

Sample Question Paper

Economics (030)

Class XII

Time : 3 Hours

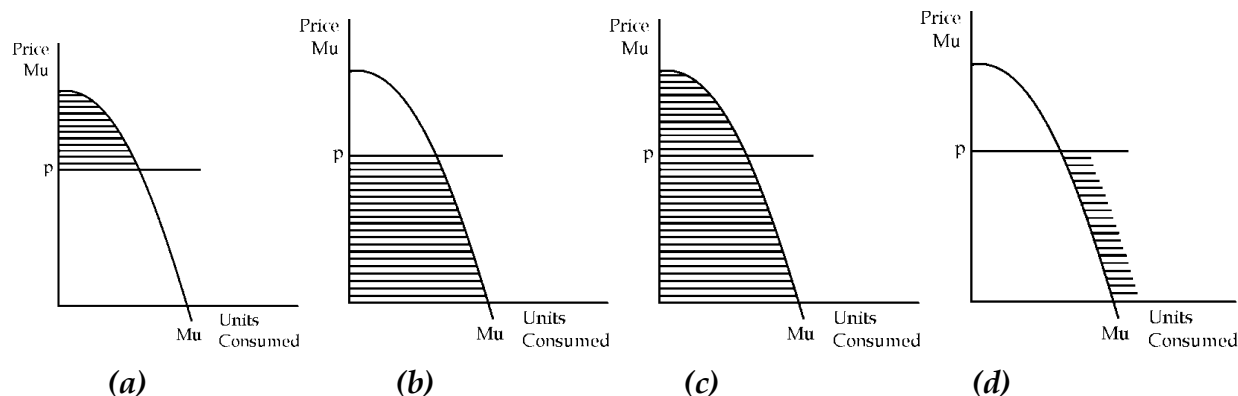
Maximum Marks : 100

Instructions:

1. All questions in both sections are compulsory. However, there is internal choice in some questions.
2. Marks for questions are indicated against each question.
3. Question No.1-3 and 15-19 are very short answer questions carrying 1 mark each. They are required to be answered in one sentence.
4. Question No.4-8 and 20-22 are short answer questions carrying 3 marks each. Answers to them should not normally exceed 60 words each.
5. Question No.9-10 and 23-25 are also short answer questions carrying 4 marks each. Answers to them should not normally exceed 70 words each.
6. Question No.11-14 and 26-29 are long answer questions carrying 6 marks each. Answers to them should not normally exceed 100 words each
7. Answers should be brief and to the point and the above word limit be adhered to as far as possible.

Section A: Microeconomics

- The total cost at 5 units of output is Rs 30. The fixed cost is Rs 5. The average variable cost at 5 units of output is: (1)
 - Rs 25
 - Rs 6
 - Rs 5
 - Rs 1
- What policy initiatives can the government undertake to increase the demand of milk in the country? Mention any one. (1)
- Which of the shaded area in the diagrams below represent total utility? (1)



For blind candidates:

What does the area under the marginal utility curve depict?

- Average Utility
- Total Utility
- Indifference Curve
- Consumer equilibrium

- Using a diagram explain what will happen to the PPC of Bihar if the river Kosi causes widespread floods? (3)

For blind candidates:

State two assumptions of a PPC. Explain what will happen to the PPC of the Bihar if the river Kosi causes widespread floods.

- State the central problems of an economy. (3)

6. State whether the following statements are True or False. Justify your answer. (3)
- a) Average product rises only where marginal product rises.
 - b) Total cost rises only when marginal cost rises.

7. Explain the effects of a 'price ceiling'. (3)

OR

Explain the effects of a 'price floor'.

8. Explain the implications of freedom of entry and exit of firms under perfect competition. (3)

9. A good is an 'inferior' good for one and at the same time 'normal' good for another consumer. Do you agree? Explain with the help of an example. (4)

10. Explain why an indifference curve is convex to the origin? (4)

OR

A consumer consumes two goods X and Y. What will happen if MU_x/P_x is greater than MU_y/P_y ?

11. Explain the condition of equilibrium of a firm based on marginal cost and marginal revenue. (6)

12. What is meant by change in supply and change in quantity supplied? (6)

13. The following headline appeared in the Hindustan Times on 2 August 2014: (6)

"Crop damaged in Himachal sent tomato prices roaring in Delhi."

Use a diagram and economic theory to analyse the statement.

OR

On 19 December 2013, the following news item was printed in the Economic Times:

Households in Southern India prefer to eat oranges for breakfast as banana plantations in Kerala have been destroyed and price of apples and grapes have also risen.

Use a diagram and economic theory to analyse the impact of the rise in price of apples and grapes on the market of oranges.

For blind candidates:

The following headline appeared in the Hindustan Times on 2 August 2014:

"Crop damaged in Himachal sent tomato prices roaring in Delhi."

Analyse the statement based on economics theories.

OR

On 19 December 2013, the following news item was printed in the Economic Times:

Households in Southern India prefer to eat oranges for breakfast as banana plantations in Kerala have been destroyed and prices of apples and grapes have also risen.

Analyse the impact of the rise in price of apples and grapes on the market of oranges.

14. A consumer consumes only two goods. Explain the conditions that need to be satisfied for the consumer to be in equilibrium under indifference curve analysis. (6)

Section B: Macroeconomics

15. Read the following dialogue between two people (1)

Sita : I want 1kg of potatoes

Rani: What will you give in exchange?

Sita : I can give you 2 litres of milk in return for the potatoes.

Rani: I don't need milk. I want a pair of shoe

Which of the following problem is being faced by Sita and Rani in their exchange process?

- a) Lack of double coincidence of wants
- b) Absence of common units of value
- c) Lack of store of value
- d) Lack of standard of deferred payment

16. What is repo rate? (1)

17. Which of the following is a characteristic of a good? (1)

- a) Intangible
- b) Can be stored
- c) Production and consumption must happen simultaneously
- d) Cannot be transferred

18. The government budget has a revenue deficit. This gets financed by: (1)

- A. Borrowing
- B. Disinvestment
- C. Tax revenue
- D. Indirect taxes

- a) A and D
- b) C and D
- c) A and B
- d) C and D

19. Which of the following statement is not true for fiscal deficit? (1)

A fiscal deficit:

- a) represents the borrowing of the government.
- b) is the difference between total expenditure and total receipts of the government
- c) is the difference between total expenditure and total receipts other than borrowing
- d) increases the future liability of the government

20. What is the role of a Central Bank in the following exchange rate? (3)

- a) Fixed exchange

- b) Floating exchange
- c) Managed floating

21. In an economy the autonomous investment is 100 and the consumption is $C=80+0.4Y$. Is the economy in equilibrium at an income level 400? Justify your answer. (3)

OR

In an economy the autonomous investment is 60 and the marginal propensity to consume is 0.8. If the equilibrium level of income is 400, then the autonomous consumption is 30. True or False? Justify your answer.

22. In an economy planned saving is greater than planned investment. Explain how the economy achieves equilibrium level of national income. (3)

23. Only one Product X is produced in the country. Its output during the year 2012 and 2013 was 100 units and 110 units respectively. The market price of the product during the year was Rs 50 and Rs 55 per unit respectively. Calculate the percentage change in real GDP and nominal GDP in year 2013 using 2012 as the base year. (4)

24. What is meant by "balance of payment" account? Distinguish between the "balance on current account" and "balance of trade" account. In which account would remittances from family members from abroad be accounted? (4)

25. State the various components of the Income Method that are used to calculate national income. (4)

OR

State any four precautions that need to be kept in mind when using the value added method for calculating national income.

26. In the government of India's budget for the year 2013-14, the Finance Minister (6) proposed to raise the excise duty on cigarettes. He also proposed to increase income tax on individual earning more than Rs. one crore per annum.

Identify and explain the types of taxes proposed by the Finance Minister. Was the objective only to earn revenue for the government? What possible welfare objectives could the Government be considering?

27. Draw a straight line consumption curve. From it derive the saving curve. Explain the process of derivation on the diagram, show: (6)

- a) The income level at which $APC=1$

- b) The income level at which APS is negative

For blind candidates:

Explain the process of working of the 'investment multiplier' with the help of a numerical example.

28. a) What is meant by Cash reserve ratio? How does it increase the money supply in the economy? (3+3)

- b) What is meant by Open market operation? How does it reduce the money supply in the economy?

29. Find (a) National Income and (b) Gross National Disposable Income. (6)

	Rs Crore
i. Net current transfer from abroad	5
ii. Private final consumption expenditure	200
iii. Subsidies	20
iv. Net domestic fixed capital formation	40
v. Net factor income to abroad	10
vi. Government final consumption expenditure	50
vii. Change in stock	(-)10
viii. Net imports	(-)20
ix. Consumption of fixed capital	30
x. Indirect tax	60
xi. Exports	100

OR

Find (a) Private Income and (b) National Income.

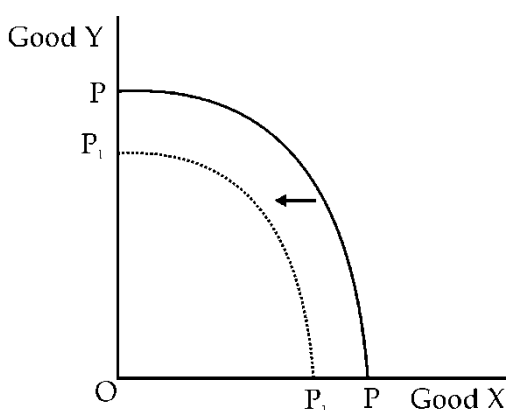
- | | |
|---|-----|
| i. Personal disposable income | 350 |
| ii. Income from property and entrepreneurship accruing to the government administrative departments | 50 |

iii.	Savings of non-departmental enterprises	25
iv.	Direct personal tax	10
v.	Net factor income from abroad	(-)5
vi.	Indirect taxes	15
vii.	Current transfers to the rest of the world	20
viii.	Savings of private corporate sector	25
ix.	Corporation tax	15
x.	Current transfers from government	30

MARKING SCHEME

Section A: Microeconomics

1. c) (1)
2. - Give subsidies to reduce price.
- Undertake health campaigns to promote the positive effects of milk consumption.
(Any 1) (1)
3. c) (1)
4. If the river Kosi causes widespread floods in Bihar, it will lead to destruction of resources in Bihar. This will shift the PPC leftward. (2)



Initial PPC is PP.

With floods, the PPC will shift to P_1P_1

(1)

5. The central problems of an economy are:
 - (i) What to produce and in what quantity? (1)
 - (ii) How to produce? (1)
 - (iii) For whom to produce? (1)
6. (a) False: Average product rises as long as marginal product is greater than average product. Here marginal product could be rising or falling. (1½)
(b) False: Total cost rises at a diminishing rate when marginal cost falls and total cost rises at an increasing rate when marginal cost increases. (1½)
7. 'Price ceiling' is the maximum price that sellers can legally charge for a product or a service. (1)

Since this price is below equilibrium price, there is excess demand in the market. With shortages, sellers tend to hoard the product. It could also lead to black marketing. (2)

OR

'Price floor' is the minimum price fixed by the government at which sellers can legally sell their product. (1)

Since this price is above equilibrium price, there is excess supply in the market. Since there is surplus, sellers can attempt to sell their product at a price below the floor price. (2)

8. Freedom of entry and exit of firms under perfect competition means that there are no costs or barriers a firm faces to enter or exit the market. The implication of this is that in the long run each firm earns only normal profit.

Suppose in the short run, existing firms are earning super normal profits, new firms enter the industry as they are attracted by profits. This raises the market supply and reduces the market price. As firms accept the lower market price, profits reduce. This process continues till profits reduce to normal levels in the long run.

The opposite occurs if firms are earning losses as firms leave the industry. This reduces market supply and raises market price till losses get wiped out and firms earn only normal profit in the long run. (3)

9. Yes, the same good can be inferior for one person and normal for another. Whether a good is normal or inferior is determined by the income level of the consumer. A good which is a normal good for a consumer with a lower income, may become an inferior good for a consumer with higher income. (2)

For example, coarse cloth may be a normal good for a low income consumer, but for a high income consumer it may be an inferior good as she can afford a better quality cloth.

Thus, when a consumer moves to a higher income level, she may consider coarse cloth as being below their income status, and has the ability to buy more expensive fine cloth, thus considering coarse cloth as being inferior. (2)

10. An indifference curve is convex to the origin due to diminishing marginal rate of substitution (MRS). Diminishing MRS means that the number of units of 'Good Y' that a consumer wants to substitute for one extra unit of 'Good X' goes on decreasing as the consumption of Good X increases. As consumption of Good X increases, the willingness to pay for it diminishes (due to the law of diminishing marginal utility). This payment is

in terms of the units of Good Y sacrificed. Thus, MRS diminishes along an indifference curve, which makes it convex to the origin. (4)

OR

If MU_x/P_x is greater than MU_y/P_y , then it means that the satisfaction a consumer derives from spending a rupee on Good x is greater than the satisfaction derived from spending a rupee on Good Y. (1)

The consumer will relocate her income – substitute Good X for Good Y. (1)

As the consumption of Good X increases its marginal utility will fall. As the consumption of Good Y decreases, its marginal utility will increase. This is due to the law of diminishing marginal utility. (1)

This process will continue till MU_x/P_x becomes equal to MU_y/P_y and the consumer is in equilibrium. (1)

11. Suppose the firm produces at an output level where $MC < MR$.

- This means that the firm's cost incurred on the last unit is less than the revenue earned on the unit.
- Firm earns a profit on the last unit.
- This incentivizes the firm to produce more output.

Suppose the firm produces at an output level where $MC > MR$ (2)

- This means that the firm's cost incurred on the last unit is more than the revenue earned on it.
- Firm makes a loss on the last unit.
- This incentivizes the firm to produce less output. (2)

Thus, a firm earns maximum profit where $MC = MR$. Should $MC = MR$ occur at more than one output level, then the firm maximizes profit if $MC > MR$ after the output where $MC = MR$. If not, then $MC < MR$ and it is in the firm's interest to produce more to maximize profit. (1)

Thus, profit for a firm is maximized at an output where: (1)

(a) $MC = MR$

(b) $MC > MR$ after the output where $MC = MR$.

12. **Change in quantity supplied** means when more is supplied at a higher price (expansion) or when less is supplied at a lower price (contraction). It leads to an upward or downward movement along the supply curve.

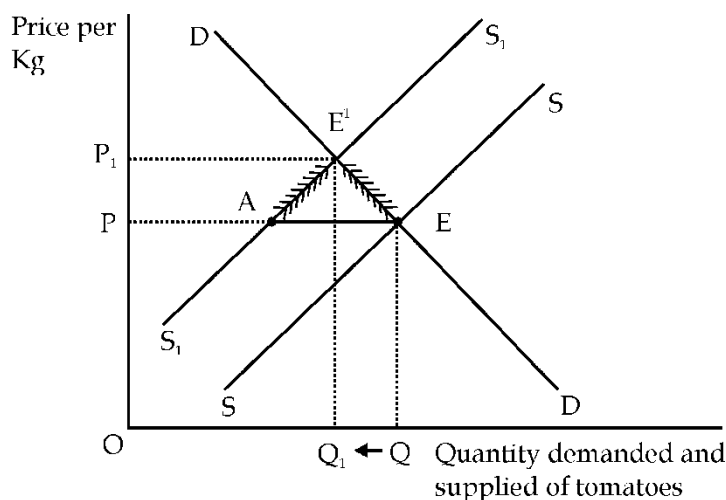
It is caused due to a change in the own price of the commodity, other factor affecting supply are held constant. (3)

Change in supply means more is supplied at the same price (increase) or less is supplied at the same price (decrease).

It leads to a rightward or leftward shift of the supply curve.

It is caused due to a change in other factors affecting supply and not a change in the own price of the commodity. (3)

13.



(1)

When the tomato crop was damaged in Himachal the supply of tomatoes decreases. This means that the supply curve shifts leftward to $S'S'$. (1)

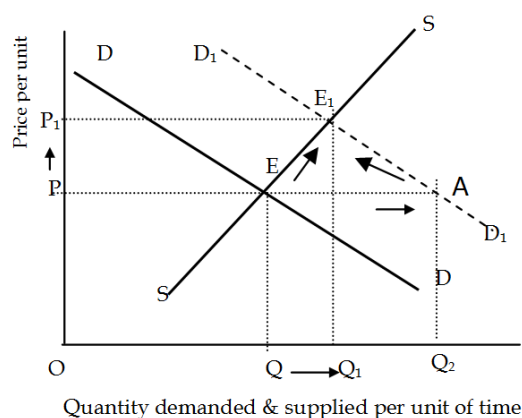
At the prevailing market price (OP), there was an excess demand of AE . In this situation, buyers would have competed to raise the market price. As market price would have risen, quantity demanded of tomatoes would have contracted and the quantity supplied would have expanded. This process would have continued till a new equilibrium price was reached at OP_1 , where market demand is equal to market supply. OP_1 is higher than the old price of tomatoes. (3)

This explains how prices in Delhi rose when the tomato crop got damaged in Himachal. (1)

OR

(1)

When the price of apples and grapes rises, consumers will substitute with these fruits with the relatively cheaper oranges. Thus, demand for oranges will increase and the demand curve shifts rightwards to $D'D'$. (1)



At the prevailing market price (OP), there was an excess demand of AE . In this situation, buyers would react by competing with each other and raise the market price. As market price rises, quantity demanded of oranges contracts and the quantity supplied expands. This process will continued till a new equilibrium price is reached at OP_1 , where market demand is equal to market supply. OP_1 is higher than the old price of oranges. (3)

Therefore, the equilibrium price of oranges increases and the equilibrium quantity also increases when the price of apples and grapes rises in Southern India. (1)

14. Let a consumer consume Good X and Good Y. A consumer attains equilibrium when:

- 1) $MRS_{XY} = \frac{P_X}{P_Y}$
- 2) MRS_{XY} must be decreasing due to the law of diminishing marginal utility. (1)

MRS_{XY} is the number of units of Good Y a consumer is willing to sacrifice for an extra unit of Good X.

$\frac{P_X}{P_Y}$ is the ratio of prices that prevail in the market and gives the actual units of Good Y that need to be sacrificed to obtain an extra unit of Good X in the market. (1)

Suppose $MRS_{XY} > \frac{P_X}{P_Y}$

- It means that the consumer is willing to sacrifice more of Good Y than she needs to give up actually in the market for an extra unit of Good X.
- The consumer gains and increases consumption of Good X.
- As consumption of Good X increase, its marginal utility declines.
- Thus, the willingness to pay for additional units of Good X (in terms of Good Y) falls.
- Process continues till $MRS_{XY} = \frac{P_X}{P_Y}$ (2)

Suppose $MRS_{XY} < \frac{P_X}{P_Y}$

- It means that the consumer is willing to sacrifice less of Good Y than is actually required in the market for as extra unit of Good X.
- The consumer loses and reduces the consumption of Good X.
- As consumption of Good X decreases, its marginal utility increases.
- Thus, MRS_{XY} increases.
- The process continues till $MRS_{XY} = \frac{P_X}{P_Y}$ (2)

Section B: Macroeconomics

- a) (1)
- Repo rate or repurchase rate is the rate at which commercial banks borrow money from the Central Bank for a short period by selling their financial securities to the Central Bank. (1)
- b) (1)
- c) (1)
- b) (1)
- The role of the Central Bank in maintaining the foreign exchange rates under different regimes is:

- a) Fixed exchange rate system: A Central Bank actively uses its foreign currency reserves to maintain the officially determined exchange rate. (1)
- b) Floating exchange rate system: A Central Bank does not maintain any reserves of foreign currency as the market automatically adjusts to determine the market driven exchange rate. (1)
- c) Managed Floating: A Central Bank enters the foreign exchange market to buy/sell foreign currency in order to control fluctuations and volatility in the market. (1)

21. At equilibrium $AD = Y$

$$AD = C + I = Y \quad (1)$$

$$80 + 0.4Y + 100 = Y$$

$$0.6Y = 180$$

$$Y = \frac{180}{0.6} = 300 \quad (1)$$

Since the given income of 400 is greater than equilibrium level of income, the economy is not at equilibrium. It is at a situation where aggregate demand is greater than the aggregate output produced in the economy. (1)

OR

$$\text{At equilibrium } AD = C + I = Y \quad (1)$$

$$I = 60$$

$$C = C_0 + bY = C_0 + 0.8Y$$

$$\text{If equilibrium level of income is 400, then } C = C_0 + 0.8 \times 400 = C_0 + 320$$

$$\text{Thus, } 60 + C_0 + 320 = 400$$

$$C_0 = 20 \quad (1)$$

The given value of autonomous consumption is incorrect. The correct value is 20. (1)

- 22. Suppose planned saving is higher than planned investment. It means that households are not consuming as much as the firms had anticipated. In other words, planned output is greater than planned demand.

As a result, producers see a rise in their inventory level, beyond the planned level. To bring back inventory to the planned level, producers cut down production. This reduces aggregate output. The process continues till aggregate demand equals the output produced in the economy i.e. planned investment becomes equal to planned saving.

(3)

23.

Year	Physical Output (Units)	Market Price Per Unit (Rs.)	Real GDP (Rs) Using base Year Prices	Nominal GDP (Rs.) Using Current Year Price
2012	100	50	5000	5000
2013	110	55	5500	6050

(1)

(1)

Percentage change in:

$$\text{Real GDP} = \frac{\Delta \text{ in real GDP}}{\text{Base year real GDP}} \times 100 = \frac{500}{5000} \times 100 = 10\% \quad (1)$$

$$\text{Normal GDP} = \frac{\Delta \text{ in nominal GDP}}{\text{Base year nominal GDP}} \times 100 = \frac{1050}{5000} \times 100 = 21\% \quad (1)$$

24. Balance of payment account records the inflows and outflows of foreign exchange of a country during a period of time. (1)

'Balance of Trade' is the difference between exports of goods and imports of goods i.e. between visible inflows and visible outflows of foreign exchange. 'Balance on current account' is the difference between the sum of both visible and invisible (Service, income and transfers) inflows and outflows of foreign currency. (2)

Remittances from family members from abroad is accounted for under unilateral transfers of the current account. (1)

25. The various components that are used under the income method to calculate national income are:

- Compensation of employees which includes - wages and salaries in cash and kind and employers' contribution to social security benefits. (1)
- Operating surplus - which includes rent and royalties, interest and profit earned by a firm. (1)
- Mixed income of self employed which includes any income that has 2 or more factor income, which cannot be accounted for separately. (1)
- Net factor income from abroad, which in the difference between factor income from abroad and factor income to abroad. (1)

OR

The precautions that need to be kept in mind when using the value added method of calculating national income are:

- i) Avoid double counting of goods and services as these tend to inflate national income estimates.
- ii) Do not include the value of second hand goods being sold as their value was accounted for at the time of first production.
- iii) Include imputed value of own account production in total output as output has been produced.
- iv) Include the imputed value of owner occupied dwellings as houses provide housing services. (1×4=4)

26. Excise duty - Indirect tax

Indirect tax is a tax where the payer and the bearer of the tax are different people.(1)

Income tax - Direct tax

Direct tax is a tax where the payer and bearer of the tax is the same person. (1)

Besides the objective of raising more revenue, the proposals also serve some welfare objectives. Firstly, raising excise duty on cigarettes will make them more expensive. The price rise is expected to discourage cigarette smoking, which will positively impact the health of people and raise their welfare.

Secondly, raising income tax on income above Rs. one crore will reduce the gap between the rich and poor people. In other words, income inequalities will reduce.

Thirdly, the extra revenue raised from these proposals could be spent on health education and other welfare enhancing schemes to improve the welfare of the poor.

(4)

27.

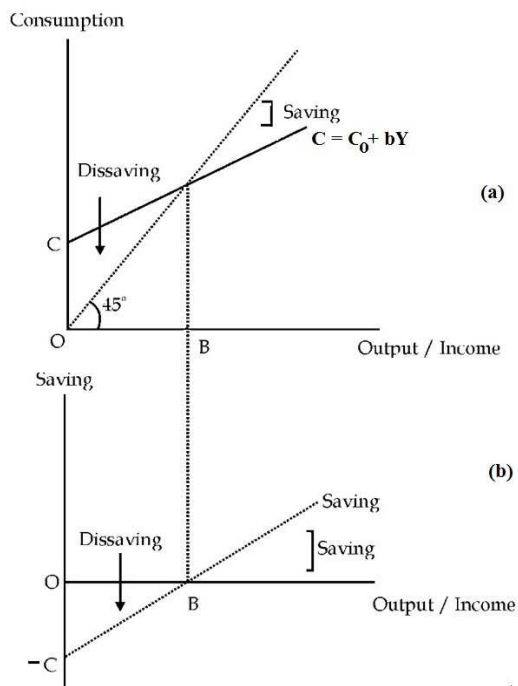


Diagram (a) gives a straight line consumption curve.

$$\text{Consumption (c) + saving (s) = income (Y)} \quad (1)$$

At zero level of income, there is an autonomous consumption of OC. The corresponding saving at this income level is (-)OC. The saving curve starts at (-)C. (1)

At the income level OB, where the 45° reference line intersects the consumption curve, $C=Y$. At this income level, saving is equal to zero. Thus, we get point B on the x-axis of the saving curve. (1)

By connecting (-)C and B, we get the saving curve.

- At income level OB, $APC = 1$ as $APC = \frac{C}{Y}$ and at the income level $C=Y$. (1)
- A level of income at which APS is negative is any level of income less than OB. $APS = \frac{S}{Y}$ and here saving is negative. (1)

28. Cash reserve ratio is the ratio of bank deposits that commercial banks must keep as reserves with the Central Bank. (1)

When CRR falls, commercial banks keep lower reserves with the Central Bank. This releases funds that were earlier held with the Central Bank for commercial banks to lend. As lending increases, the money creation in the economy expands and money supply in the economy increases. (2)

Open market operations refers to the sale and purchase of government securities by the Central Bank in the open market. (1)

When there is a need to reduce the money supply in the economy, the Central Bank starts selling government securities. Those who buy make payments by cheques to to the central bank. The money flows from commercial banks to the Central Bank. This reduces the deposits held by commercial banks. This reduces money supply as well as the money creation power of the commercial banks. (2)

29. (a) National income using expenditure method:

$$\begin{aligned} & \text{(ii) } + \text{(vi)} + \text{(iv)} + \text{(vii)} - \text{(viii)} - \text{(x)} + \text{(iii)} - \text{(v)} & (1\frac{1}{2}) \\ & 200 + 50 + 40 - 10 + 20 - 60 + 20 - 10 & (1) \\ & = \text{Rs } 250 \text{ crores} & (\frac{1}{2}) \end{aligned}$$

(b) Gross National disposable income

$$\begin{aligned} & \text{National income} + \text{(ix)} + \text{(x)} - \text{(iii)} + \text{(i)} & (1\frac{1}{2}) \\ & = 250 + 30 + 60 - 20 + 5 & (1) \\ & = \text{Rs } 315 \text{ crores} & (\frac{1}{2}) \end{aligned}$$

OR

(a) Private Income

$$\begin{aligned} & \text{(i)} + \text{(iv)} + \text{(viii)} + \text{(ix)} & (1\frac{1}{2}) \\ & = 350 + 10 + 15 + 25 & (1) \\ & = \text{Rs } 400 \text{ crores} & (\frac{1}{2}) \end{aligned}$$

(b) National Income

$$\begin{aligned} & \text{Private income} + \text{(vii)} - \text{(x)} + \text{(ii)} + \text{(iii)} & (1\frac{1}{2}) \\ & = 400 + 20 - 30 + 25 + 50 & (1) \\ & = \text{Rs } 465 \text{ crores} & (\frac{1}{2}) \end{aligned}$$

For Blind Candidates

3. b) (1)

4. Assumptions of PPC:

- Resource available are fixed.

- Technology remains unchanged
- Resource are fully employed
- No resource is equally efficient in production of all goods.

(Any 2)

(1)

Rest of the answer same as answer 4 but without the diagram.

13. No diagram required. Explanation is the same.
(Adjust the 1 mark for diagram in the explanation)

OR

No diagram required. (Adjust 1 mark for diagram in the explanation)

27. Meaning of multiplier (2)
Working of multiplier (4)