



B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL



TERM - I EXAMINATION (2026-27)

ECONOMICS
MARKING KEY

Class: XI

Date: 07.09.26

Admission no:

SET – I

Time: 3hr

Max Marks: 80

Roll no.:

General Instructions:

Read the following instructions carefully and follow them:

- (i) This question paper contains 34 questions. All questions are compulsory.*
- (ii) This question paper contains 20 Multiple Choice type questions. Each question carries 1 mark.*
- (iii) This question paper contains 4 Short Answer Type-I questions. Each question carries 3 marks. Answer these questions in 60 to 80 words.*
- (iv) This question paper contains 6 Short Answer Type-II questions. Each question carries 4 marks. Answer these questions in 80 to 100 words.*
- (v) This question paper contains 4 Long Answer type questions. Each question carries 6 marks. Answer these questions in 100 to 150 words.*
- (vi) Attempt all parts of a question together.*
- (vii) There is no overall choice in the question paper. However, an internal choice has been provided in few questions. Only one of the choices in such questions has to be attempted.*

MICROECONOMICS

Q1. **Answer:** (b) Both statements are false.

[1 mark]

Reason: Statement 1 describes “what to produce”, while Statement 2 describes “how to produce”.

Q2.

[1 mark]

Answer: (a) Both A and R are true and R correctly explains A.

Reason: Opportunity cost is the value/output sacrificed in the next-best alternative use; shifting resources from Y to X causes loss of Y.

Q3.

[1 mark]

Answer: (a) Verifiable.

Reason: Positive economics deals with “what is” and its statements can be tested against facts.

Q4.

[1 mark]

Answer: (b) ₹600.

Reason: If resources are used to grow wheat worth ₹1000, cloth worth ₹600 is forgone. That foregone alternative is the opportunity cost.

Q5.

[1 mark]

Answer: (a) Both A and R are true and R correctly explains A.

Reason: Microeconomics studies allocation of scarce resources; in a market economy the price mechanism helps allocate resources among alternative uses.

Q6. [1 mark]

Answer: (b) Positive.

Reason: A Giffen good is an exception to the Law of Demand: price and quantity demanded move in the same direction.

Q7. [1 mark]

Answer: (d) Less than unitary elastic.

Reason: $E_d = \% \text{ change in quantity demanded} / \% \text{ change in price}$. If the numerator is smaller, $E_d < 1$.

Q8. [1 mark]

Answer: (d) All of these.

Reason: Each factor raises demand for the good at the same price, causing a rightward shift from D to D_1 .

Q9. [1 mark]

Answer: (b) Zero.

Reason: Quantity demanded does not change even though price changes, so $\% \Delta Q = 0$ and $E_d = 0$.

Q10. [1 mark]

Answer: (d) Change of taste, preference and choice of the consumer.

Reason: The Law of Diminishing Marginal Utility assumes tastes/preferences remain unchanged during consumption.

Q11. [1 mark]

Answer: (a) Both Assertion(A) and Reason (R) are True and Reason(R) is the correct explanation of Assertion(A)

Reason: The exact algebraic slope of the budget line is $-P_x/P_y$.

Q12. [1 mark]

Answer: (d) All of these.

Reason: MP rising $\rightarrow$ TP rises at an increasing rate; MP positive but falling $\rightarrow$ TP rises at a decreasing rate; MP negative $\rightarrow$ TP falls.

Q13. [1 mark]

Answer: (a) $AC = MC$.

Reason: MC cuts AC at the minimum point of AC.

Q14. [1 mark]

Answer: (b) TVC.

Reason: The area under the MC curve from zero output to a given output equals TVC at that output.

Q15. [1 mark]

Answer: (a) Explicit cost.

Reason: Explicit costs are actual money payments made to outside factor owners/suppliers.

Q16. [1 mark]

Answer: (b) AD.

Reason: Under monopolistic competition the firm faces a downward-sloping but relatively elastic demand/AR curve. AD is the elastic downward-sloping curve.

Q17.

[1 mark]

Answer: (d) Zero.

Reason: If TR is horizontal, TR does not change with output; therefore $MR = \Delta TR / \Delta Q = 0$.

Q18.

[1 mark]

Answer: (a) Increasing returns to a factor.

Reason: In Stage I initially, TP rises at an increasing rate and MP rises.

Q19.

[1 mark]

Answer: (d).

Reason: TVC starts from the origin and normally has an inverse-S shape because of the Law of Variable Proportions.

Q20.

[1 mark]

Answer: (a) To its left.

Reason: Higher input prices increase cost of production and reduce supply at each price, shifting the supply curve leftward.

Q21.

[3 marks]

(i) At 50 million tonnes of wheat, the economy is at point E on the PPF; therefore tanks produced = 0 lakh.

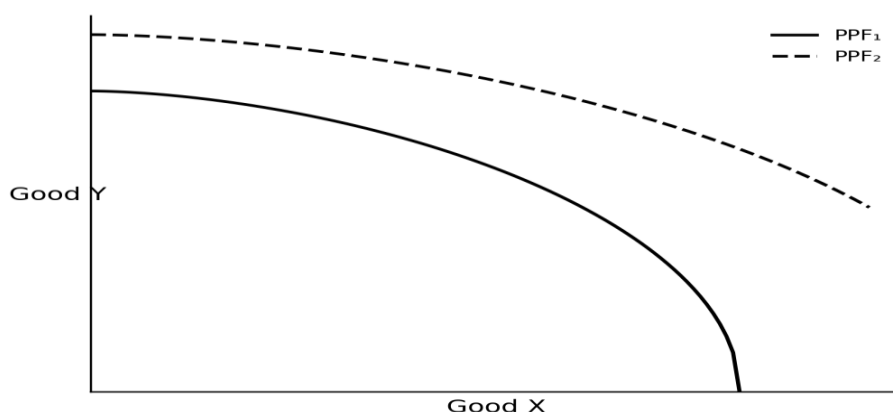
[1]

(ii) Growth in resources increases productive capacity, so the PPF shifts outward/rightward.

[1]

(iii) Point F represents underutilisation/unemployment of resources because it lies inside the PPF.

[1]



OR

Answer: Microeconomics vs Macroeconomics:

Basis	Microeconomics	Macroeconomics
Meaning	Studies individual units such as a consumer, firm or industry.	Studies the economy as a whole and aggregates.
Main variables	Individual demand, price, output, cost.	National income, general price level, employment.
Example	Price determination of a commodity.	Determination of national income or inflation.

Q22.

[3 marks]

(a) False. Central problems exist in every economy, developed or developing, because resources are scarce in relation to wants and have alternative uses.

[1]

(b) True. With given resources and technology, a point outside the PPF is unattainable. It can be reached only after growth in resources or improvement in technology.

[1]

(c) True. If there is genuinely no scarcity, there is no need to choose among competing uses of resources; hence the basic economic problem does not arise.

[1]

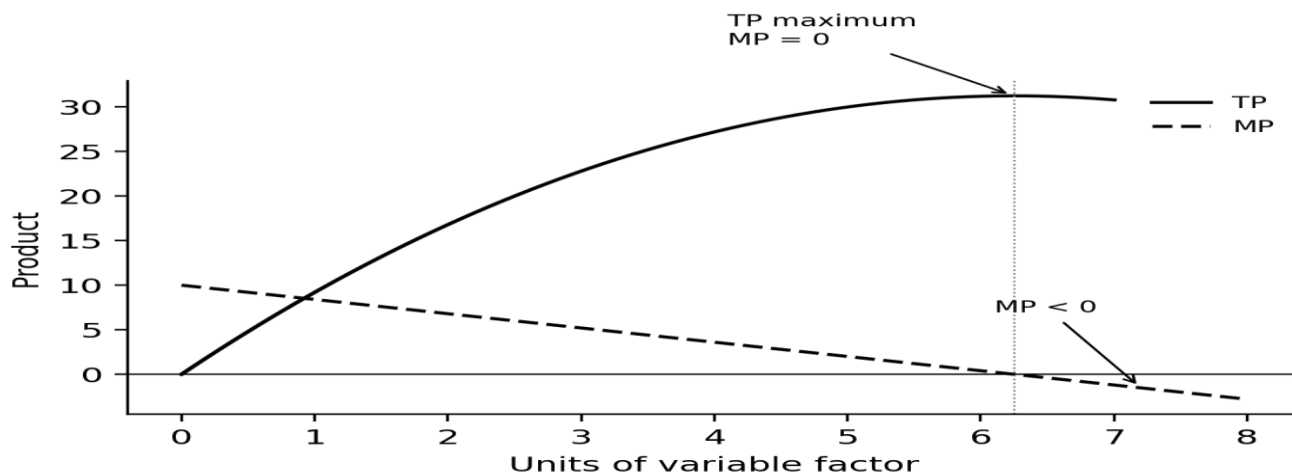
Q23.

[3 marks]

(a) When TP reaches its maximum, MP becomes zero.

(b) When TP starts falling, MP becomes negative.

In the diagram, MP cuts the X-axis at the output where TP is maximum; beyond that point MP lies below the X-axis.

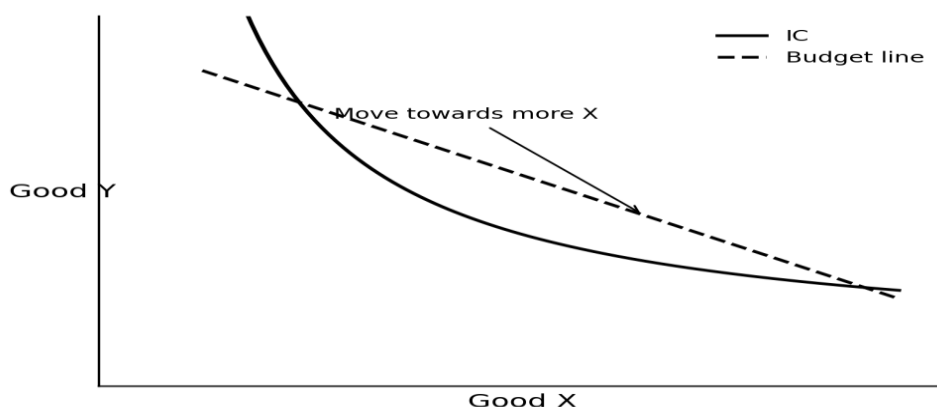


Q24.

[3 marks]

When the slope of the indifference curve is greater than the slope of the budget line, $MRS_{xy} > P_x/P_y$.

- The consumer values X relatively more than the market trade-off.
- The consumer should buy more of X and less of Y, moving rightward/downward along the budget line.
- Adjustment continues until $MRS_{xy} = P_x/P_y$, which is the tangency condition for consumer equilibrium.



OR

Answer: Income Demand and Cross Demand:

- Income demand: the relationship between a consumer's income and quantity demanded of a commodity, other factors constant. For a normal good, demand rises with income; for an inferior good, demand falls with income.
- Cross demand: the relationship between demand for one good and the price of a related good. If the price of a substitute rises, demand for the given good rises; if the price of a complement rises, demand for the given good falls.

Q25.

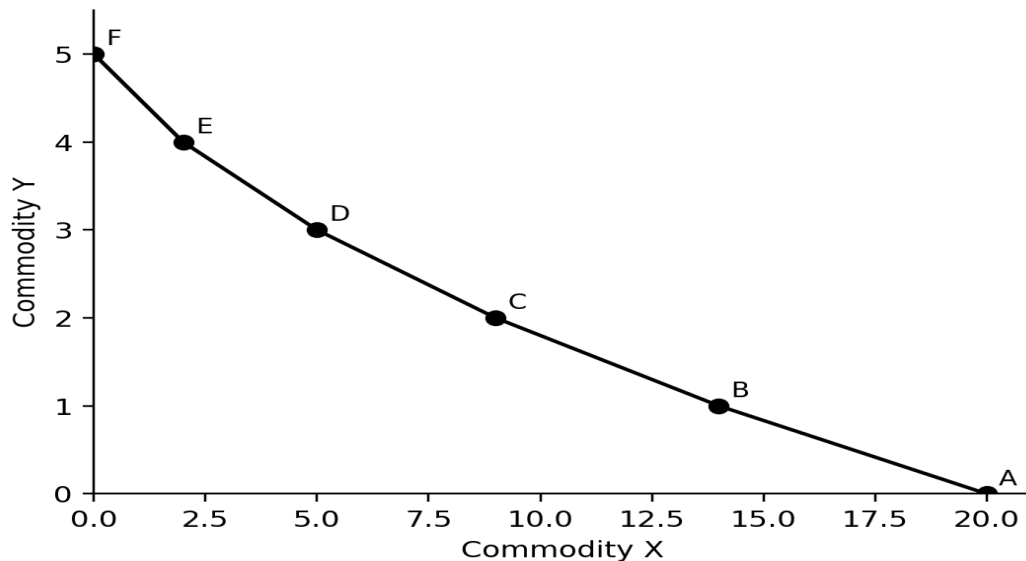
[4 marks]

Answer: (a) MRT / opportunity cost from the given schedule:

Movement	Loss of X	Gain of Y	MRT of X for Y = $\Delta X/\Delta Y$
A → B	6	1	6
B → C	5	1	5
C → D	4	1	4
D → E	3	1	3
E → F	2	1	2

Thus MRT diminishes from 6 to 2 as production moves from X towards Y. [1]

Answer: (b) PPF: Plot the six combinations and join them smoothly. [1]



Answer: (c) Shape: The PPF is convex to the origin on the basis of the given data because MRT/opportunity cost is diminishing. [1]

Answer: (d) Any two assumptions of a PPF: [1]

- Resources are fixed in quantity during the period.
- Technology remains constant.
- Resources are fully and efficiently employed.
- The economy produces only two goods. (Any two)

Q26.

[4 marks]

Answer: Step 1: Calculate marginal utility per rupee.

Units	1	2	3	4	5	6	7	8	9	10
MU _x /P _x	12	11	10	9	8	7	6	5	4	3
MU _y /P _y	10	9	8	7	6	5	4	3	2	1

Answer: Step 2: Apply the equi-marginal condition and budget constraint.

- At X = 8 units: MU_x/P_x = 25/5 = 5.
- At Y = 6 units: MU_y/P_y = 50/10 = 5.
- Expenditure = (8 × ₹5) + (6 × ₹10) = ₹40 + ₹60 = ₹100. Entire income is spent.

Answer: Therefore, consumer equilibrium = 8 units of X and 6 units of Y. [Final answer]

- TU_x at 8 units = 60+55+50+45+40+35+30+25 = 340 utils.
- TU_y at 6 units = 100+90+80+70+60+50 = 450 utils.
- Maximum total utility = 340 + 450 = 790 utils.

Reason: The stated MUM = 1 is inconsistent with the full-expenditure solution because the common MU per rupee at equilibrium is 5. If MUM = 1 is applied strictly, no feasible bundle satisfies all conditions. For marking, X = 8 and Y = 6 is the defensible answer from the schedule and budget.

Q27.

[4 marks]

Answer: (A) Ascending order of elasticity by magnitude (CBSE convention): 0.53 < 0.80 < 0.87 < 3.1. If the negative signs are retained: -0.53, -0.80, -0.87, -3.1. [1]

Reason: Elasticity is ordinarily discussed by its absolute coefficient; the negative sign only indicates inverse price-demand relation.

Answer: (B) Initial price calculation:

[3]

- Initial demand $Q = 80$ units; fall in demand $\Delta Q = 4$ units; rise in price $\Delta P = ₹10$.
- $E_d = (\Delta Q/Q) \div (\Delta P/P)$
- $1.5 = (4/80) \div (10/P)$
- $1.5 = (4/80) \times (P/10)$
- $P = ₹300$.

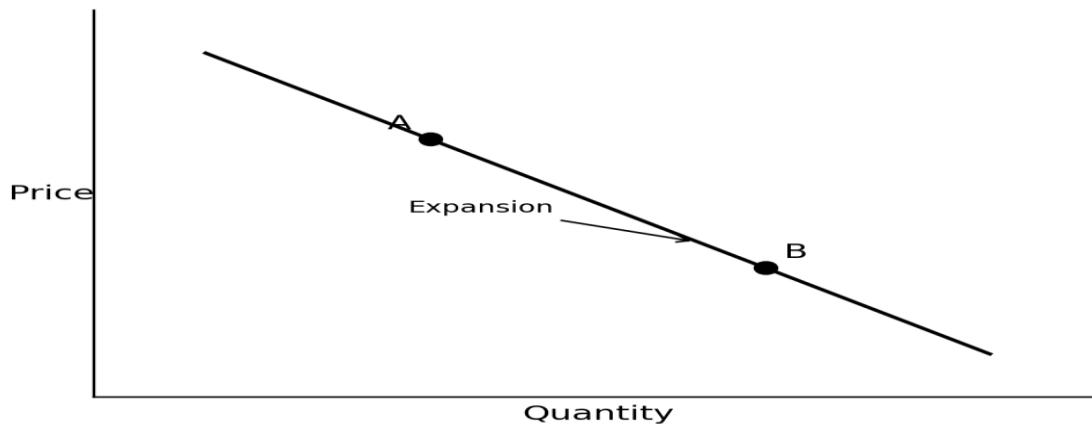
Q28.

[4 marks]

Answer: Expansion in demand vs Increase in demand:

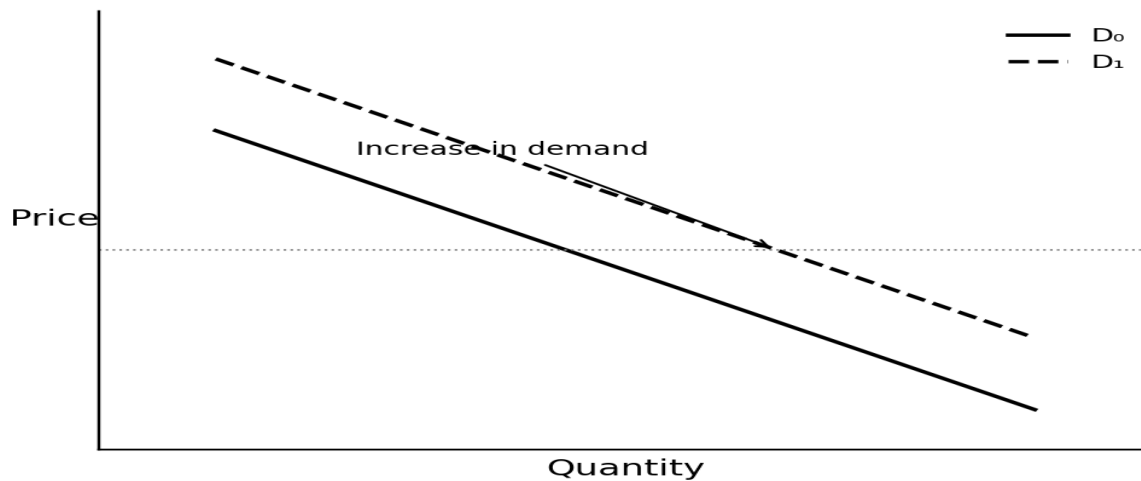
- Expansion in demand: quantity demanded rises because the commodity's own price falls, other factors unchanged. It is a downward movement along the same demand curve.

[2]



Increase in demand: quantity demanded rises at the same price because of a favourable change in a non-price determinant such as income, taste, population, price of related goods or expectations. The demand curve shifts rightward.

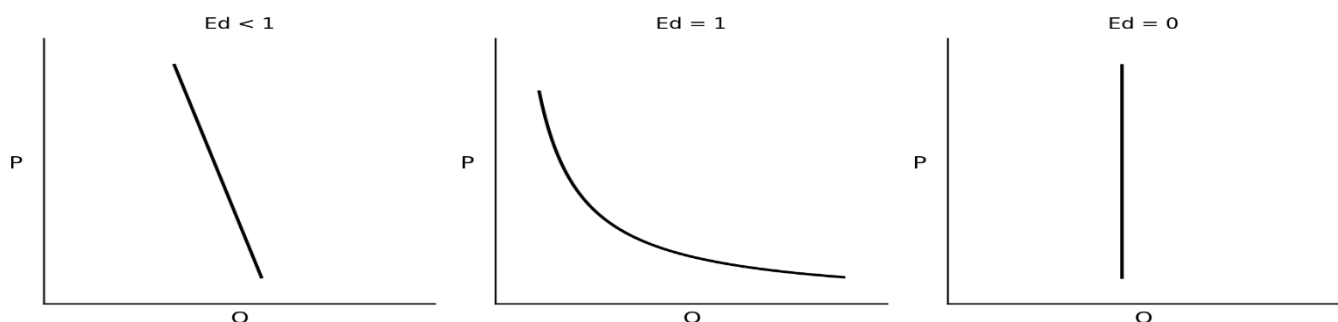
[2]



OR

Answer: (A) Elasticity diagrams:

[3]



$E_d < 1$: relatively inelastic demand; quantity changes proportionately less than price.

- $E_d = 1$: unitary elastic demand; rectangular hyperbola is the standard diagram.
- $E_d = 0$: perfectly inelastic demand; vertical demand curve.

Answer: (B) Price of a substitute:

[1]

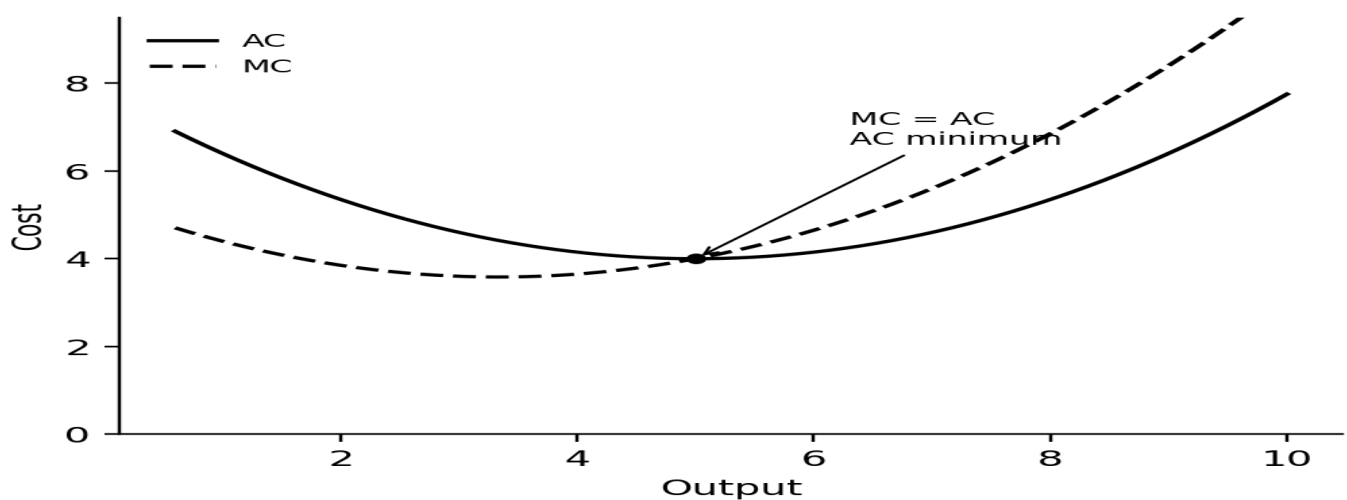
- If the price of a substitute rises, demand for the given good increases and its demand curve shifts right. If the price of a substitute falls, demand for the given good decreases and its demand curve shifts left.

Q29.

[4 marks]

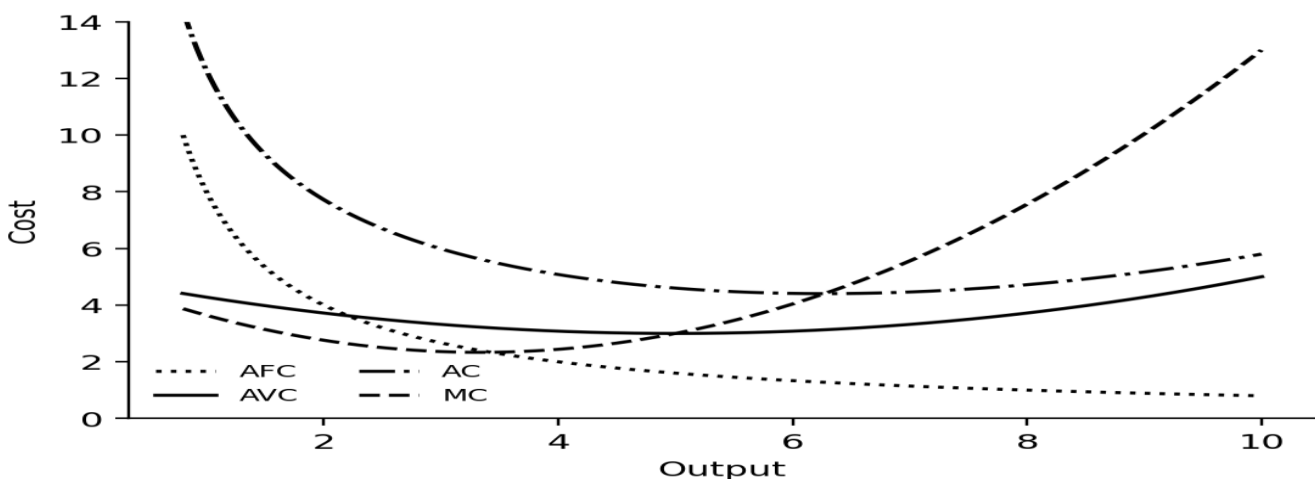
Answer: Relationship between AC and MC:

- When $MC < AC$, AC falls.
- When $MC > AC$, AC rises.
- When $MC = AC$, AC is minimum. MC cuts AC from below at AC's minimum point.
- The reason is that the marginal value pulls the average in its own direction: a marginal below average lowers the average; a marginal above average raises it.



OR

Answer: AFC, AVC, AC and MC in one diagram:



AFC falls continuously as fixed cost is spread over more units of output.

- AVC and AC are U-shaped due to the Law of Variable Proportions: initially increasing returns reduce variable cost per unit; later diminishing returns raise it.
- MC cuts both AVC and AC at their respective minimum points. The vertical gap between AC and AVC equals AFC and therefore narrows as output increases.

Q30.

[4 marks]

- (i) True. During both increasing returns and diminishing returns to a factor, MP remains positive; therefore TP continues to rise. Under increasing returns TP rises at an increasing rate, while under diminishing returns TP rises at a decreasing rate. [2]
- (ii) False. TP does not require MP to be increasing. TP increases whenever MP is positive. Even when MP is falling but positive, TP still rises, though at a decreasing rate. [2]

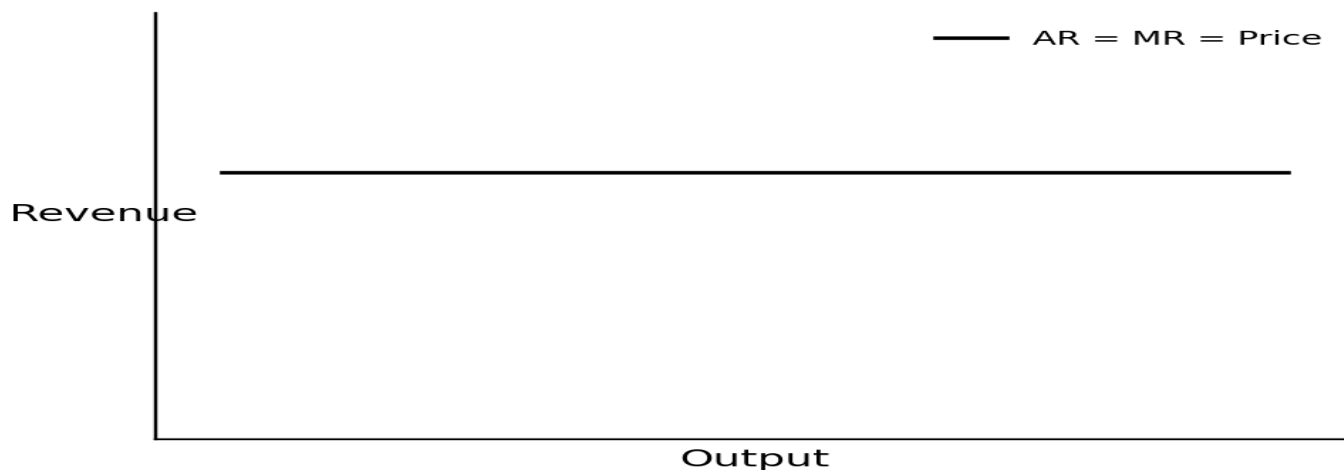
Q31.

[6 marks]

Answer: (A)(i) Market form in the passage: Imperfect competition, i.e. a price-making firm facing a downward-sloping demand curve, such as monopoly or monopolistic competition. [1]

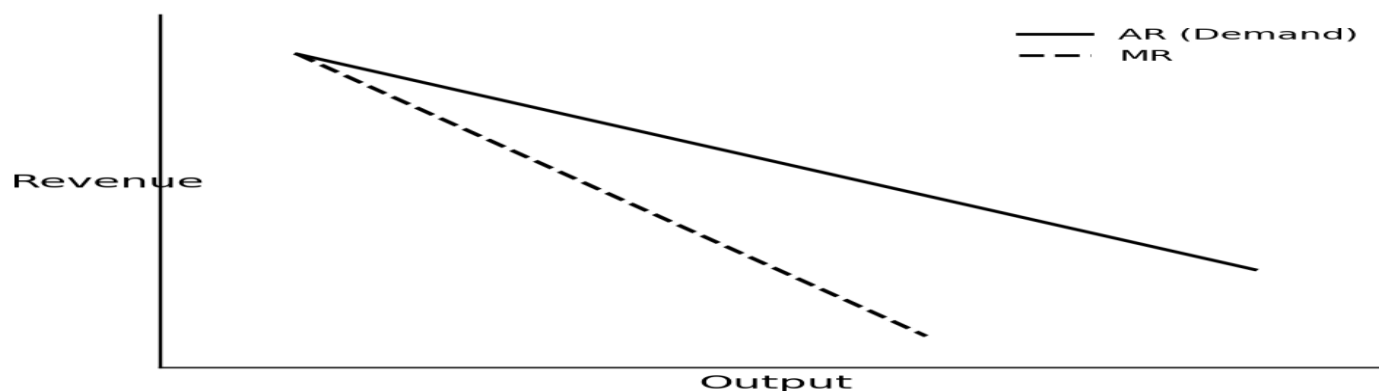
Answer: (A)(ii) When more units are sold at the same price, AR and MR are equal and horizontal. [3]

Q	Price = AR (₹)	TR (₹)	MR (₹)
1	10	10	10
2	10	20	10
3	10	30	10
4	10	40	10



Under perfect competition: AR = MR = Price.

Answer: (B) Under monopoly and monopolistic competition, AR is downward sloping and MR lies below AR; MR falls faster than AR. [2]



Qualitative shape under monopoly / monopolistic competition.

Q32.

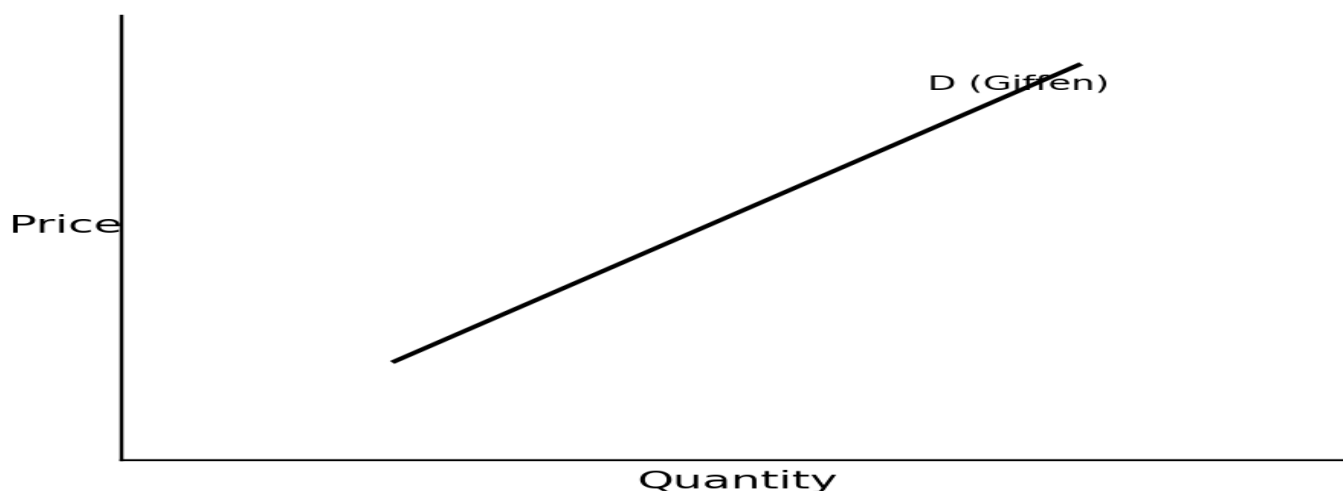
[6 marks]

Answer: (A) Why a good can be inferior for one consumer and normal for another: [2]

- Classification depends on the consumer's income level, preferences and circumstances, not on the physical nature of the good alone.
- Example: a low-priced local transport service may be a normal good for a low-income consumer, but an inferior good for a higher-income consumer who shifts to cabs or a private vehicle as income rises.

Answer: (B) Giffen goods as an exception to the Law of Demand: [2]

- A Giffen good is a strongly inferior good on which a poor consumer spends a large share of income. When its price rises, the negative income effect is so strong that it outweighs the substitution effect; quantity demanded may rise with price.
- Hence its demand curve slopes upward, showing a direct price-demand relation.



Answer: (C) Income effect and inverse price-demand relation: [2]

- For a normal good, a fall in price increases the consumer's real purchasing power. The consumer can buy more, so quantity demanded rises.
- A rise in price reduces real purchasing power, so quantity demanded falls. This income effect supports the inverse relation between price and demand for normal goods.

Q33.

[6 marks]

Answer: (A) Effect on supply: [3]

- State of technology: improvement in technology raises productivity and/or lowers cost of production. Supply increases and the supply curve shifts right. Inferior/outdated technology has the opposite effect.
- Government taxation policy: higher indirect taxes increase production cost, reduce supply and shift the supply curve left. Lower taxes or subsidies reduce cost and increase supply, shifting it right.

Answer: (B) Complete the cost table: [3]

- Formulae: $AVC = TVC/Q$; $MC = \Delta TVC / \Delta Q$; $TVC = AVC \times Q$.

Output (Q)	TVC (₹)	AVC = TVC/Q (₹)	MC (₹)
1	10	10	10
2	16	8	6
3	27	9	11
4	40	10	13

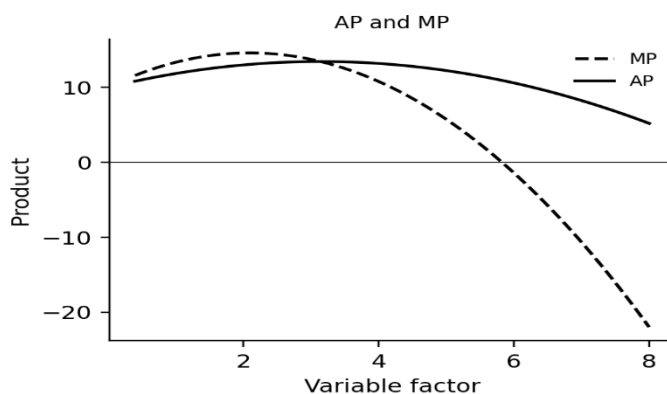
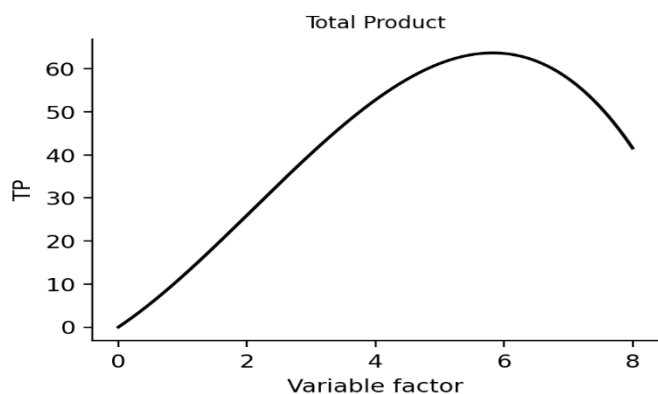
- Working: $TVC_2 = 8 \times 2 = 16$; $MC_3 = 27 - 16 = 11$; $TVC_4 = 10 \times 4 = 40$; $AVC_3 = 27/3 = 9$. At $Q=1$, $MC_1 = TVC_1 - TVC_0 = 10 - 0 = 10$.

OR

Answer: (A) Law of Variable Proportions: [4]

- When units of a variable factor are increased while other factors remain fixed, total product first increases at an increasing rate, then at a decreasing rate, and finally may fall.

Stage	Behaviour of TP	Behaviour of MP	Returns
I	Rises at an increasing rate	MP rises initially; later may fall but stays positive	Increasing returns
II	Rises at a diminishing rate; reaches maximum	MP is positive and falling; becomes 0 at TP maximum	Diminishing returns
III	Falls	MP is negative	Negative returns



Answer: (B) Rational stage for a producer: Stage II.

[2]

- In Stage I the fixed factor is underutilised, so stopping there is irrational. In Stage III MP is negative, so extra variable input reduces output.
- In Stage II both factors are used economically, MP is positive but diminishing, and TP is still increasing. Therefore a rational producer operates in Stage II.

Q34.

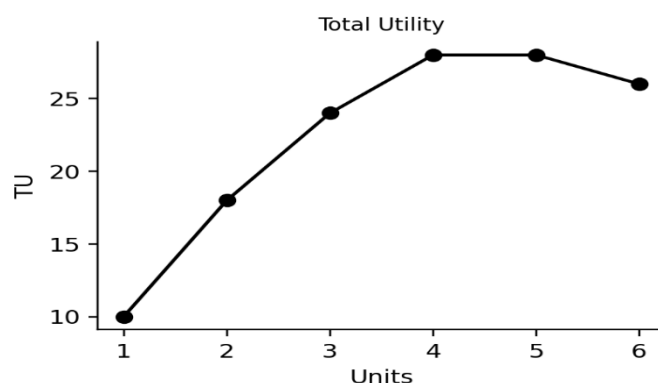
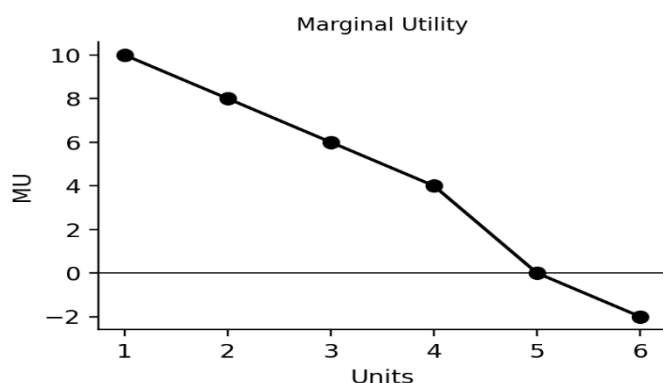
[6 marks]

Answer: (A) Law of Diminishing Marginal Utility:

[4]

- Other things remaining constant, as a consumer consumes more and more units of a commodity continuously, marginal utility from each successive unit tends to decline.

Units consumed	MU (utils)	TU (utils)
1	10	10
2	8	18
3	6	24
4	4	28
5	0	28
6	-2	26

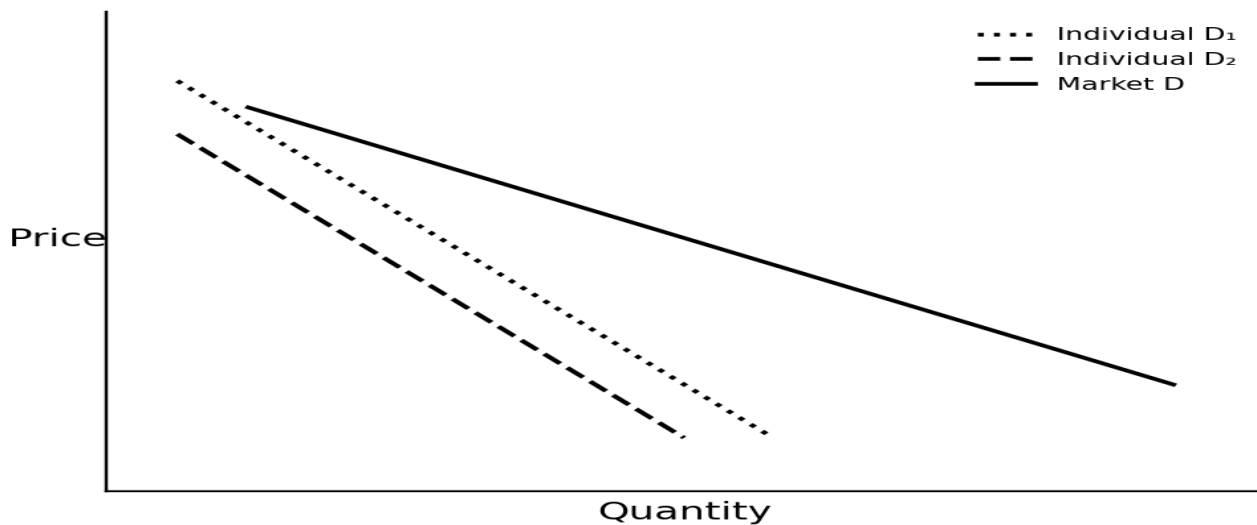


Relation between MU and TU: when MU is positive, TU rises; as MU falls but remains positive, TU rises at a decreasing rate; when MU = 0, TU is maximum; when MU becomes negative, TU falls.

Answer: (B) Individual demand vs Market demand:

[2]

Basis	Individual Demand	Market Demand
Meaning	Demand of one consumer at different prices.	Total demand of all consumers at different prices.
Derivation	Read from one consumer's demand schedule/curve.	Horizontal summation of individual demand curves.



OR

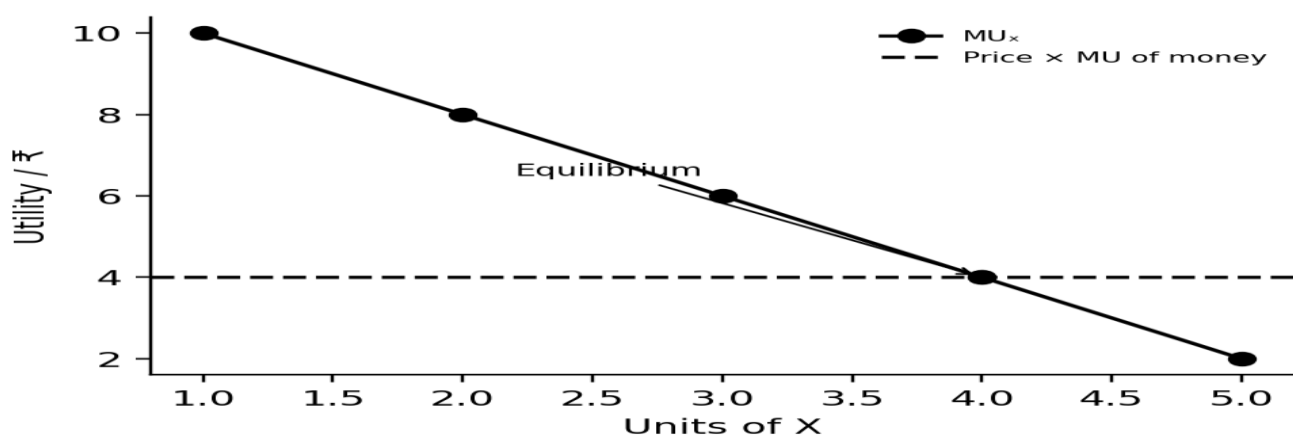
Answer: (A) Consumer equilibrium in a single-commodity case under utility analysis:

[4]

- Equilibrium condition: $MU_x/P_x = MU_m$, or $MU_x = P_x \times MU_m$.
- Because MU diminishes as consumption increases, a consumer buys additional units while $MU_x/P_x > MU_m$ and stops when equality is reached. If $MU_x/P_x < MU_m$, buying that unit would reduce total satisfaction.

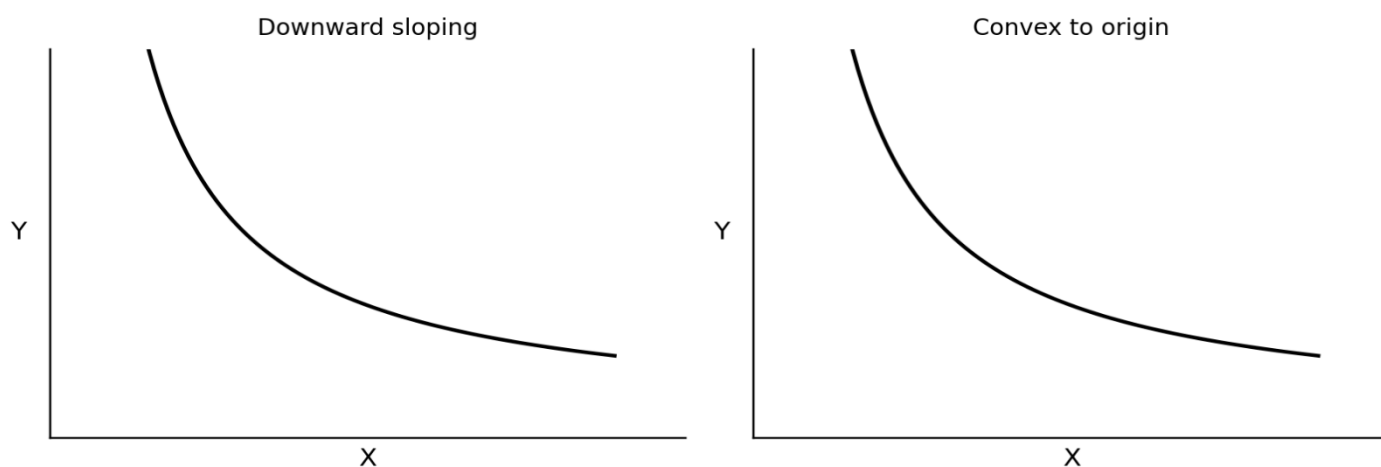
Units of X	MU_x
1	10
2	8
3	6
4	4
5	2

Example: Let $P_x = ₹4$ and $MU_m = 1$ util per rupee. Then $P_x \times MU_m = 4$ utils. At the 4th unit, $MU_x = 4$, so the consumer is in equilibrium at 4 units.



Answer: (B) Any two properties of indifference curves: [2]

- Indifference curves slope downward from left to right because to obtain more of one good while keeping satisfaction unchanged, the consumer must give up some quantity of the other good.
- Indifference curves are convex to the origin because MRS diminishes as the consumer substitutes X for Y.



*****ALL THE BEST*****