quantity demanded is less than the percentage change in price. For Ex.—Percentage change in quantity demanded is 10% whereas percentage change in price = 20% So, Elasticity ($E_d < 1$) = 0.5 On the other hand, when increase or decrease in price does not affect the quantity demanded, it is known as perfectly inelastic demand. For Ex.—Price is changed by 10% but quantity demanded remains the same i.e., Percentage change in quantity demand = 0	3

	Percentage change in price = 20% So, elasticity is 0.	
7	Given, $P_1 = \text{Rs. } 4$ $P_2 = \text{Rs. } 5$ $Q_1 = 100$ $Q_2 = 120$ $E_s = (\text{Change in } Q / \text{Change in } P) \times (P/Q)$ $E_s = \{(120-100) / (5-4)\} \times (4/100)$ $E_s = (20/1) \times (4/100)$ $E_s = 80/100 = 0.8$ $E_s = 0.8$, It is inelastic, as elasticity is less than one.	4
8	Price ceiling is a situation when the price charged is more than or less than the equilibrium price determined by market forces of demand and supply. It has been found that higher price ceilings are ineffective. Price ceiling has been found to be of great importance in the house rent market.  Implications of Price Ceiling' • Price ceiling enables the availability of basic goods at reasonable prices to the poor. This enables the welfare of the people. • When there is a fall in the price level, the demand for a good increases more than the supply of the good. Hence, it creates an excess demand for the good.	4

9

Consumer equilibrium refers to the situation when a consumer gets maximum satisfaction/utility from the goods it consumes. It is the situation through which a consumer decides how many units of the goods to consume.



Price remains constant when MU of goods is more than its price, and in that case, consumers will decide not to purchase that good.

Also, when MU is less than its price, then consumers will give up their consumption. As a consumer will consume only when MU is equal to price.

$$MU_x = P_x$$

In the figure,

X-axis = Consumption

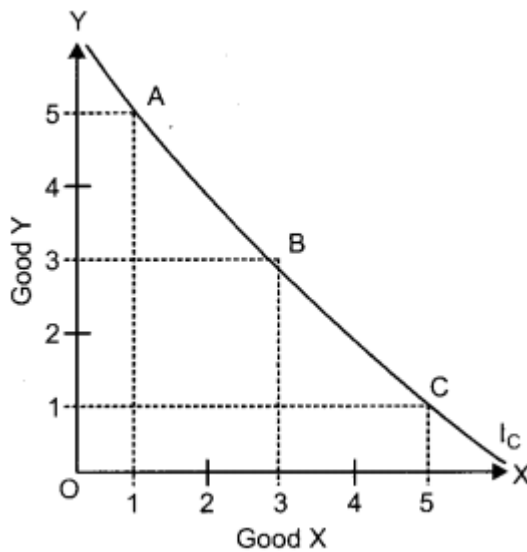
Y-axis = Price

E = Consumer Equilibrium

OR

An **indifference curve** is a graph showing a combination of two goods that give the consumer equal satisfaction and utility. Each point on an indifference curve indicates that a consumer is indifferent between the two and all points give him the same utility.

4



Properties:

- Higher IC gives higher levels of satisfaction.
- Two Indifference curves never intersect each other.
- Indifference curve is convex to the origin.
- Indifference curve is downward sloping.

10

The main features of monopolistic competition are as under:

(1) **Large Number of Buyers and Sellers:** There are large numbers of firms but not as large as under perfect competition. That means each firm can control its price- output policy to some extent. It is assumed that any price- output policy of a firm will not get reaction from other firms so each firm follows the independent price policy.

(2) **Less Mobility:** Under monopolistic competition, both the factors of production as well as goods and services are not perfectly mobile.

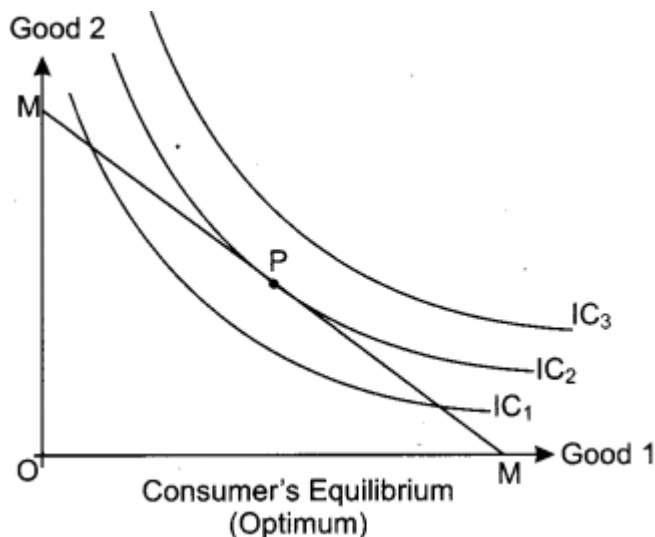
(3) **More Elastic Demand:** Under monopolistic competition, the demand curve is more elastic. In order to sell more, the firm must reduce its price.

The characteristics which separate monopolistic competition from perfect competition are:

Basis	Perfect Competition	Monopolistic Competition
Nature of Firms	Under perfect competition, an industry consists of a large number of firms. Each firm in the industry has a very little share in the total output. The firms have to accept the price determined by the industry.	On the other hand, under monopolistic competition the number of firms is limited. The firms can influence the market price by their individual actions.
Nature of Price and Output	Under perfect competition, price is equal to marginal cost as well as marginal revenue	Under monopolistic competition marginal cost and marginal revenue are equal yet not equalising the price.
Nature of Product	Under perfect competition, firms produce homogeneous products. The cross elasticity of demand among the goods is infinite.	Under imperfect competition, all the firms produce differentiated products and the cross elasticity of demand among them is very small.

6

	OR (a) Freedom of entry and exit of firms under perfect competition: There is freedom of entry and exit of firms in perfect competition. This implies that under perfect competition, in the long-run, firms earn only normal profits, so new firms do not enter or exit the market in the long-run. The firms in this competition do not earn supernormal profits or losses in the long-run. It is only in the short-run that the firms enter or exit the market. (b) Non-price competition under oligopoly: In an oligopoly market, firms do not compete with each other for changes in the price. If the firm increases the price, rival firms may not increase it, so it will lead to a loss of the market. Consumers will shift to rival firms. On the other hand, if the firm decreases the price, the rival firms may decrease it, so it will lead to a loss of total revenue. There will not be an increase in the demand for the product. They take into consideration the decisions of rival firms, and hence, the price does not move freely and it leads to non-price competition. High selling cost prevails in the market, resources are not fully used and welfare is not maximised.	
11	According to indifference curve analysis, a consumer attains equilibrium at a point where the budget line is tangent to an indifference curve. Consumer equilibrium is achieved where slope of indifference curve (MRS) = slope of budget line (P_x/P_y). $MRS = P_x \div P_y$ (Ratio of prices of two goods) Given the indifference map (preference schedule) of the consumer and budget or price line, we can find out the combination which gives the consumer maximum satisfaction. The aim of the consumer is to obtain the highest combination on his indifference map and for this, he tries to go to the highest indifference curve with his given budget line. He would be in equilibrium only at such a point which is common between a budget line and the highest attainable indifference curve. A consumer is in equilibrium at a point where the budget line is tangent to the indifference curve. At this point, the slope of the indifference curve (called MRS) is equal to the slope of the budget line.	6



In the above fig, P is the equilibrium point at which budget line M just touches the highest attainable indifference curve IC2 within consumer budget. Combinations on IC3 are not affordable because his income does not permit whereas combinations on IC1 gives lower satisfaction than IC2. Hence, the best combination is at point P where the budget line is tangent to the indifference curve IC2. It is at this point that the consumer attains the maximum satisfaction at the state of equilibrium.

For consumer's equilibrium, two conditions are necessary:

- (a) Budget line should be tangent to the indifference curve ($MRS = P_x/P_y$).
- (b) Indifference curve should be convex to the point of origin (i.e., MRS should be diminishing at a point of equilibrium.)

12

Producer's equilibrium refers to the state in which a producer earns his maximum profit or minimise its losses. According to the MR- MC approach, the producer is at equilibrium, when the Marginal Revenue (MR) is equal to the Marginal Cost (MC) and Marginal Cost curve cuts the Marginal Revenue curve from below.

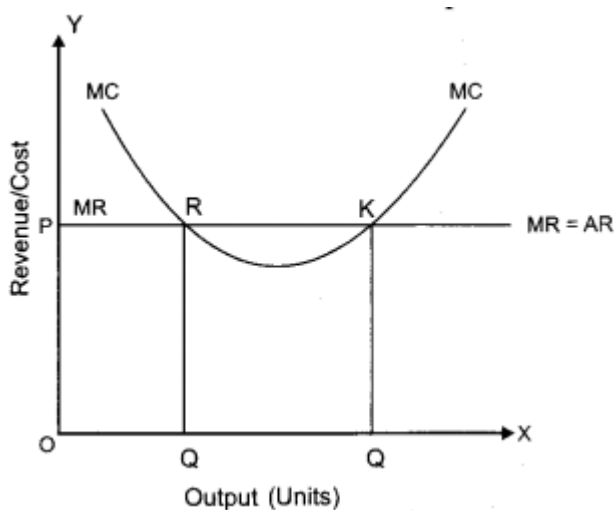
Two conditions under this approach are :

- (i) $MR = MC$
- (ii) MC curve should cut the MR curve from below, or MC should be rising.

MR is the addition to TR from the sale of one more unit of output and MC is the addition to TC for increasing the production by one unit. In order to maximise profits, firms compare 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, revenue and cost on the Y-axis. The Marginal Cost (MC) curve is U-shaped and $P = MR = AR$, is a horizontal line parallel to X-axis.

6



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 and Q1 levels of output, MR exceeds MC. Therefore, firms 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 the conditions are satisfied.

Situation beyond OQ1 level:

MR < MC when output level is more than OQ1 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.

Section B - Macroeconomics		
13	Money supply is the total amount of money in circulation or in existence in a country at a specific time.	1
14	(c) Subsidies	1
15	As consumption includes autonomous consumption and autonomous consumption can never be zero.	1
16	(c) Buying government securities.	1
17	Real income can be calculated by applying the following formula: Real Income = Nominal Income / Price Index of current year x Price Index of base year Consider the price index of base year as 100 When nominal income is given, we can convert it into real income with the help of GDP deflator. Real Income = Nominal Income / GDP deflator x 100	3

	OR (a) It is an intermediate good because it is used by the producer during the production process of making tea and not for final consumption. (b) It is a final good as it is purchased by school for final consumption. (c) It is a final good as it is purchased by a student for final consumption.	
18	In economics, a multiplier is the factor by which gains in total output are greater than the change in spending that caused it. It is usually used in reference to the relationship between investment and total national income. Relationship between marginal propensity to consume and multiplier There is a direct relationship between MPC and Multiplier as, the higher the MPC, the higher the multiplier and vice versa. Multiplier = $1/(1-MPC)$ Therefore, $4 = 1/(1-MPC)$ MPC = 0.75	3
19	An inflationary gap is the amount by which the actual gross domestic product exceeds the potential full-employment GDP. Three measures to reduce this gap are: 1. Fiscal Policy: Fiscal policy is the expenditure and revenue (taxation) policy of the government to accomplish the desired objectives. In case of excess demand (when current demand is more than aggregate supply at full employment), the objective of fiscal policy is to reduce aggregate demand. 2. Monetary Policy: Monetary policy of the central bank of a country is to control the money supply and credit in the economy. Therefore, it is also called the Central Bank's Credit Control Policy. Money broadly refers to currency notes and coins whereas credit generally means loans, i.e., finance provided to others at a certain rate of interest. Monetary measures (instruments) affect the cost of credit (i.e., rate of interest) and availability of credit. Thus, it helps in checking excess demand when credit availability is restricted and credit is made costlier. 3. Miscellaneous: Other anti-inflationary measures are import promotion, wage freeze, control and blocking of liquid assets, compulsory savings	4

	scheme for households, increase in production by utilising idle capacities, etc. OR Aggregate demand (AD) or Domestic Final demand (DFD) is the total demand for final goods and services in an economy at a given time. It specifies the amount of goods and services that will be purchased at all possible price levels. Components of aggregate demand are: $AD = C + I + G + (X + M)$ Where C = Consumption I = Investment G = Government Spending X – M = Net Exports 1. Consumption: This is made by households, and sometimes consumption accounts for the larger portion of aggregate demand. An increase in consumption shifts the AD curve to the right. 2. Investment: Investment, second of the four components of aggregate demand, refers to the spending by firms not households. However, investment is also the most volatile component of AD. An increase in investment shifts AD to the right in the short term and helps to improve the quality and quantity of factors of production in the long run. 3. Government: Government spending forms a large total of aggregate demand, and an increase in government spending shifts aggregate demand to the right. This spending is categorized into transfer payments and capital spending. Transfer payments include pensions and unemployment benefits and capital spending is on things like roads, schools and hospitals. Government spends to increase the consumption of health services, education and to redistribute income. They may also spend to increase aggregate demand. 4. Net Exports: Imports are foreign goods bought by consumers domestically, and exports are domestic goods bought abroad. Net exports is the difference between exports and imports, and this component can be net imports too if imports are greater than exports. An increase in net exports shifts aggregate demand to the right. The exchange rate and trade policy affects net exports.	
20	Given that, Marginal propensity to consume (MPC) = 0.6 Initial income = ₹ 100 crores Autonomous investment = ₹ 80 crores	4

	$C = \bar{C} + c(Y)$$C = 0 + 0.6(Y)$ <table><tr><th>Income (₹)</th><th>Consumption</th><th>Saving (₹) (1-MPC = MPS) MPS = 0.40</th><th>Investment</th></tr><tr><td>100</td><td>60</td><td>40</td><td>80</td></tr><tr><td>200</td><td>120</td><td>80</td><td>80</td></tr><tr><td>300</td><td>180</td><td>120</td><td>80</td></tr><tr><td>400</td><td>240</td><td>160</td><td>80</td></tr><tr><td>500</td><td>300</td><td>200</td><td>80</td></tr></table> Aggregate Demand (AD) = Aggregate Supply (AS) AD = C + I and AS = C + S Therefore, the equilibrium level of income is ₹ 200 crores.	Income (₹)	Consumption	Saving (₹) (1-MPC = MPS) MPS = 0.40	Investment	100	60	40	80	200	120	80	80	300	180	120	80	400	240	160	80	500	300	200	80	
Income (₹)	Consumption	Saving (₹) (1-MPC = MPS) MPS = 0.40	Investment																							
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21	A person or organisation which is ready to help the individual or organisation who is in need of immediate financial help to come out of the financial struggles is the lender of the last resort. It means that if a commercial bank fails to get financial accommodation from anywhere, it approaches the Reserve Bank as a last resort. The Reserve Bank advances loans to such banks against approved securities. By offering loan to the commercial bank in situations of emergency, the Reserve Bank ensures that: • The banking system of the country does not suffer from any setback. Money market remains stable. It preserves the stability of the banking and financial system by protecting individual's deposited funds and preventing panic-ridden withdrawals from banks with temporary limited liquidity. For more than a century and a half, central banks have been trying to avoid great depressions by acting as lenders of last resort in times of financial crisis.	4																								
22	(a) If the exchange rate of a country falls with respect to the other country then its exports become cheap while imports become expensive. For example : If earlier, the exchange rate was US\$1 = INR 60, and if the exchange rate decreased to US\$1 = INR 70, then businesses that are selling their products in the US will receive more money. So, if my product was priced at US\$5, earlier I was receiving 5*60 = INR 3Q0, now the exchange rate depreciated to INR 70, so for the same priced product in the US that is priced at US\$5, I will be receiving 5*70 = INR 350. Similarly,	6																								

	for imports, as the ' exchange rate depreciated to INR 70 and if I want to purchase a Smartphone worth US\$200; earlier I had to pay $200 \times 60 = \text{INR } 12,000$. Now I will pay, $200 \times 70 = \text{INR } 14,000$. Exactly the opposite will happen when the exchange rate appreciates. For example : when $\text{US\\$1} = \text{INR } 60$ will become $\text{US\\$1} = \text{INR } 50$. (b) The deficit in the Balance of Payment (BOP) is governed by the balance of autonomous transactions in the BOP. The BOP would show a deficit if the autonomous receipts are lesser than the autonomous payments. As autonomous receipt implies a receipt of foreign exchange and autonomous payment implies a payment of foreign exchange, so, it can be said that BOP would show a deficit when the foreign exchange receipts are less than foreign exchange payment which also means that the BOP deficit would reflect depletion of foreign exchange reserves of the country.	
23	$\text{NDPFC} = \text{Wages and salaries} + \text{SSC by employers} + \text{Rent and interest} + \text{Dividend} + \text{Corporation tax} + \text{Undistributed profit} + \text{Mixed income}$ $\text{NDPFC} = 1800 + 200 + 6000 + 80 + 120 + 400 + 1000$ $\text{NDPFC} = ₹ 9600 \text{ Crores}$ (a) $\text{NNPMP} = \text{NDPFC} + \text{NFIA} + \text{NIT}$ $\text{NNPMP} = ₹ 9600 + (- 70) + 100$ $\text{NNPMP} = ₹ 9630 \text{ Crores}$ (b) $\text{GDPFC} = \text{NDPFC} + \text{Consumption of fixed capital}$ $\text{GDPFC} = ₹ 9600 + 50$ $\text{GDPFC} = ₹ 9650 \text{ Crores}$	6
24	(a) Revenue Deficit: A revenue deficit occurs when the net income generated (revenues less expenditures), falls short of the projected net income. This happens when the actual amount of revenue received and/ or the actual amount of expenditures do not correspond with budgeted revenue and expenditure figures. (b) Fiscal Deficit: A fiscal deficit occurs when a government's total expenditures exceed the revenue that it generates, excluding money from borrowings. Deficit differs from debt, which is an accumulation of yearly deficits. (c) Primary Deficit: The deficit can be measured with or without including the interest paid on the debt as expenditures. The primary deficit is defined as the difference between the current government's spending on goods and services and total current revenue from all types of taxes. OR (a) Allocation of Resources: It is one of the important objectives of the	6

	government budget. In a mixed economy, the private producers aim towards profit maximisation, while the government aims towards welfare maximisation. The private sector always tends to divert resources towards areas of high profit, while ignoring areas of social welfare. In such a situation, the government through the budgetary policy aims to reallocate resources in accordance with the economic and social priorities of the country. (b) Reducing Income inequalities: Government through budget makes every possible effort to reduce income inequalities. Income inequalities are so prevalent in an economy like India. To achieve this objective, the government uses fiscal instruments of taxation and subsidies. By imposing taxes on the rich and giving subsidies to the poor, the government redistributes income in favour of poorer sections of the society. Distribution of food grain through 'fair = price shops' to BPL (below poverty line) population is an important step in this direction. Equitable distribution of income and wealth is a sign of social justice. Thus, the government budget reduces income inequalities.	
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