B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL
MID-TERM EXAMINATION (2025-26)
ECONOMICS - XI
MARKING SCHEME

1. (a) Both Assertion(A) and Reason (R) are True and Reason(R) is the correct explanation of Assertion(A) **1)**

2. (d) A movement from a point inside the PPC to a point towards PPC 1)

3. (a) Resources are not fully employed 1)

4. (b) Opinions 1)

5. (c) Marginal Opportunity cost 1)

6. (b) Positive 1)

7. (d) Less than unitary elastic 1)

8. (d) All of these 1)

9. (A) If Both assertion and reason are true, and reason is the correct explanation of assertion. 1)

10. b) want satisfying capacity of a commodity

11. (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A). 1)

12. (c) buy more of X and less of Y 1)

13. (D) 1)

14. (c) Rs. 56 1)

15. (b) 1)

16. (a) If Both assertion and reason are true, and reason is the correct explanation of assertion. 1)

17. (b) rises 1)

18. (b) AD 1)

19. a) Increasing returns to a factor 1)

20. (b) TVC 1)

21. (i) 0 quantity of tanks 1 + 1 + 1)
(ii) PPC will shift outward and combination G is now attainable
(iii) Combination F

OR

1. Microeconomics is the branch of Economics that is related to the study of individual, household and firm's behaviour in decision making and allocation of the resources. It comprises markets of goods and services and deals with economic issues. 3)
Eg. Price theory

Macroeconomics is the branch of Economics that deals with the study of the behaviour and performance of the economy in total. The most important factors studied in macroeconomics involve gross domestic product (GDP), unemployment, inflation and growth rate etc.

2. Microeconomics studies the particular market segment of the economy.

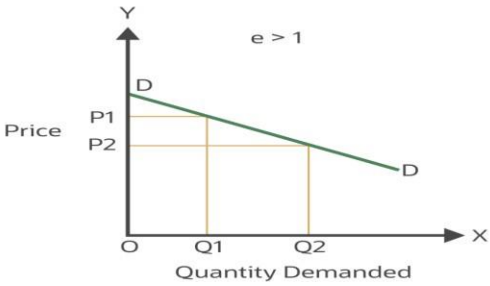
Macroeconomics studies the whole economy, that covers several market segments

3. Microeconomics deals with various issues like demand, supply, factor pricing, product pricing, economic welfare, production, consumption, and more.

Macroeconomics deals with various issues like national income, distribution, employment, general price level, money, and more.

22. (**i) TRUE**. It is a case of perfectly inelastic demand 3)
(ii) FALSE. A rise in price of tea will increase the demand for coffee and the demand curve for coffee will shift towards the right.

23. **3)**



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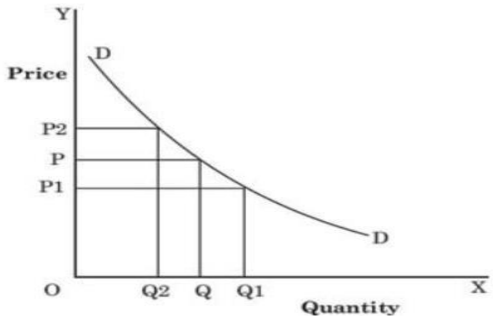

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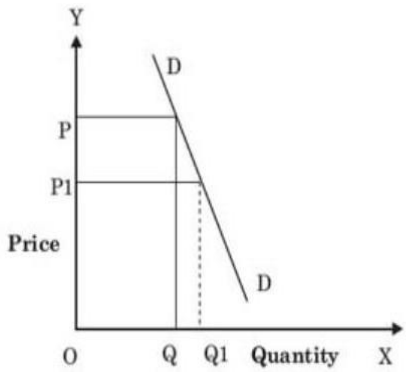

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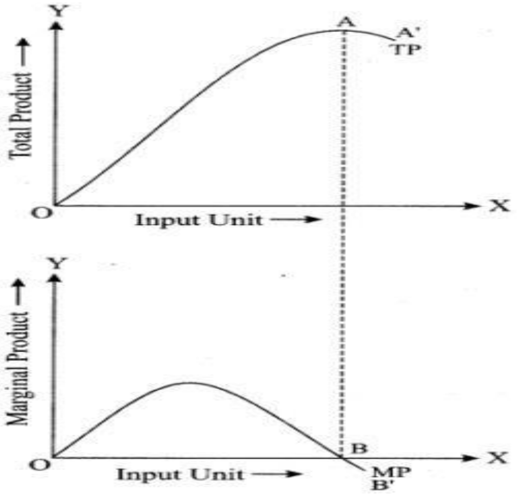
OR

An extension of demand can be seen as a movement along the demand curve. 3)
This movement would be caused by a change in the price of the product in question.

An increase in demand can be seen as a rightward shift of the demand curve. This shift can be caused by a number of factors.
An increase in demand happens when more is purchased at the same price and the same quantity is purchased at a higher price.

24. **3)**



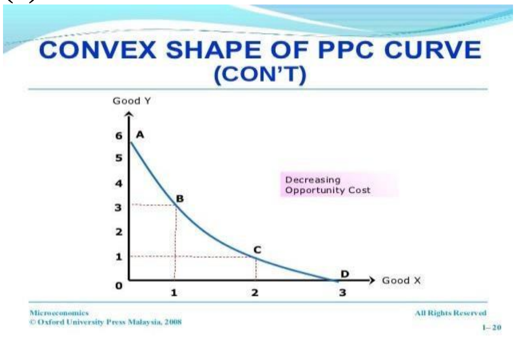
. (a) When TP of a variable factor reaches the maximum, the MP of the variable factor becomes zero. It is shown in the diagram below. When TP of a variable factor becomes maximum at point A, the MP of the variable factor touches the X-axis at point B.

(b) (b) When TP of a variable factor falls, the MP of the variable factors becomes negative and the negative returns to factor set in. The situation is shown in the diagram. The TP falls between point A and A', and MP becomes negative between point B and B'

25. (a) **1 x 4**

Possibility	A	B	C	D	E	F
Commodity X	20	14	9	5	2	0
Commodity Y	0	1	2	3	4	5
MRT	-	6:1	5:1	4:1	3:1	2:1

(b)



(c) PPF is convex due to decreasing MRT.

(d) I State of technology remains fixed

ii All resources are fully and efficiently utilised

iii Resources are not equally efficient in the production of all products.

26. True and False 4)

(a) False - Reason: Explanation: The cotton textile industry can be considered a microeconomic study because it focuses on the individual decisions and behaviours of firms and households within the industry.

(b) False – Reason: Central problems are found in all economies (both developed and developing economies) as every economy faces problem of scarcity of resources.

(c)True: Economy can never operate outside PPC with the given resources and technology as all points outside PPC are unattainable.

(d) True – Reason: Economic problem arises due to scarcity of resources. However, if there is no scarcity, then there would be no economic problem. This is because scarcity is the root cause of economic problem.

27. (a) **2)**

LAW OF DEMAND :The prices of the goods or services and their quantity demanded are inversely related when the other factors remain constant.

This 'other things remaining the same' is called the assumptions of the law of demand.

1. No change in price of related commodities.
2. No change in income of the consumer.
3. No change in taste and preferences, customs, habit and fashion of the consumer.

(b) **Giffen Goods** **2)**

Giffen Goods are inferior goods for which demand increases as the price rises, contradicting the law of demand. Named after Sir Robert Giffen, these goods are often necessities for low-income households, where no close substitutes are available.

Example:
Consider staple foods like bread or rice. When these goods' prices rise, low-income consumers might cut back on more expensive foods and buy more bread or rice to sustain their diets.

28. MRS Definition: **4)**

The **Marginal Rate of Substitution of X for Y (MRSxy)** is the amount of good Y a consumer is willing to give up to obtain **one more unit of X** while keeping the same level of satisfaction (staying on the same indifference curve).

Diminishing MRS:
As a consumer substitutes **X for Y** (consuming more of X and less of Y), the **willingness to sacrifice Y declines**. This is because as you get **more of X**, its **marginal utility falls**, and as you get **less of Y**, its **marginal utility rises**.

Schedule (Hypothetical)

Combination	Good X (units)	Good Y (units)	MRSxy (Y given up per unit of X)
A	1	12	–
B	2	8	4
C	3	5	3
D	4	3	2
E	5	2	1

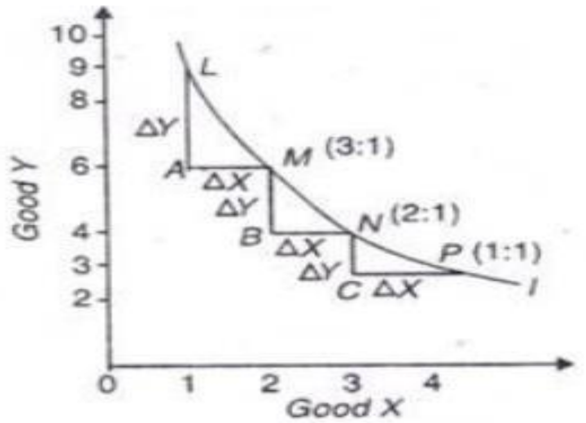


Fig. 3

OR

Price Ed = $\frac{P}{Q}$ x $\frac{\Delta Q}{\Delta P}$ -1 = $\frac{10}{30}$ x $\frac{\Delta Q}{-1}$ Δ 4)

= $\Delta Q = Q_1 - Q$

= $\Delta Q = Q_1 - 30$

= $3 = Q_1 - 30$

Q_1 = 33 UNITS

29. Complete the following table: (4)

OUTPUT	**AVC**	**TC**	**MC**
1	**20**	60	20
2	18	**76**	**16**
3	**18**	**94**	18
4	20	120	**26**
5	22	**150**	**30**

30. Explicit Costs 4)

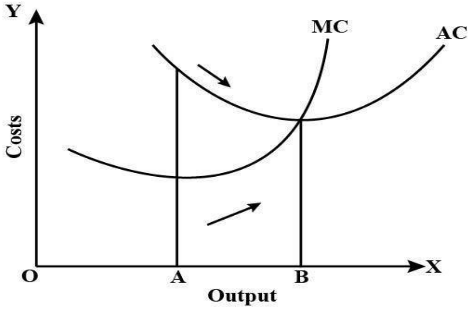
- Definition:
  These are the actual, out-of-pocket payments a firm makes to outsiders for acquiring resources or services.
- They involve direct monetary transactions.
- These are recorded in accounting books.
- Examples:
  - Wages paid to workers
  - Rent paid for factory building
  - Payment for raw materials
  - Electricity bills

2. Implicit Costs

- Definition:
  These are the opportunity costs of using the owner's own resources in production, for which no direct payment is made.
- They are not recorded in accounting books but are important in economic analysis.
- Examples:
  - The salary an entrepreneur could have earned by working elsewhere instead of running their own business.
  - Interest that could have been earned on money invested in the business if it had been kept in a bank.
  - Rent that could have been earned if the owner had rented out their own building instead of using it.

OR

4)



The relationship between MC and AC is as follows :
(i) When MC < AC, then AC falls.
(ii) When MC = AC, then AC is constant (or minimum).
(iii) When MC > AC, then AC rises.
(iv) MC curve always intersects AC curve at its minimum point.

31.
(A)
i. Form of market - Monopolistic competition 1)

ii. A firm under perfect competition is a price taker. It cannot influence/change the market price, implying a constant AR for a firm corresponding to all levels of output. As AR is equal to MR, it will be horizontal as well. 3)

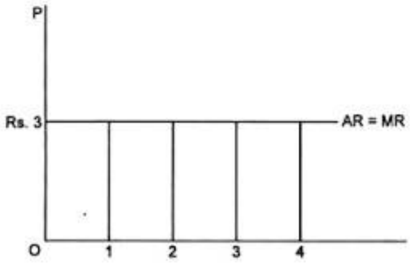
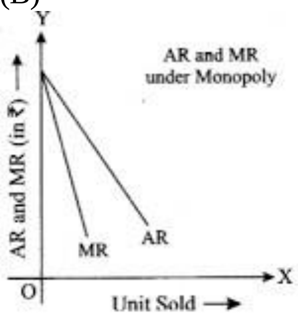


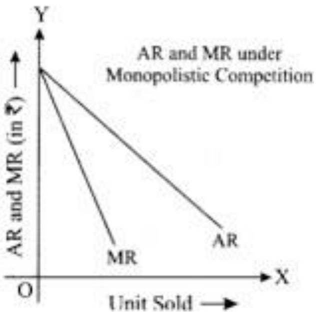
Fig. 7 : Horizontal AR curve & MR curve

Table 5

Units	TR	AR	MR
1	5	5	5
2	10	5	5
3	15	5	5
4	20	5	5
5	25	5	5

(B) 2)



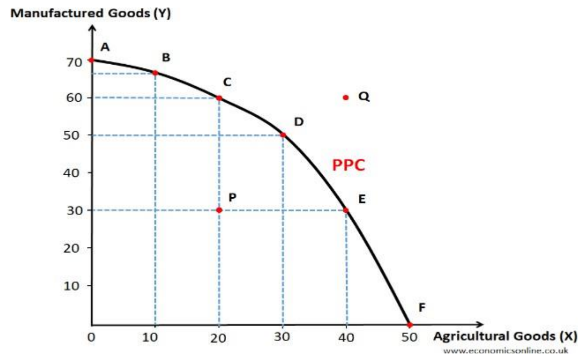


32. (A) Positive economics describes and explains various economic phenomena in verifiable terms. 3)
Normative economics focuses on the value of economic fairness, or what the economy "should be" or "ought to be."
While positive economics is based on facts, normative economics is based on value judgments.

(B) The problem **"How to Produce"** arises because there are **limited resources** and multiple ways to produce goods. 3)
It is about **choosing the method of production**:

- **Labour-intensive technique:** More workers, less machinery (common in countries with abundant labour, like India).
- **Capital-intensive technique:** More machines, less labour (common in developed nations).

The goal is to **use resources efficiently** to produce maximum output **at the lowest cost**.



33. (A) Arrange the following coefficients of elasticity of demand in ascending order: 1)
-0.53, -0.80, -0.87, -3.1

(B) 3)

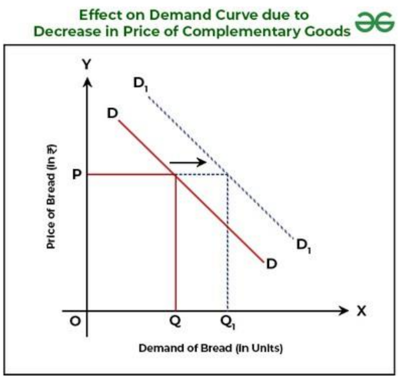
Initial Demand (Q)	=	80 units	Rise in Price (ΔP)	=	₹ 10
Fall in Demand (ΔQ)	=	4 units	Original Price (P)	=	?
New Demand (Q_1)	=	76 units	Elasticity of Demand (E_d)	=	1.5

Price Elasticity of demand (E_d) $= \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$

$1.5 = \frac{4}{10} \times \frac{P}{80} \Rightarrow P = ₹\ 300$

Price Before Change in Demand (Original Price) = ₹ 300

(C) A decrease in the price of complementary goods leads to a increase in the demand for given commodity and vice versa. 2)
For example if price of a complementary good (say petrol) decreases, then demand for given commodity (say car) will rise.



OR

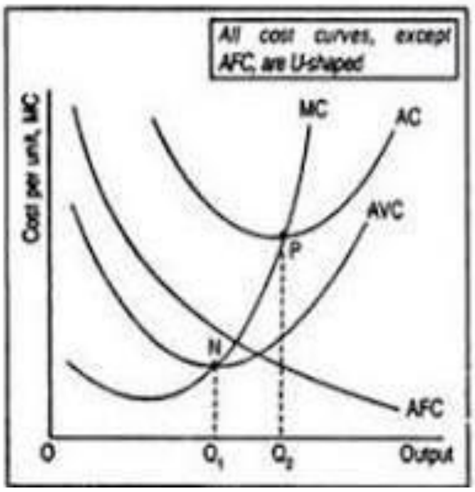
(A) It is true as it is the income of a consumer which determines whether the good is inferior or normal. 2)
A good which is a normal good for the consumer having lower income, may become an inferior good for the consumer having higher income.

(B) Meaning of Articles of Distinction **2)**

- These are **luxury goods** purchased not just for their utility but to display **wealth, prestige, and social status**.
- For such goods, a **higher price** itself makes them more desirable, as they symbolize **exclusivity and distinction**.
- When the price rises, **demand may increase instead of falling** because the high price enhances their prestige value.

(C) The income effect, in microeconomics, is the resultant change in demand for a good or service caused by an increase or decrease in a consumer's purchasing power or real income. 2)
As one's income grows, the income effect predicts that people will begin to demand more (and vice-versa).

34. (A) 4)



Why AVC and AC are U- shaped?
In short run, Average Cost Curves are of U - shape. It means, in the beginning it falls and after reaching the minimum point it starts rising upward. It gets U - shape due to the following reason:

<u>On the Basis of the Law of Variable Proportions</u> : In the beginning with increase in output, average cost falls because of the operation of the law of increasing returns. After reaching the minimum point, when we increase the output, average cost starts increasing because of the operation of the law of diminishing returns. Thus due to the law of variable proportions, the AC & AVC curve takes U -shape.

(B) Fixed costs are expenses that remain the same no matter how much a company produces, such as rent, property tax, insurance, and depreciation. 2)
Variable costs are any expenses that change based on how much a company produces and sells, such as labor, utility expenses, commissions, and raw materials.

Fixed costs are normally independent of a company's specific business activities.
Variable costs increase as production rises and decrease as production falls.

OR

(A) Law of variable proportions states that when total output or production of a commodity is increased by adding units of a variable input while the quantities of other inputs are held constant then MP of the variable factor initially rises and then falls after reaching a certain level of employment of the variable factor. 4)

Causes are as follows:

i MP rises: Because when the variable input is increased efficient utilization of the fixed inputs takes place due to specialization. This raises efficiency of the variable input.

ii MP falls but is positive: Because beyond a point increasing variable inputs puts Pressure on fixed inputs leading to decline in efficiency.

iii MP continues to fall and is negative: Because there are so much pressures of the variable input on the fixed inputs that total product starts declining.

(B) The point F where the total product stops increasing at an increasing rate and starts increasing at the diminishing rate is called the point of inflexion. ▪ At this point of inflexion marginal product is maximum, after which it slopes downward. ▪ The stage 1 ends where the average product curve reaches its highest point. 1)

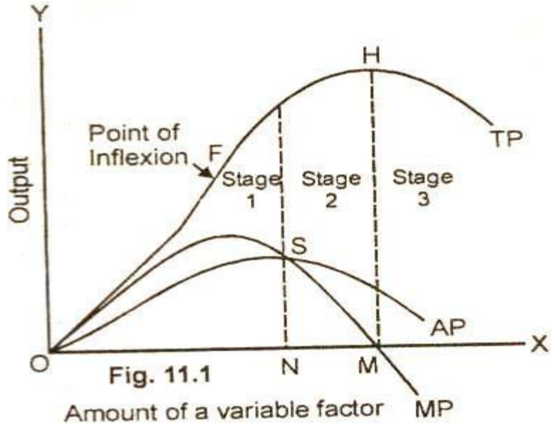


Fig. 11.1

(C) Average revenue is the revenue per unit of output sold. AR= T R /Q … 1)

(i) and that, TR= P ×Q …

(ii) Where, P = Price per unit and Q = Quantity sold.

Thus, AR is always equal to price. Q.