

ECONOMICS 2025-26

MARKING SCHEME/ HINTS TO SOLUTIONS

NOTE: ANY OTHER RELEVANT ANSWER NOT GIVEN HEREIN BUT GIVEN BY CANDIDATE BE SUITABLY AWARDED.

Section-A (Statistics)

Q.NO	Value Points	Marks	Total Marks
1.	b. Economic activities are not undertaken for monetary gains.	1	1
2.	d. 10	1	1
3.	a. 26	1	1
4.	a. qualitative	1	1
5.	a. Statement 1 is true and statement 2 is false.	1	1
6.	d. I, ii& iii	1	1
7.	c. (i)c, (ii)d, (iii)b, (iv)a	1	1
8.	b. Both Assertion (A) and Reason (R) are True and Reason (R) is not the correct explanation of Assertion (A)	1	1
9.	c. ii, iii	1	1
10.	a. Urban non manual workers, Industrial workers & Agricultural labourers.	1	1
11.	Combined Mean= $\{(N \times A.\text{mean})_A + (N \times A.\text{mean})_B\} / \{N_A + N_B\}$ $38 = \{50 \times 35 + 25x\} / 75$ = 44 marks	1 1 1	3
12	Although census method is appropriate since it provides complete enumeration and is also more suitable for a heterogeneous population, it cannot be conducted where area of investigation is vast and it is time consuming and costly. OR Discrete variables <ul style="list-style-type: none"> Finite jumps between two values Example: no. of cars per household Continuous variables <ul style="list-style-type: none"> Can be broken down into Infinite gradations Example: Income, Expenditure of a household 	1.5 1.5	3

13.

Marks in English (X) →

Marks in Maths (Y) ↓

	12	14	16	18	Total
20		11(2)	1(1)	1(1)	4
22	1(1)	1(1)		11(2)	4
24	1(1)		11(2)		3
26	1(1)				1
Total	3	3	3	3	12

OR

Table No. - 1

Classification of persons going for Excursion

(persons in no.)

Category of Persons	Male	Female	Total	Contribution in (Rs)
Students	49	11	60	9600
Teaching staff	9	5	14	2800
Peons	6	-	6	-
Total	64	16	80	12400

Footnote: Excursion by College A

Source: College Records

2-cells

1format

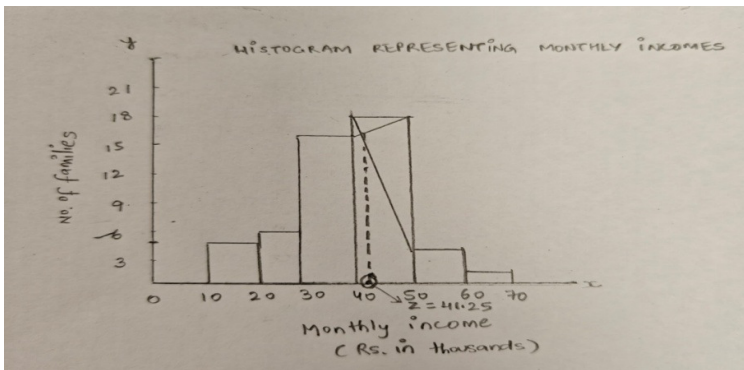
1(other parts)

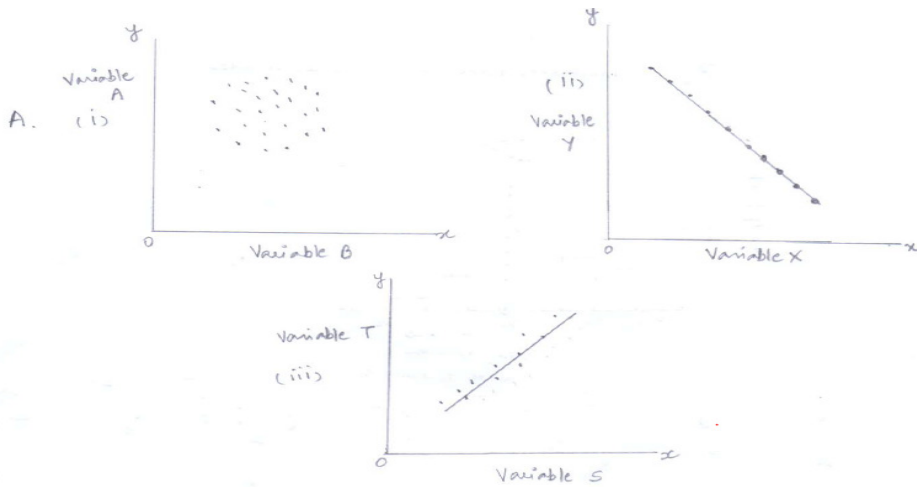
4

14.

Wages(Rs. In thousands)	No. of workers(f)	C.f
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	<table><tr><td>20-30</td><td>60</td><td>60</td></tr><tr><td>30-40</td><td>60</td><td>120</td></tr><tr><td>40-50</td><td>X</td><td>120+X</td></tr><tr><td>50-60</td><td>200</td><td>320+X</td></tr><tr><td>60-70</td><td>Y</td><td>320+X+Y</td></tr><tr><td>70-80</td><td>40</td><td>550</td></tr></table>	20-30	60	60	30-40	60	120	40-50	X	120+X	50-60	200	320+X	60-70	Y	320+X+Y	70-80	40	550		1.5	4			
	20-30	60	60																						
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	50-60	200	320+X																						
	60-70	Y	320+X+Y																						
	70-80	40	550																						
	Median = N/2 th value Median = l + {(n/2-c.f)/f X i}																								
	$52.75 = 50 + \frac{\{ 225 - (120 + X) \}}{200} \times 10$																								
	$52.75 - 50 = \frac{225 - 120 - X}{20}$																								
$2.75 \times 20 = 105 - X$																									
$X = 105 - 55$ $= 50$ $360 + 50 + Y = 550$ $Y = 550 - 410 = 140$																									
15.i)	<table><tr><th>PRICE INDEX</th><th>QUANTITY INDEX</th></tr><tr><td>1.It measures the percentage changes in prices between the current year and the base year.</td><td>It measures percentage changes in the physical quantity of goods produced, consumed or sold between the current year and the base year.</td></tr><tr><td>Example-WPI,CPI</td><td>Examples-Index of Industrial production</td></tr></table>	PRICE INDEX	QUANTITY INDEX	1.It measures the percentage changes in prices between the current year and the base year.	It measures percentage changes in the physical quantity of goods produced, consumed or sold between the current year and the base year.	Example-WPI,CPI	Examples-Index of Industrial production		1,1																
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ii)	<table><tr><th>COMMODITIES</th><th>P1</th><th>P0</th></tr><tr><td>A</td><td>100</td><td>80</td></tr><tr><td>B</td><td>70</td><td>56</td></tr><tr><td>C</td><td>30</td><td>25</td></tr><tr><td>D</td><td>40</td><td>20</td></tr><tr><td>E</td><td>180</td><td>60</td></tr><tr><td></td><td>$\sum P1=420$</td><td>$\sum P0=241$</td></tr></table> $\sum PO1=\sum P1/\sum P0 \times 100$ $=420/241 \times 100$ $=174.27$	COMMODITIES	P1	P0	A	100	80	B	70	56	C	30	25	D	40	20	E	180	60		$\sum P1=420$	$\sum P0=241$		0.5	4
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	<p>It reveals that there is a 74.27% increase in the year 2024 compared to the prices in the year 2023.</p>	0.5																																																																
16 (i)	<div></div> <p>Modal class- (40-50)</p> <p>Mode= $l_1 + \{ (f_1 - f_0) / (2f_1 - f_0 - f_2) \} \times i$</p> <p>= $40 + \{ (18 - 16) / (2 \cdot 18 - 16 - 4) \} \times 10$</p> <p>= $40 + (2 \times 10) / 16$</p> <p>= $40 + 1.25$</p> <p>= ₹ 41.25</p>	4	6																																																															
17	<p>Since the coefficient of correlation is not affected by the change in scale and origin of variables. So, in order to make calculations simpler, we can divide series X by 10 and series Y by 100. By doing so we get the following table:</p> <table><tr><td>X</td><td>Y</td><td>x=X—</td><td>x2</td><td>y=Y-Y</td><td>y2</td><td>xy</td></tr><tr><td>2</td><td>6</td><td>-3</td><td>9</td><td>2</td><td>4</td><td>-6</td></tr><tr><td>3</td><td>2</td><td>-2</td><td>4</td><td>-2</td><td>4</td><td>4</td></tr><tr><td>4</td><td>7</td><td>-1</td><td>1</td><td>3</td><td>9</td><td>-3</td></tr><tr><td>5</td><td>1</td><td>0</td><td>0</td><td>-3</td><td>9</td><td>0</td></tr><tr><td>6</td><td>3</td><td>1</td><td>1</td><td>-1</td><td>1</td><td>-1</td></tr><tr><td>7</td><td>5</td><td>2</td><td>4</td><td>1</td><td>1</td><td>2</td></tr><tr><td>8</td><td>4</td><td>3</td><td>9</td><td>0</td><td>0</td><td>0</td></tr><tr><td>ΣX=35</td><td>ΣY=28</td><td></td><td>Σx2=28</td><td></td><td>Σy2=28</td><td>Σxy=-4</td></tr></table> <p>Mean of X=ΣX/N=35/7</p> <p>=5</p>	X	Y	x=X—	x2	y=Y-Y	y2	xy	2	6	-3	9	2	4	-6	3	2	-2	4	-2	4	4	4	7	-1	1	3	9	-3	5	1	0	0	-3	9	0	6	3	1	1	-1	1	-1	7	5	2	4	1	1	2	8	4	3	9	0	0	0	ΣX=35	ΣY=28		Σx2=28		Σy2=28	Σxy=-4	2	
X	Y	x=X—	x2	y=Y-Y	y2	xy																																																												
2	6	-3	9	2	4	-6																																																												
3	2	-2	4	-2	4	4																																																												
4	7	-1	1	3	9	-3																																																												
5	1	0	0	-3	9	0																																																												
6	3	1	1	-1	1	-1																																																												
7	5	2	4	1	1	2																																																												
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ΣX=35	ΣY=28		Σx2=28		Σy2=28	Σxy=-4																																																												
		1																																																																

	<p>Mean of $Y = \sum Y / N = 28 / 7$ $= 4$</p> <p>$r = \sum xy / \sqrt{\sum x^2 \cdot \sum y^2}$ $= -4 / 28.28$ $= -4 / 28$ $= -0.143$</p> <p>There is low degree of negative correlation.</p> <p>OR</p>	1									
a.		1	6								
b.	<table border="1"> <thead> <tr> <th>SPEARMAN'S COEFFICIENT OF CORRELATION</th><th>PERSIAN COEFFICIENT OF CORRELATION</th></tr> </thead> <tbody> <tr> <td>It measures correlation for quanlitative data.</td><td>It measures correlation for quantitative data.</td></tr> <tr> <td>It calculates the rank differences</td><td>It calculates deviations from actual or assumed mean.</td></tr> <tr> <td>It gives less importance to extreme values.</td><td>It gives more importance to extreme values.</td></tr> </tbody> </table>	SPEARMAN'S COEFFICIENT OF CORRELATION	PERSIAN COEFFICIENT OF CORRELATION	It measures correlation for quanlitative data.	It measures correlation for quantitative data.	It calculates the rank differences	It calculates deviations from actual or assumed mean.	It gives less importance to extreme values.	It gives more importance to extreme values.	1	
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		1									

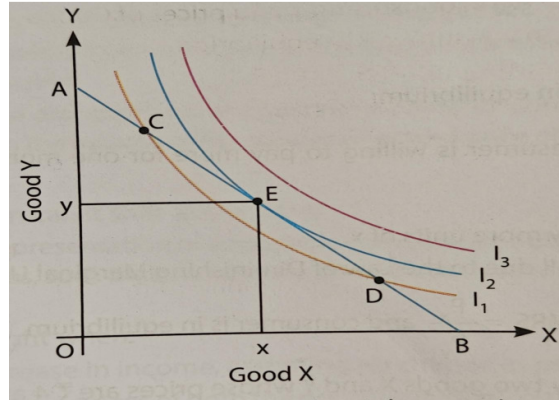
Section-B (Micro Economics)

Q	VALUE POINTS	MAR	TO
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NO.		KS	TAL MA RKS									
18	c. MRT increasing with more production of a good	1	1									
19	b. statement 2 is true and 1 is false	1	1									
20	c. C-iii	1	1									
21	c. Rs. 7000	1	1									
22	a. Decrease in quantity and price may increase or decrease or remain unchanged	1	1									
23	d. Both statements are false	1	1									
24	a. i, ii, iv	1	1									
25	b. Both assertion (A) and Reason (R) are true but (R) is not the correct explanation of the Assertion (A)	1	1									
26	b. Horizontal straight line parallel to x-axis	1	1									
27	c. Rightward shift in the market demand curve of ice cream	1	1									
28	<table border="1"><thead><tr><th>Price</th><th>Demand (Units)</th><th>Total Expenditure (Rs)</th></tr></thead><tbody><tr><td>9</td><td>10</td><td>90</td></tr><tr><td>10</td><td>9</td><td>90</td></tr></tbody></table> <p>A rise in price of the good from 9 per unit to 10 per unit does not result in any change in total expenditure on it. It remains unchanged at Rs</p>	Price	Demand (Units)	Total Expenditure (Rs)	9	10	90	10	9	90	1	
Price	Demand (Units)	Total Expenditure (Rs)										
9	10	90										
10	9	90										

	<p>90. Therefore, demand for the good is unitary elastic, $ed = -1$.</p> <p>The demand curve of the good will be a rectangular hyperbola demand curve where $ed = -1$ at all points on the demand curve.</p> <p>OR</p> <p>Percentage change in demand = $\frac{\text{change in demand}}{\text{original demand}} \times 100$ $= \frac{80}{100} \times 100 = 80\%$.</p> <p>Percentage change in price = 50% (since the price gets halved)</p> <p>$ed = \frac{\text{percentage change in demand}}{\text{percentage change in price}}$ $= \frac{80}{50} = 1.6$</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>	3
29	<p>The price elasticity of supply in the following cases will be:</p> <p>(a) Unitary elastic Supply</p> <p>(b) Perfectly Inelastic Supply</p> <p>(c) Perfectly Elastic Supply</p>	<p>1</p> <p>1</p> <p>1</p>	3
30	<p>As a result of decrease in production of Apple, the market supply will shift towards left</p> <p>This implies excess demand at the equilibrium price leading to competition among buyers and bidding up of the prices. As a result, there will be contraction in demand and expansion in supply</p> <p>leading to a new equilibrium at higher price and lower quantity.</p> <p>Or</p> <p>Increased demand will shift the demand curve rightward.</p>	<p>1</p> <p>2</p> <p>1</p> <p>1</p>	4

	<p>This will create competition among buyers, which will result in bidding up of the prices leading to contraction in demand and expansion and supply.</p> <p>The new equilibrium will then be attained at higher price and quantity.</p>	<p>2</p> <p>1</p>	
31	<p>Dell PCs are substitutes of Acer PCs. When Dell reduce its prices, Dell PCs become cheaper than Acer PCs. Therefore, consumers buy more of Dell PCs. As a result, demand for Acer PCs decreases at the same price.</p> <p>(2) CPU and keyboards are complementary goods. If the price of CPU and keyboards reduce sharply, demand for them will rise which, in turn, will increase the demand for Acer PCs at the same price.</p>	<p>2</p> <p>2</p>	4
32	<p>Producer equilibrium refers to that price and output combination which brings maximum profit to the producer and profit decline as more is produced.</p> <p>Conditions</p> <p>1 MC =MR</p> <p>2 MC is greater than MR after</p> <p>MC = MR output level.</p> <p>Since marginal revenue is more than the marginal cost, the producer can increase his profits by producing more. Therefore, the producer should increase his production to attain maximum profit, and continue till MC = MR and MC > MR after MC = MR output level.</p>	<p>1</p> <p>1</p> <p>2</p>	4
33	<p>a. Let the two goods be X and Y as shown in the diagram. The tangency is at point E where: Slope of indifference curve= Slope of budget line Or $MRS_{xy} = P_x/P_y$.</p>	<p>1</p>	



The equilibrium purchase is Ox of X and Oy of Y on the indifference curve I C 2

The consumer cannot get satisfaction level higher than IC2 because his income does not permit him to move above the budget line AB. The consumer will not like to purchase any other bundle on the budget line AB, for example the bundle at C and D, because they all lie on the lower indifference curve, and give him lower satisfaction. Therefore, the equilibrium choice is only at the tangency point E.

b.

Quantity	1	2	3	4	5
PRICE	3	3	3	3	3
MU	8	7	5	3	2

The consumer will buy 4 units to attain equilibrium, ie, to maximise his satisfaction since at this consumption level, $MU = Price = Rs\ 3$.

At consumption level of less than 4 units, $MU > Price$. Therefore, there is scope of increasing gain by purchasing more.

If he buys more than 4 units, $MU < Price$. Therefore, buying more than 4 units will be disadvantageous to the consumer. Thus, the consumer will maximise his satisfaction by buying 4 units of the commodity X.

34

a.

Variable input	TP	MP	PHASES
1	11	11	I
2	22	12	I
3	30	8	II
4	35	5	II
5	30	-5	III

1.5

Phase 1: TP increases at an increasing rate. MP increases. (Up to 2 units of the variable input)

Phase II: TP increases at a decreasing rate. MP falls but remains positive. (from 3 to 4 units of the variable input)

Phase III: TP falls. MP falls and becomes negative. (at 5th unit of the variable input).

1.5

b .Under increasing returns to a factor, total product increases at increasing rate as more and more units of a variable input are employed. As a result, marginal product also increases.

1

Reasons

1) Better utilisation of the fixed factor

2) Increased efficiency of variable factor

3) Indivisibility of fixed factor.

(Any Two Reasons)

2

6

OR

Important Observations: AC, AVC and AFC

1. AC curve will always lie above the AVC curve because AC, at all levels of output includes both AVC and AFC.
2. AVC reaches its minimum point (point 'B') at a level of output lower than that of AC (point 'A') because when AVC is at its minimum point, AC is still falling because of falling AFC.
3. As the output increases, the gap between AC and AVC curves decreases, but, they never intersect each other. It happens because the vertical distance between them is AFC, which can never be zero.(3)

