

CBSE
Class XII Economics
All India Board Paper Set 1 – 2012 Solution

Answer 1

Microeconomics studies economic relationships or economic problems at the level of an individual, an individual firm or household or consumer. It is basically concerned with the determination of output and price for an individual firm or industry.

Answer 2

A shift in the demand curve is either rightwards or leftwards because of a change in other factors such as change in prices of substitutes, change in prices of complementary goods and change in income.

Answer 3

Total variable costs vary directly with the level of output. So, TVC increases at a decreasing rate initially with an increase in output, then at a constant rate and finally at an increasing rate.

Answer 4

The type of market implied in the question is perfect competition. In this market structure, the marginal revenue (MR) curve is constant for all levels of output. The MR curve is a horizontal straight line parallel to the output axis.

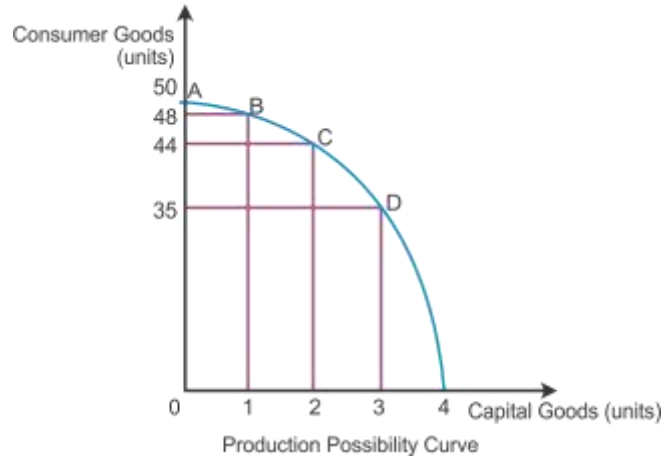
Answer 5

The price-maker is an individual firm which can determine the market price of the product on its own.

Answer 6

The production possibility curve is concave to the point of origin because to produce each additional unit of Good X, more units of Good Y will have to be sacrificed than before. Opportunity cost of producing every additional unit of Good X tends to increase in terms of the loss of production of Good Y.

Consider capital goods and consumer goods to represent PPC in the diagram. If 1 unit of capital good and 48 units of consumer goods are produced at the initial production point B, then to produce one additional unit of capital good, 4 units of consumer goods must be sacrificed. The opportunity cost of one additional capital good is 4 units of consumer goods at Point C. Likewise, it moves on to Point D by sacrificing 9 units of consumer goods to produce another unit of capital good. The opportunity cost increases as the PPC moves down from Point C to D. Hence, PPC has a concave shape.



Answer 7

When a consumer buys both commodities X and Y, the consumer’s equilibrium condition is expressed through the equation:

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y} = \frac{MU_m}{P_n} = MU_m$$

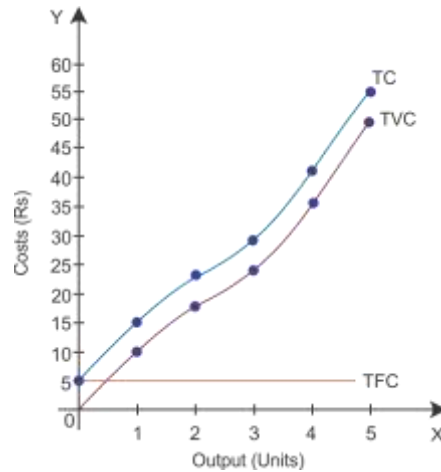
Say, the consumer is in equilibrium at the consumption of 5 units of commodity X and 8 units of commodity Y. At such a consumption combination, the marginal utility of a rupee spent on commodity x $\left(\frac{MU_x}{P_x}\right)$ is equal to the marginal utility of a rupee spent on commodity y $\left(\frac{MU_y}{P_y}\right)$ and equal to the marginal utility of money (MU_m).

If the price of commodity X falls, then the ratio of marginal utility to price of $x \left(\frac{MU_x}{P_x}\right)$ will be more than that of Y.

$$\frac{MU_x}{P_x} < \frac{MU_y}{P_y}$$

Here, the consumer reorganises his consumption combination to attain equilibrium. Therefore, the consumption of commodity X increases till it reaches equilibrium.

Answer 8



Answer 9

Implicit cost is the value of self-owned inputs in their next best alternative use. Here, the producer investing his own savings in his business activity is the implicit cost.

Explicit cost is the value of costs which are paid to the factors of production by the firm. Here, the producer hires labour and makes payment as wages for labour in his business activity, which is the explicit cost.

Answer 10

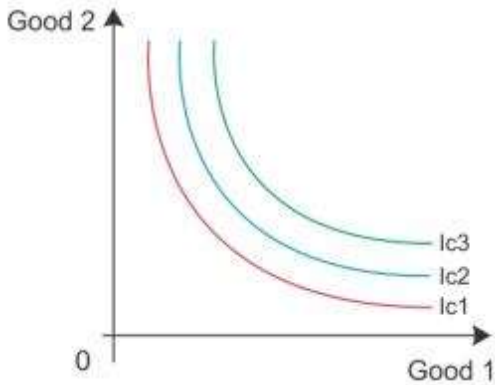
A large number of sellers in perfect competition: There are a large numbers of sellers, but the supply of an individual firm is only a small fraction of the whole market supply. Here, an individual seller cannot influence the market price by varying the sale in the market. Hence, a firm can supply any amount of goods at the given price. They are only price takers but not price makers.

OR

In an oligopoly market, each firm is huge enough to control a significant portion of the market even though they are few firms. Output quotas and the price have a direct bearing on the output and price of rival firms in the market. So, there is no unique demand curve for an oligopoly firm. They form a collusive agreement among the firms to fix the price and output in the market. It is to avoid price competition and earn monopoly profits.

Answer 11

Indifference map refers to a set of indifference curves. An indifference curve which is to the right and above another shows a higher level of satisfaction to the consumer. Here, IC3 shows higher level of satisfaction than IC2. Thus, the indifference curve relates to a higher level of income of the consumer.



Answer 12

Given that

Initial price (P_1) = Rs 10

Initial quantity (Q) = 10 units

Final expenditure = Rs 20

Final quantity = 20 units

As we know that

Final expenditure = Final price \times Final quantity

By substituting the values, we get

$$200 = P_2 \times 20$$

$$P_2 = \text{Rs } 10$$

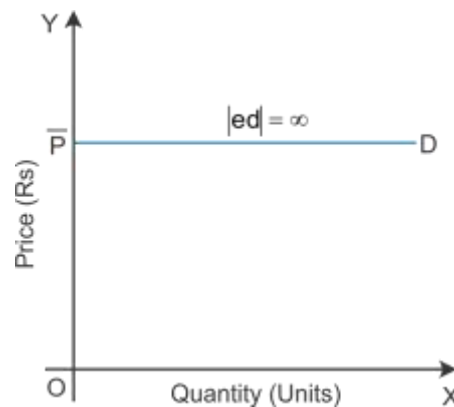
$$\text{Change in price } (\Delta P) = (P_2 - P_1) = (10 - 10) = 0$$

$$\text{Change in quantity, } \Delta Q = (Q_2 - Q_1) = (20 - 10) = 10$$

$$e_d = \frac{10}{0} \times \frac{10}{10}$$

$$e_d = \frac{10}{0} \times \frac{10}{10} \Rightarrow e_d = \infty$$

Therefore, the demand curve is a horizontal straight line parallel to x-axis.



Answer 13
Law of variable proportion:

As more of the variable factor input is combined with the fixed factor input, a point will eventually be reached where the marginal product of the variable factor input starts declining.

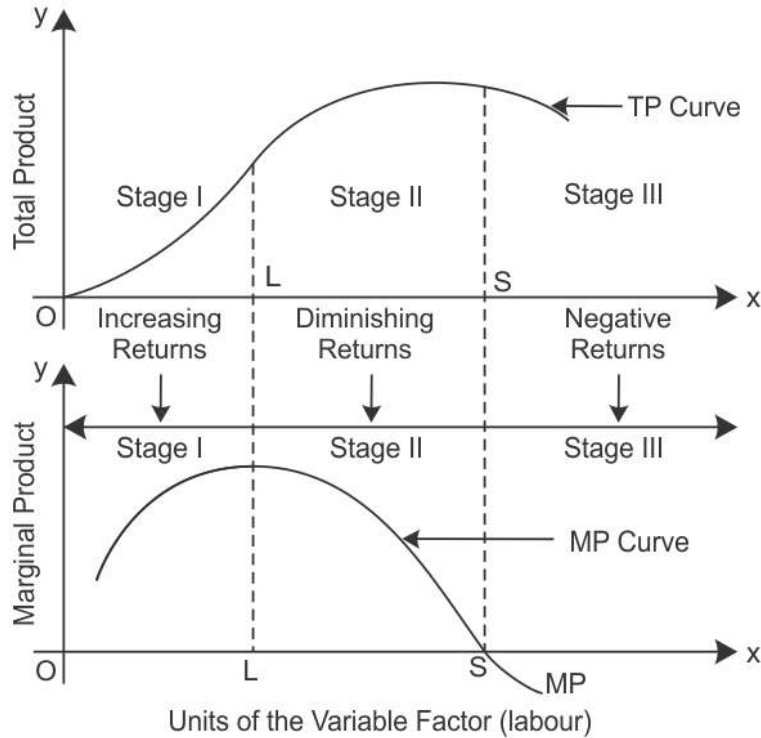
Units of Fixed Factor	Units of Variable Factor	TP	MP	Stages
1	1	4	4	Increasing MP (Increasing returns to a factor)
1	2	12	8	
1	3	24	12	
1	4	32	8	Diminishing MP (Diminishing returns to a factor)
1	5	34	2	
1	6	34	0	
1	7	30	-4	Negative MP (Negative returns to a factor)
1	8	21	-9	
1	9	10	-11	

Consider the above table.

Stage I: As more units of factor input are used, MP tends to rise till 3 units of factor input are used. Here, the total product increases at an increasing rate which is called increasing returns to the factor input.

Stage II: However, when the 4th unit of factor input is used, the diminishing returns set in, where MP starts decreasing and TP increases at a decreasing rate. Diminishing MP reduces to zero. The total output is the maximum when the marginal output is zero.

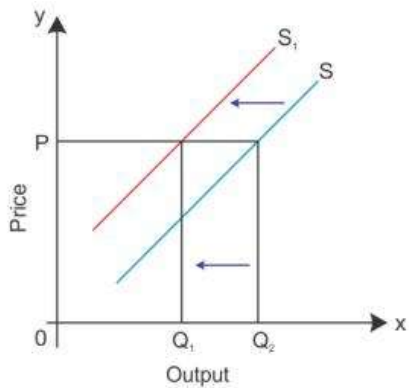
Stage III: When MP is negative, TP starts declining from 34 to 10 when the 9th unit is employed.



OR

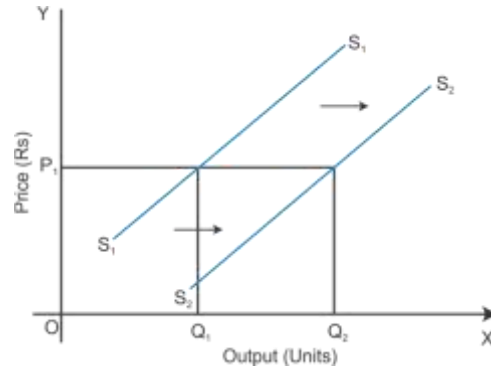
Changes in prices of inputs influence the supply of a product:

When there is a rise in input prices, there will be an increase in the cost of production resulting in a decline in profit margin and the supply of good.



When there is an increase in input prices, the supply curve S shifts leftwards from S to S1. It leads to a fall in the supply of good from OQ2 to OQ1, where the price remains constant at OP.

While there is a fall in input prices, there will be a decrease in the cost of production resulting in an increase in profit margin and the supply of good. In the diagram, the quantity supplied increases and the supply curve shifts rightwards from S1S1 to S2S2.



Answer 14

i. Normal and inferior goods

Normal goods are goods which have a positive relationship between income and quantity demanded. Assuming that other things remaining constant, an increase in the consumer's income will lead to an increase in the quantity demanded, and a decrease in the consumer's income will lead to a decrease in the quantity demanded.

Inferior goods are goods which have a negative relationship between income and quantity demanded. Assuming that other things remaining constant, an increase in the consumer's income will lead to a decrease in the quantity demanded, and a decrease in the consumer's income will lead to an increase in the quantity demanded.

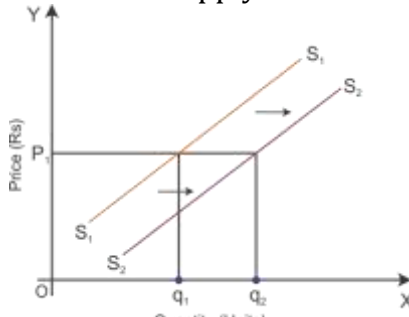
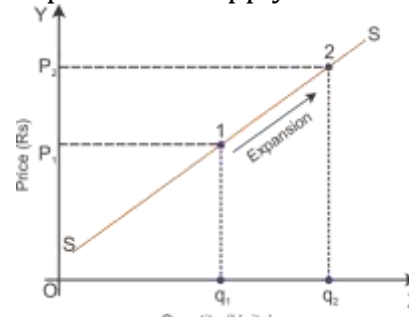
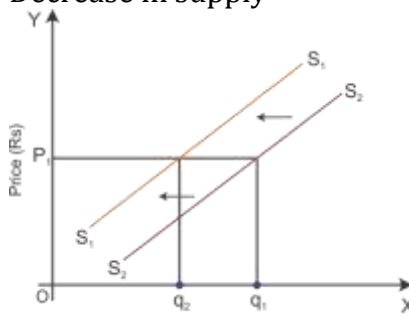
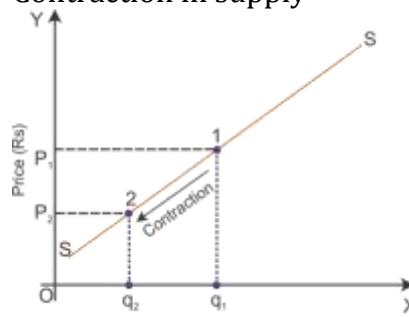
ii. Cardinal utility and ordinal utility

Cardinal utility approach is measured in cardinal terms such as 15 utils to apple and 20 utils to banana. It implies that banana offers 5 more utils than apple. Based on the consumption of goods and services, the satisfaction level is measured, i.e. higher level of satisfaction accorded higher level of utils.

Ordinal utility approach is a subjective concept which cannot be measured, but it is possible to rank the scale of consumption. If a consumer consumes more banana than apple, then it implies that banana ranks first and apple ranks second.

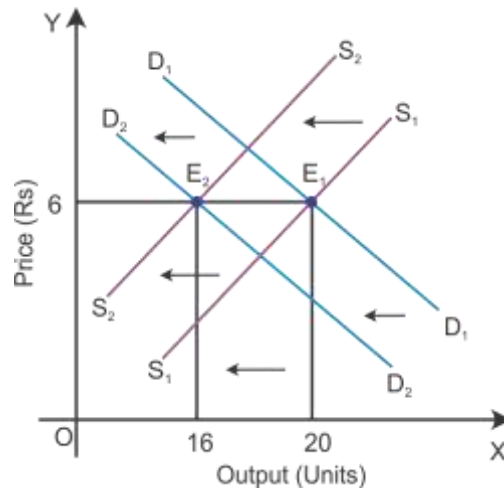
Answer 15

Basis	Change in Supply	Change in Quantity Supplied
Meaning	Assuming that the price remains constant, there is a change in the supply because of change in other variables such as technological change, input prices, unit tax and price of other related goods.	Assuming that other variables remain constant, there is a change quantity supplied because of the change in the own price of a good.

<p>Functional relation</p>	$Q_x = f(\bar{P}_x, P_y, P_F, T, G, G_p, N_F)$ <p>where \bar{P}_x = Ownprice of a good P_y = Price of related goods P_F = Price of factors of production T = State of technology G = Goal of the firm G_p = Government policy N_F = Number of firms</p>	$Q_x = f(P_x, \bar{P}_y, \bar{T}, \bar{P}_F, \bar{G}, \bar{G}_p, \bar{N}_F)$ <p>where \bar{P}_x = Ownprice of a good \bar{P}_y = Price of related goods \bar{P}_F = Price of factors of production \bar{T} = State of technology \bar{G} = Goal of the firm \bar{G}_p = Government policy \bar{N}_F = Number of firms</p>
<p>Shift and Movement</p>	<p>The supply curve of the firm will shift rightward or leftward.</p>	<p>The supply curve of the firm will move upwards or downwards.</p>
<p>Types</p>	<p>Shift in the supply curve— increase in supply and decrease in supply.</p>	<p>Movement along a supply curve—expansion of supply and contraction of supply.</p>
<p>Diagram for increase/expansion</p>	<p>Increase in supply</p> 	<p>Expansion in supply</p> 
<p>Diagram for decrease/contraction</p>	<p>Decrease in supply</p> 	<p>Contraction in supply</p> 

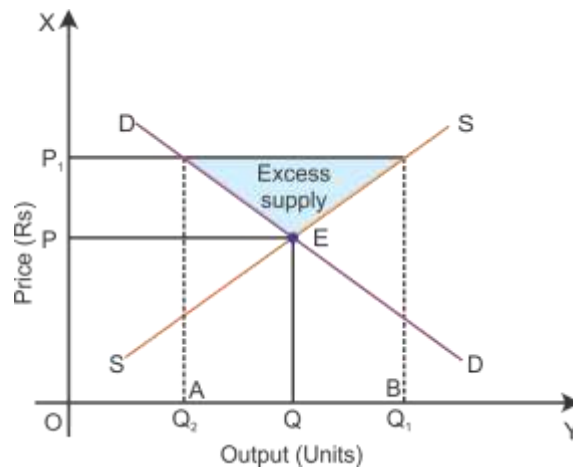
Answer 16

When decrease in demand is proportionately equal to decrease in supply, the changes in the curve will be leftward shift in demand curve from D_1D_1 to D_2D_2 which is proportionately equal to leftward shift in supply curve from S_1S_1 to S_2S_2 . As the changes in demand and supply curve are proportionate, the equilibrium price will remain constant, but the equilibrium quantity will fall from 20 to 16.

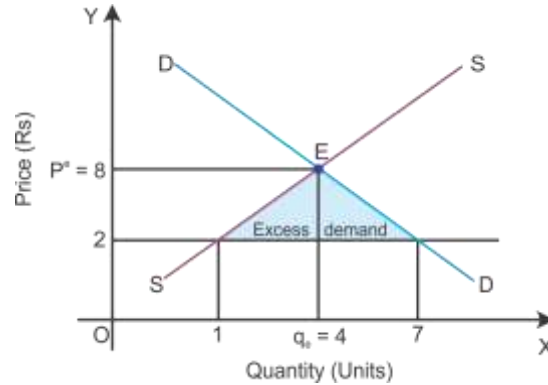


OR

- i. The income of the farmer is regulated and continuous production is assured. In the diagram, the equilibrium price and quantity are OP and OQ . As the equilibrium price is low for farmers, the government fixes the price floor, i.e. the price level increased from OP to OP_1 which leads to a decline in the quantity demanded, and therefore, there is excess supply in the market.



- ii. While the price level decreased from 8 to 2 leading to an increase in the quantity demanded, and therefore, there is excess demand in the market.



This leads to competition among consumers to increase the purchase of output and they are willing to pay higher prices for the output. An increase in the market price continues until it attains the equilibrium price OP_e , where the market demand equals the market supply.

Answer 17

A variable which is measured over a period of time is known as flow variable. It implies a time dimension such as production of goods in March 2016.

Answer 18

Consumption goods are purchased by consumers for satisfying their wants directly such as car, refrigerator, bread and vegetables for their own use but not for any business motive.

Answer 19

Time deposits can be withdrawn only after the expiry of a specific period. It carries a higher interest rate than other types of deposits. However, chequable facility is completely absent as it cannot be withdrawn before the maturity period.

Answer 20

Direct tax is the tax burden which cannot be shifted to any other individual or firm by the taxpayer. It is progressive because the tax rate increases with an increase in income slab. The impact and incidence of tax fall on the same person. For income tax, the tax burden cannot be shifted to any other person. The person on whom the government imposes the tax must pay a part of his/her income as tax to the government.

Answer 21

Fixed exchange rate is fixed by the government or Central Bank of a country and the changes can be made by the government. Under this system, the value of currency is fixed against different currencies to ensure stability in the exchange rate and it promotes foreign trade.

Answer 22

Net value added at market price = Value of output (units of output × price per unit) + (closing stock – opening stock) – intermediate cost – depreciation
 = $(900 \times 40) + (1000 - 800) - 20,000 - 700$
 = Rs 15,500

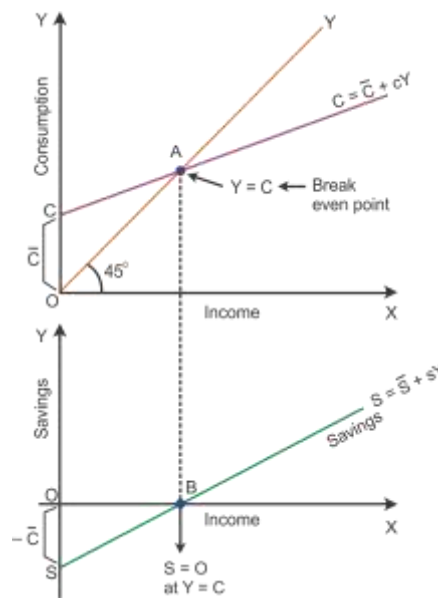
Answer 23

Deferred payments refer to payments which are made in the future. Money has made deferred payments easier. When money is borrowed, the principal and interest amounts have to be returned to the lender. However, these transactions are not possible in terms of goods and services. Money performs this function more effectively.

Answer 24

Derivation of the consumption curve from the saving curve:

Given the SS curve, let us consider $OS = OC$. At Point B, draw a perpendicular 45° line towards Point A. Points C and A are joined to produce a straight line upward sloping consumption curve CC.



Answer 25

Given that

National income = Rs 5,000

Autonomous consumption = Rs 1,000

MPC = 0.80

As we know that

$$C = \bar{C} + bY$$

By substituting the values

$$C = 1000 + 0.8 \times 5000$$

or

$$C = \text{Rs } 5000$$

Answer 26

Basic of Difference	Capital Receipts	Revenue Receipts
Definition	Receipts which cause reduction in the assets of the government and create liability for the government.	Receipts which neither create any liability nor cause any reduction in the assets of the government.
Impact	Decrease in government assets and create liabilities for the government.	Zero effect on government assets and liabilities.
Example	Disinvestment	Tax receipts

OR

Role of government in stability at the time of deflationary and inflationary situations:

During the deflationary situation, the government can deficit financing, i.e. borrowing by the government from the Central Bank against treasury bills to increase the flow of money circulation in the economy. Tax burden is decreased to adjust deficient demand and thereby purchasing power of the people will increase. Increase in public expenditure on infrastructural development improves production efficiency.

During inflationary situation, the government can take fiscal measures to reduce excess demand by increasing taxes, i.e. government levies new taxes and increases the rate of prevailing ones. Surplus budget policy and decrease in public expenditure lead to a fall in aggregate demand.

Answer 27

- i. Expenditure made on the purchase of furniture by a firm is a final expenditure because it is consumed by the firm for long-term investment.
- ii. Expenditure on maintenance by a firm is an intermediate expenditure because this expenditure is made to improve the existing operations of the firm.

Answer 28

Lender of the last resort: The Central Bank is the apex bank which controls the entire banking system of a country. It has the sole authority to issue notes in that country. It also acts as a banker to the government and controls the supply of money in the country.

The Central Bank provides financial assistance to commercial banks by rediscounting eligible bills of exchange. When commercial banks do not get loan facilities from any other sources, they approach the Central Bank as a last resort. The Central Bank advances loans to such banks against approved securities. Thus, the Central Bank acts as a 'lender of the last resort'.

OR

Banker to the government

The Central Bank is also a banker, agent and financial advisor to the government. As a banker, it manages government accounts across the country. It buys and sells securities for the government as an agent of the government. It helps the government in framing policies to regulate the money market by acting as an advisor to the government.

Answer 29

Fiscal deficit is the excess of total expenditure, i.e. revenue and capital expenditure over total receipts. This measure reflects total borrowings of the government during the financial year.

Fiscal Deficit = Budget Expenditure – Budget Receipts (other than borrowing and liabilities)

Fiscal Deficit = Borrowings of the government + other liabilities of the government

When fiscal deficit is high, it implies that the requirement of the government borrowing is high. The main source of borrowings is the Central Bank from where the government borrows in the form of deficit financing. This leads to an increase in the circulation of money in the economy which causes inflation. When the government borrows from external sources of finance (e.g. the World Bank and IMF), it will increase dependency on the lending country. It becomes a burden on future generations to repay the amount of borrowing along with interest.

Answer 30

i. $GNPMP = \text{Private Final Consumption Expenditure} + \text{Government Final Consumption Expenditure} + \text{Net Exports} + \text{Net Domestic Fixed Capital Formation} + \text{Depreciation} - \text{Net Factor Income to Abroad}$

$$= 1000 + 300 + 15 + 110 + 100 - (-)10$$

$$= \text{Rs } 1535 \text{ crore}$$

ii. Net Current Transfers from Abroad

$$= \text{National Disposable Income} - \text{National Income} - \text{Net Indirect Taxes National Income (NNPFC)}$$

$$= \text{GNPMP} - \text{Depreciation} - \text{Net Indirect Taxes}$$

$$= 1535 - 100 - 50$$

$$= \text{Rs } 1385 \text{ crore}$$

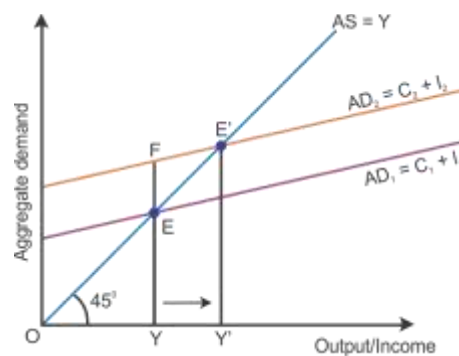
$$\text{Thus, Net Current Transfers from Abroad} = 1500 - 1385 - 50$$

$$= \text{Rs } 65 \text{ crore}$$

Answer 31

Excess demand occurs in a situation when the aggregate demand is more than the aggregate supply corresponding to full employment. It leads to reduction in inventories and inflation in the economy. This situation is considered an inflationary gap—the difference between aggregate demand beyond full employment and aggregate demand at full employment.

Aggregate demand is the AD curve and aggregate supply is the AS curve (as shown in the diagram below). While the aggregate demand curve and the aggregate supply curve intersect each other, the full employment equilibrium is attained at Point E. OY is the full employment level of output, and EY is the aggregate demand at full employment level of output. If the aggregate demand increases beyond the full employment level of output from EY to FY, then the economy will have excess demand (FY – EY = FE).

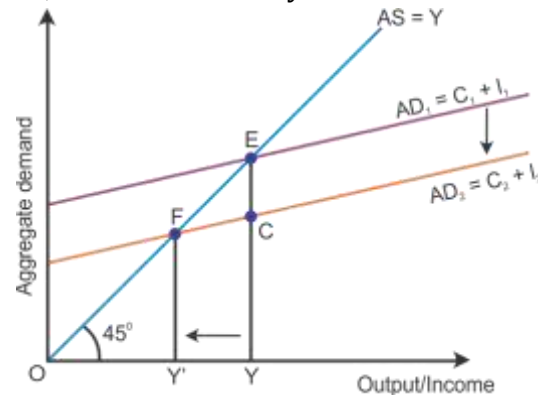


Because of excess demand, the repo rate will be increased by the Central Bank and it will increase the cost of borrowings for the commercial bank. This leads to a decline in the demand for loans and consumption expenditure. Thus, the aggregate demand comes down and the economy attains equilibrium.

OR

Deficient demand is a situation when the aggregate demand is short of the aggregate supply corresponding to full employment in the economy. It leads to a fall in the general price level and results in deflation, i.e. $AD < AS$.

Aggregate demand is shown by the AD curve and aggregate supply is shown by the AS curve (as shown in the diagram below). While the aggregate demand curve and the aggregate supply curve intersect each other, the full employment equilibrium is attained at Point E. OY is the full employment level of output, and EY is the aggregate demand at full employment level of output. If the aggregate demand decreases below the full employment level of output from EY to CY, then the economy will have deficient demand, (EY – CY = EC).



The Central Bank overcomes the deficient demand. It decreases the bank rate and there is a fall in the cost of borrowing for commercial banks. This enables the increase for the demand for loans and borrowings in the market. This in turn increases the ability to purchase more. In this way, the aggregate demand increases to the level of aggregate supply and the economy attains equilibrium.

Answer 32

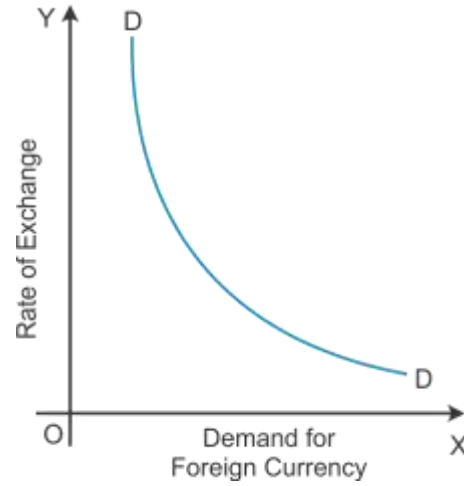
Fixed exchange rate is fixed by the government or Central Bank of a country and the changes can be made by the government. Under this system, the value of currency is fixed against different currencies to ensure stability in the exchange rate and it promotes foreign trade.

Flexible exchange rate is determined by demand and supply forces of varied currencies in the foreign exchange market. It is also called free rate of exchange, as it is freely determined by demand and supply forces in the international market. Here, the government does not hold any reserves and there is no problem of under or over valuation of currency.

Demand for foreign currencies is inversely related with the exchange rate because higher the exchange rate, the demand for foreign currencies will be lower.

Currency appreciation is the value of domestic currency becomes costlier in terms of foreign currency. For example, if the exchange rate for \$1 = Rs 50 decreases to \$1 = Rs 45, then the export of goods to foreign countries will become costlier. This implies that the rupee value is appreciated against the dollar. So, the goods worth Rs 48 for \$1 only get exported, and hence, there is a decrease in the demand for exports.

On the other hand, depreciation of domestic currency refers to a decrease in the price of domestic currency related to foreign exchange. For example, \$1 = Rs 48 to \$1 = Rs 52 indicates that the exports will be cheaper, and hence, a rise in the demand for exports.



In the diagram, demand for foreign exchange is represented on the x-axis and exchange rate on the y-axis, which shows that the demand curve for the exchange rate is the negatively sloped DD curve.