CBSE
Class XII Economics

Time: 3 hrs   **Max. Marks: 80**

General Instructions:
  i. **All** questions in both sections are **compulsory**.
  ii. Marks for questions are indicated against each question.
  iii. Question Nos. **1–4** and **13–16** are very short answer questions carrying **1** mark each. They are required to be answered in one sentence.
  iv. Question Nos. **5–6** and **17–18** are short answer questions carrying **3** marks each. Answers to them should normally not exceed **60** words each.
  v. Question Nos. **7–9** and **19–21** are also short answer questions carrying **4** marks each. Answers to them should normally not exceed **70** words each.
  vi. Question Nos. **10–12** and **22–24** are long answer questions carrying **6** marks each. Answers to them should normally not exceed **100** words each.
  vii. Answers should be brief and to the point, and the above word limits should be adhered to as far as possible.

SECTION A

1. How does AFC change as output increases?   [1]

2. At the point where MR is zero, TR is   [1]

3. A firm is a price taker in   [1]
   a. Perfect competition
   b. Monopolistic competition
   c. Oligopoly
   d. Monopoly

4. Why does Average Product continue to rise even when Marginal product starts falling?
            [1]

5. A consumer is in equilibrium in consuming two Goods X and Y. With the help of utility analysis, show that if the price of Good X falls, then its demand would rise.   [3]

6. The market for a good is in equilibrium. What would be the impact on the market price if there is a simultaneous increase in both demand and supply of the good? (the increase in demand being more than increase in supply)   [3]

7. Explain with the help of an example the effect of change in the price of substitute good to change in the demand of the commodity. [4]

8. Complete the following table: [4]

Output	Average Cost	Marginal Cost
1	5	-
2	3	-
3	-	9
4	7	-
5	-	17

9. Explain the central problem of 'what to produce'. How is this problem solved under market economy? [4]

10. Explain consumer equilibrium using indifference curve analysis. [6]

11. With the help of a numerical example, illustrate producer's equilibrium. [6]

12. Explain the following features under perfect competition market: [6]
   a. Large number of buyers and sellers
   b. Free entry and exit of firms in the market

SECTION B

13. How can the measure of open market operations correct the situation of excess demand? [1]

14. Consumption function represents the functional relationship between: (Choose the correct alternative) [1]
   a. National income and saving
   b. Consumption and saving
   c. Consumption and national income
   d. Investment and consumption

15. What is the barter system of exchange? [1]

16. When planned investment falls short of planned saving, then the: (Choose the correct alternative) [1]
   a. Inventory falls below the desired level
   b. Inventory rises above the desired level
   c. Inventory falls or rises
   d. Inventory remain unaffected

17. Explain the difference between appreciation and depreciation. [3]

18. Explain any three factors determining the demand for foreign currency. [3]

19. Categorise as intermediate and final product: [3]
  a. Paper purchased by a publisher
  b. Purchase of a computer by an office

20. What is meant by money multiplier? [4]
   Calculate the total deposits which would be created if the initial deposits are Rs 500 crore and the legal reserve ratio is 10%.

21. Suppose the national income is Rs 100 crore and the consumption expenditure is Rs 70 crore. What is the value of average propensity to save? What will be the value of marginal propensity to consume if the income rises to Rs 120 crore and consumption expenditure rises to Rs 100 crore? [4]

22. Calculate national income from the following information: [6]

Particulars	In Rs crore
i. Wages and salaries	700
ii. Compensation of employees	500
iii. Rent	100
iv. Net exports	20
v. Profits	500
vi. Interests	200
vii. Depreciation	50
viii. NFIA	10

23. From the consumption curve, derive the save curve. State the steps in the procedure.
[6]

24. a. State the difference between revenue expenditure and capital expenditure. [6]
   b. Classify the following as revenue expenditure or capital expenditure:
     i. Providing subsidies
     ii. Providing grants to state governments

SECTION A

Answer 1
With an increase in output, AFC falls.

$$AFC = \frac{TFC}{Q}.$$

Answer 2
The correct answer is (a). At the point where MR is zero, TR is maximum. After this point, TR starts falling and MR becomes negative.

Answer 3
The correct answer is (a). A firm is a price taker under perfect competition market. As there are a large number of firms in perfect competition, no individual firm can influence the price. It takes the price as set by the industry.

Answer 4
Average Product will continue to rise when Marginal Product starts falling till Marginal Product is greater than Average Product.

Answer 5
According to utility analysis, a consumer is in equilibrium when

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

When price of Good X falls, the ratio $\frac{MU_x}{P_x}$ increases so that $\frac{MU_x}{P_x} > \frac{MU_y}{P_y}$. To restore the equilibrium, the consumer would increase the consumption of Good X. With an increase in consumption, the marginal utility of Good X will increase. The consumer will continue to increase the consumption of Good X till $\frac{MU_x}{P_x}$ again becomes equal to $\frac{MU_y}{P_y}$.

Answer 6
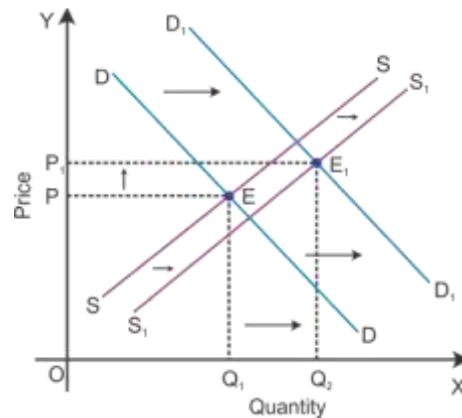
In the diagram, DD is the initial demand curve and SS is the initial supply curve. Point E is the initial equilibrium point where DD intersects SS. Correspondingly, OQ is the equilibrium quantity and OP is the equilibrium price. With the increase in demand, the demand curve shifts parallelly outwards to D'D'. On the other hand, with the increase in supply, the supply curve shifts parallelly outwards to S'S'. However, the increase in demand is more than the increase in supply. The new equilibrium is established at Point E' where D'D' intersects S'S'. Here, both equilibrium price and equilibrium quantity have risen to OP_1 and OQ_1, respectively.

Answer 7

Substitute goods refer to goods which can be consumed instead of each other. For example, tea and coffee are substitute goods. In case of substitute goods, the demand for a good shares a positive relation with the price of the substitute good.

i.   ***Increase in price of substitute good***: With an increase in the price of the substitute good, the demand of the concerned good increases. For example, with an increase in the price of coffee, the demand for tea increases.
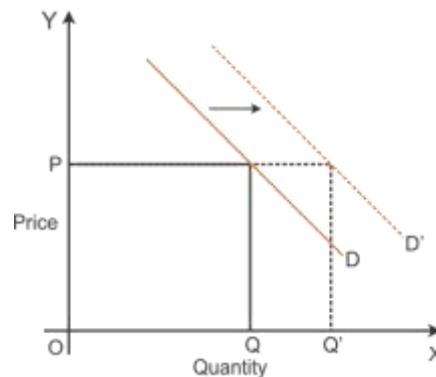
According to the diagram, *DD* is the initial demand curve for tea. At price OP, OQ quantity of tea is demanded. With an increase in the price of coffee, the demand for tea increases. Accordingly, the demand curve for tea shifts parallelly rightwards to *D'D'*. Here, even at the existing price OP, the quantity demand of tea rises to OQ'.

ii. ***Fall in price of substitute good***: With a fall in the price of the substitute good, the demand of the concerned good falls. For example, with a fall in the price of coffee, the demand for tea increases.
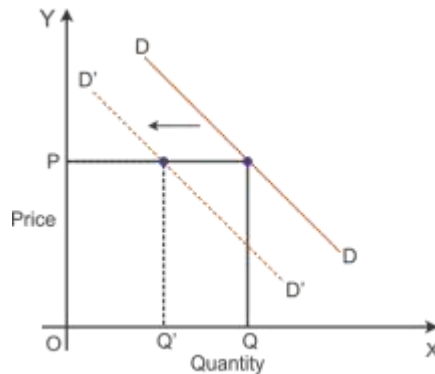
According to the diagram, *DD* is the initial demand curve for tea. At price OP, OQ quantity of tea is demanded. With a fall in the price of coffee, the demand for tea falls. Accordingly, the demand curve for tea shifts parallelly leftwards to $D'D'$. Here, even at the existing price OP, the quantity demand of tea falls to OQ'.

Answer 8

Output	*Average Cost*	*Marginal Cost*	*Total Cost*
1	5	-	5
2	3	1	6
3	5	9	15
4	7	13	28
5	9	17	45

Answer 9

This problem relates to what goods and services are to be produced and in what quantities. In every economy, the resources are limited. Accordingly, a choice must be made between various goods and services. Specifically, a choice must be made between consumer goods and capital goods. As both goods are necessary, a choice must be made with respect to the quantity of the goods which are to be produced. Producing more of one good would imply producing less of the other. Producing more of consumer goods improves the quality of life of the present generation; on the other hand, producing more of capital goods would improve the production capacity for the future. A suitable choice must be made keeping in mind the various factors.

In a market economy, the answer to the question of what to produce is determined by the profit motive. Goods and services which have a greater demand and command a greater price in the market are produced.

Answer 10
According to the indifference curve analysis, the consumer's equilibrium is struck at the point where the following two conditions are met:

i. MRS is equal to price ratio, i.e. $MRS = \dfrac{P_x}{P_y}$

ii. Indifference curve is convex to the origin at the point of equilibrium

Condition 1
MRS is equal to price ratio: MRS is the slope of the indifference curve and the price ratio is the slope of the budget line. So, at the point of equilibrium, MRS equals price ratio which implies that the indifference curve is tangent to the budget line. At this point, the rate at which the consumer is willing to substitute one good for the other is equal to the actual rate of substitution as defined by the market price. At all other points on the budget line other than the tangency point, the consumer receives a lower satisfaction.
Condition 2
At the point of tangency of the budget line and the indifference curve, the indifference curve must be convex to the origin, i.e. the MRS must fall. In other words, for every additional unit increase in consumption of one good, the consumer must be willing to sacrifice less and less units of the other good. That is the law of diminishing marginal utility must be followed.

The two conditions of consumer equilibrium can be understood with the help of the following diagram:
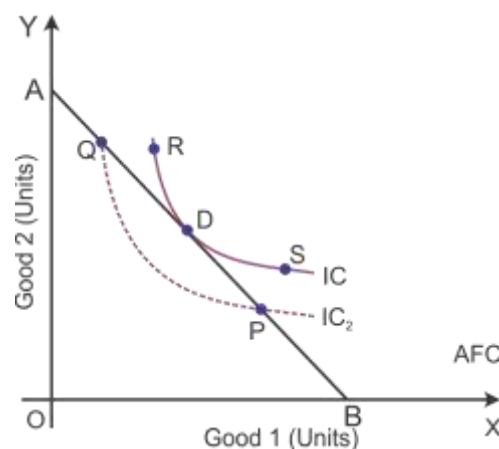
In the diagram, AB is the budget line. It represents the various combinations of two goods which are available to the consumer given his income and the prices of the two goods. The slope of the budget line is the price ratio which shows how much units of one good must be sacrificed by the consumer to increase the consumption of the other good by one unit.
IC is the indifference curve. It shows the various combinations of two goods, the consumption of which provides consumers the same level of satisfaction. The slope of IC is the MRS which shows how many units of one good the consumer is willing to sacrifice to increase consumption of the other good by one unit.
Point E is the point of equilibrium where IC is tangent to the budge line AB.

At all other points on the budget line other than the tangency point, the consumer receives a lower satisfaction.

For instance at Point P and Point F, the consumer is on a lower IC, thereby at a lower satisfaction level.

Similarly, at all the other points on the IC, the consumer is not at equilibrium. For instance at Point R, $MRS > \dfrac{P_x}{P_y}$. So, the consumer can increase satisfaction by substituting more of Good X for Good Y. That is, he moves down along the IC till MRS equals price ratio again at Point E.

Similarly, at Point S, $MRS < \dfrac{P_x}{P_y}$. So, the consumer can increase satisfaction by substituting more of Good Y for Good X. That is, he moves up along the IC till MRS equals price ratio again at Point E.

Thus, Point E is the point of equilibrium. A rational consumer would not wish to move away from this point.

Answer 11

According to the MR–MC approach, a consumer strikes equilibrium at the point where the following two conditions are met

i.   MR is equal to MC

ii. MC is rising

This can be understood with the help of the following example.

Output (units)	Marginal Revenue (Rs)	Marginal Cost (Rs)
1	5	10
2	5	5
3	5	3
4	5	5
5	5	9

The two conditions of equilibrium are met when 4 units of output are produced. At this point, MR and MC are equal to 5, and the producer maximises profits.

MR is equal to MC at 2 units of output as well. However, at this point, MC is falling. So, this is not the equilibrium point.

Answer 12

a. *Large number of buyers and sellers*: Under a perfect competition market, there are a large number of buyers and sellers such that each individual buyer or each individual seller constitutes only a small proportion of the total market. Consequently, no individual firm or individual buyer can influence the price in the market by altering the supply or demand of the commodity. This implies that in a perfect competition market, the price remains constant as determined by the industry. An individual firm is only a price taker.

b. *Free entry and exit*: Under perfect competition, there is free entry and exit of firms. While new firms can enter the market, existing firms can leave the market.

SECTION B

Answer 13

Open market operations refer to selling and purchasing of securities by the Central Bank in the open market. In a situation of excess demand, the Central Bank sells securities. This reduces the reserves of commercial banks, and thereby, their ability to create credit.

Answer 14

The correct option is (c). The term consumption function refers to a functional relationship between the consumption and national income.

Answer 15

The barter system is a system of exchange wherein goods and services are exchanged for each other.

Answer 16

The correct option is (b). When planned investment falls short of planned saving, it means that households are not consuming as expected by the firms. Hence, the inventory rises above the desired level.

Answer 17

Appreciation	*Depreciation*
There is a rise in the value of domestic currency against foreign currency.	There is a fall in the value of domestic currency against foreign currency.
If the exchange rate falls from $1 = Rs 45 to $1 = Rs 40, the Indian rupee is said to be appreciated.	If the exchange rate rises from $1 = Rs 45 to $1 = Rs 60, the Indian rupee is said to be depreciated.
It results in a rise in the demand for imports. Appreciation implies that more of foreign goods can be bought with the same amount of money.	It results in a rise in the demand for exports. Depreciation implies that domestic goods become cheaper in terms of foreign currency. Accordingly, the demand for

	exports increases.

Answer 18

Reasons for the demand of foreign currency:

i.   ***Imports***: Imports refers to purchase of goods and services from abroad. Foreign currency is required to make payments for such purchases.

ii.   ***Tourism***: Foreign currency is required for meeting expenses in tourism in foreign countries.

iii.   ***Unilateral transfers***: People from domestic countries often send gifts or other such unilateral transfers abroad; this requires foreign currency.

Answer 19

a.   Paper purchased by a publisher is an intermediate product as it will be used for further production.

b.   Purchase of a computer by an office is a final product as it is an investment.

Answer 20

Money multiplier refers to the number of times the value of money increases from the reserves held by commercial banks. Algebraically, it is the reciprocal of the legal reserve ratio

Money multiplier = 1/LRR

According to the given information:

Money multiplier = 1/LRR = 1/0.10 = 10

Total deposits = Money multiplier * Initial deposits

Total deposits = 10 * 500 = Rs 5000 crore

Answer 21

$$APS = \frac{Saving}{Income}$$

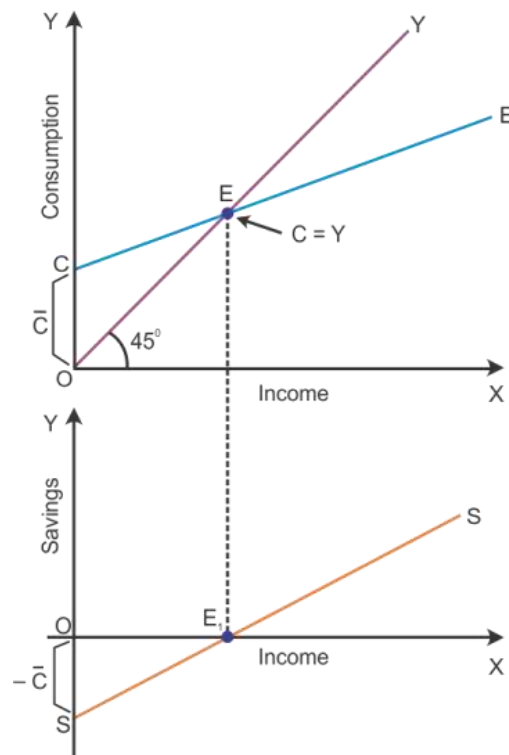$$APS = \frac{100 - 70}{100} = 0.30$$

$$MPC = \frac{\Delta c}{\Delta Y}$$

$$MPC = \frac{120 - 100}{100 - 70} = 0.66$$

Answer 22

National income   = Compensation of employees + Rent + Interests + Profit + NFIA

= 500 + 100 + 200 + 500 + 10

= Rs 1,310 crore

Answer 23

The derivation of saving curve from the consumption curve can be explained with the help of the following diagram:

In the upper portion of the diagram, the 45 degree line represents income, while CC represents the consumption curve.

The autonomous consumption (consumption at zero level of income) is represented by $\overline{C}$. Corresponding to this, the savings is negative equal to OS. Accordingly, the saving curve starts from the negative axis.

The consumption curve and the income curve intersect at Point E. Point E is the point of equilibrium where consumption is equal to income. Accordingly, the savings is zero. At this point, the saving curve intersects the x-axis. In the diagram, it is represented by Point E_1. Joining Point S with E_1 and extending it, we get the saving curve SS.

Answer 24

a.

Revenue Expenditure	*Capital Expenditure*
Revenue expenditure refers to expenditures of the government; there is neither any creation of liability nor any reduction in assets of the government.	Capital expenditure refers to expenditures of the government; there is either a creation of liability or a reduction in assets of the government.
They are incurred primarily for routine functioning of the government.	They are incurred primarily for acquiring assets or for granting loans by the government.
They are recurring.	They are non-recurring.
Example: Expenditure on salaries and	Example: Expenditure on acquiring assets

pension of government staff	by the government

b. i. Provision of subsidies by the government is revenue expenditure as it neither leads to creation of assets for the government nor causes a reduction in liabilities.
ii. Providing grants to the state governments is revenue expenditure as it neither leads to creation of assets for the government nor causes a reduction in liabilities.