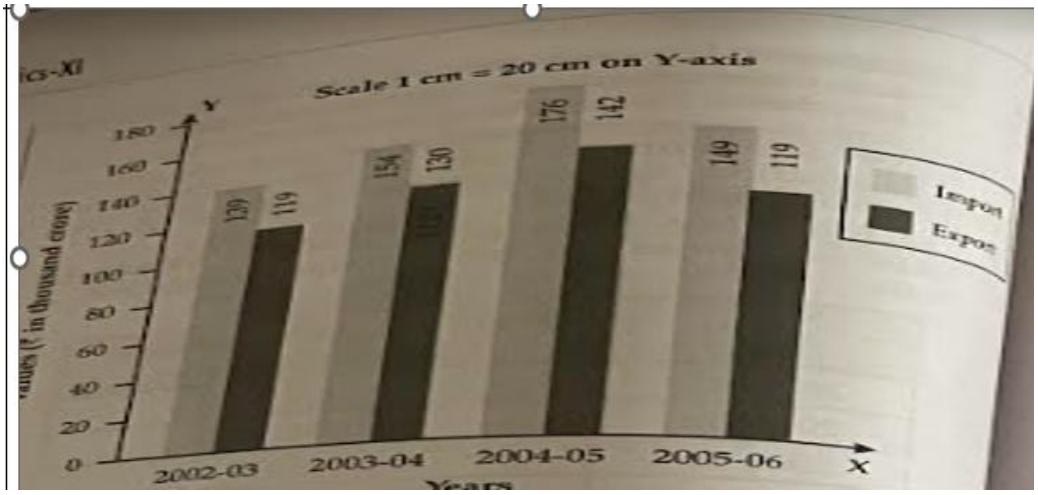
INDIAN SCHOOL AL WADI AL KABIR

DEPARTMENT OF COMMERCE

ASSESSMENT 2 -XI 2025-26

ECONOMICS (030)

ANSWER KEY

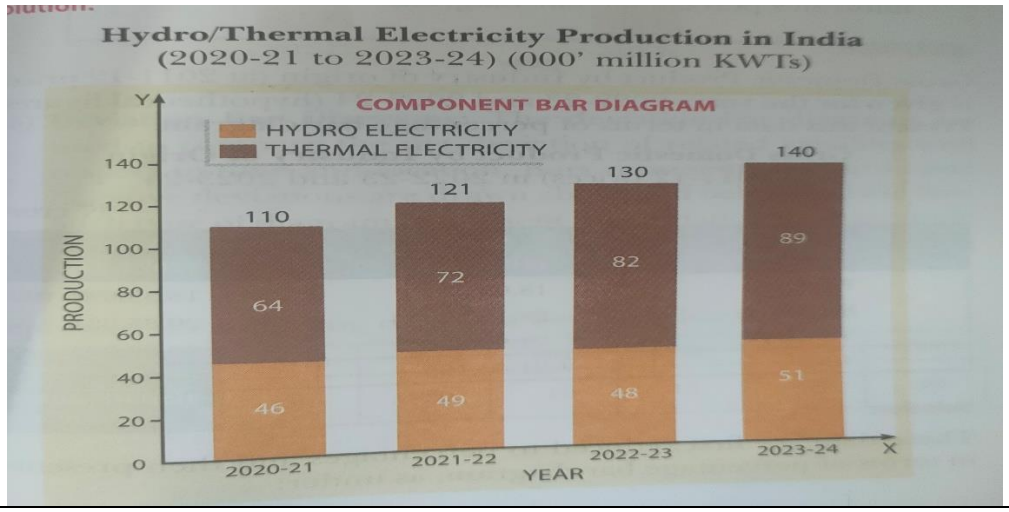
Q. NO	SECTION A – STATISTICS	MARKS
1	A: a	1
2	A: a	1
3	A: a	1
4	A: d	1
5	A: d	1
6	A: d	1
7	A: b	1
8	A: c	1
9	A: b	1
10	A: b	1
11		3

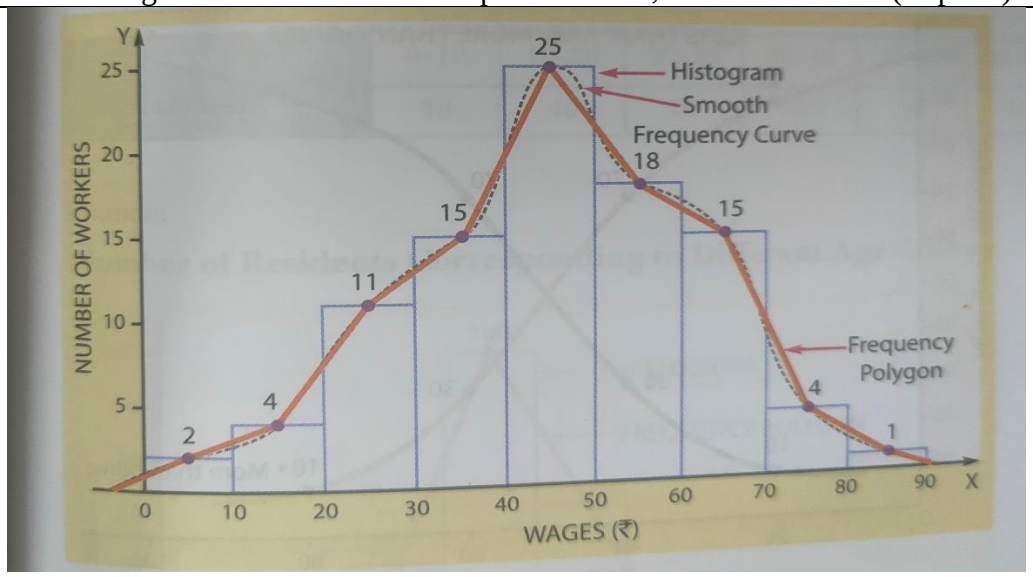
12		3
13		4

Class Interval	Frequency (f)	Midpoint (x)	f × x
0 – 10	6	5	30
10 – 20	8	15	120
20 – 30	11	25	275
30 – 40	16	35	560
40 – 50	14	45	630
50 – 60	8	55	440
60 – 70	5	65	325
70 – 80	2	75	150
Total (Σf = 70)			Σ(f×x) = 2530

$$\text{Mean} = \frac{\sum(f \times x)}{\sum f}$$

$$\text{Mean} = \frac{2530}{70} = 36.14$$



14	No. of persons 12 18 s. **Age (Year) / No. of persons (f) / c.f.** 0 – 10 / 12 / 12 10 – 20 / 18 / 30 20 – 30 / 35 / 65 30 – 40 / 42 / 107 40 – 50 / 50 / 157 50 – 60 / 45 / 202 60 – 70 / 20 / 222 70 – 80 / 8 / 230 Σf = 230 Median = $\left(\frac{N}{2}\right)^{th}$ item = $\frac{230}{2}$ = 115th item, which lies in the class 40–50 By Interpolation: $\text{Median} = l_1 + \frac{\frac{N}{2} - \text{c.f.}}{f} \times i$ $= 40 + \frac{115 - 107}{50} \times 10$ $= 40 + \frac{8}{50} \times 10 = 40 + \frac{8}{5}$ $= 40 + 1.6 = 41.6$	4
15	a. Positive correlation – increase in fertilizer use leads to increase in crop yield. (Explain) b. Negative correlation – as temperature rises, blanket use falls. (Explain)	4
16	 	6

17		6

2	-2	30	-2.5	4	6.25	5
4	-1	40	-1.5	1	2.25	1.5
6	0	55	0	0	0	0
8	1	65	1	1	1	1
10	2	80	2.5	4	6.25	5

$$r = \frac{\Sigma dx'dy' - \frac{(\Sigma dx') \times (\Sigma dy')}{N}}{\sqrt{\Sigma dx'^2 - \frac{(\Sigma dx')^2}{N}} \times \sqrt{\Sigma dy'^2 - \frac{(\Sigma dy')^2}{N}}}$$

$$r = \frac{5(12.5) - (0)(-0.5)}{\sqrt{[5(10) - 0^2][5(15.75) - (-0.5)^2]}}$$

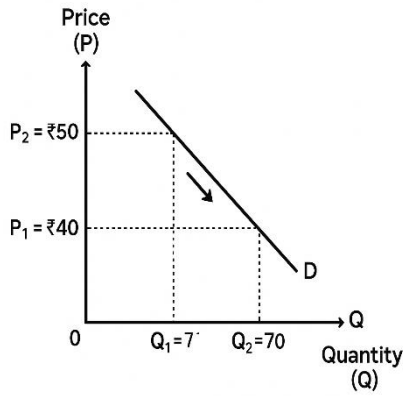
$$r = \frac{62.5}{\sqrt{(50)(78.5)}}$$

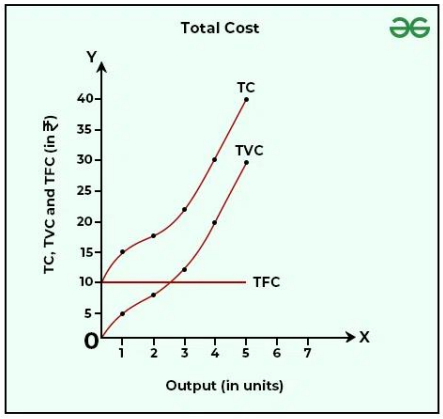
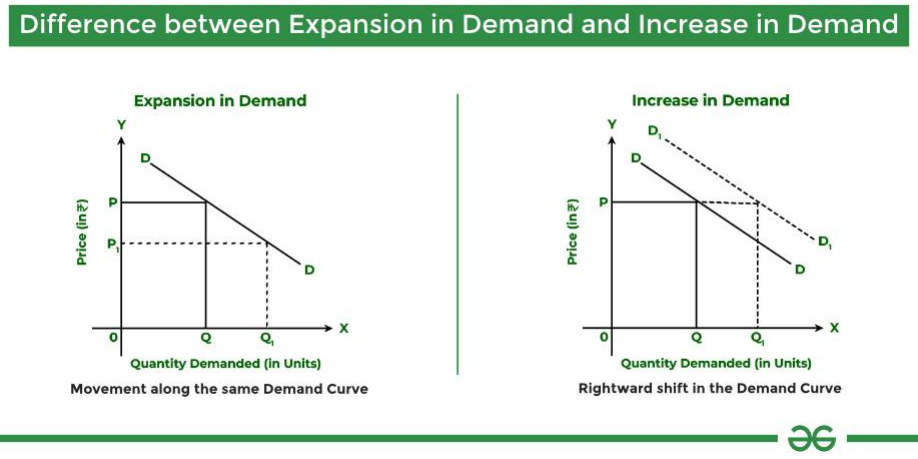
$$r = \frac{62.5}{\sqrt{3925}} = \frac{62.5}{62.66} \approx 0.998$$

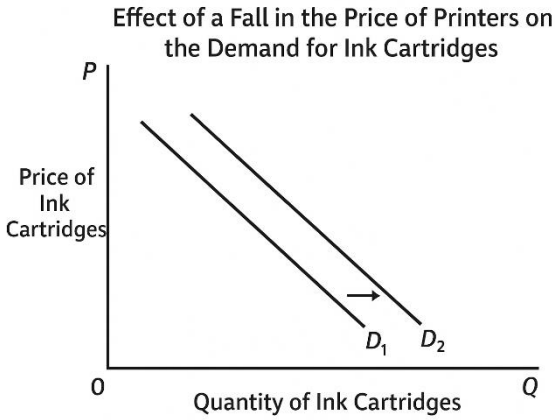
$$\boxed{r = +0.998}$$

A.M for X = 6/2
A.M for Y = 55/10
N = 5
Total:
0, 12.5, -0.5, 10, 15.75
There is a very high positive correlation between hours studied and marks obtained — meaning as the number of study hours increases, marks also increase almost perfectly.

	SECTION B – MICRO ECONOMICS	
18	A: d	1
19	A: b	1
20	A: a	1
21	A: b	1
22	A: c	1
23	A: a	1
24	A: c	1
25	A: a	1
26	A: b	1

27	A: c	1
28	Consumer equilibrium can be explained visually as the point where the indifference curve and the budget line meet. This happens when the slope of both the indifference curve and the consumer's budget line are equal so In this diagram consumer equilibrium will be on point "Q". Conditions are: 1. The slope of the indifference curve (representing the MRS) must be equal to the slope of the budget line (representing the price ratio). 2. Indifference Curve is Convex to the Origin: The indifference curve must be convex to the origin at the point of tangency for a stable equilibrium.	3
29	In a perfectly competitive market, if existing firms are earning abnormal (supernormal) profits in the short run, it attracts new firms to enter the market because there are no barriers to entry. Increase in Market Supply: Entry of new firms increases the total supply of the product in the market. Fall in Market Price: As supply increases, the market price falls. Reduction in Profits: The fall in price reduces the revenue of existing firms, causing their abnormal profits to shrink. Long-Run Equilibrium: Entry continues until firms earn normal profit.	3
30	a. The law illustrated: Law of Demand. b. Explanation: According to the Law of Demand, other things being equal, when the price of a commodity rises, its quantity demanded falls, and when the price falls, quantity demanded rises. Here, as the price of sugar increased, customers bought less. c. Type of change in demand: Contraction of demand (movement along the demand curve). d. Diagram:  	4
31	Total Cost is the sum of Total Variable Cost and Total Fixed Cost. So, TC curve is the vertical summation of TFC and TVC curves. Explain TC = TFC+TVC	4

		
32	i. The market structure described in the case is 'Perfect Competition'. ii. Two features of this market structure shown in the situation are: a. Large number of buyers and sellers – Many farmers sell wheat in the market. b. Homogeneous products – All farmers produce identical wheat in terms of quality and price. (any other feature)	4
33	a.  An expansion of demand is a downward movement along a single demand curve caused by a decrease in the good's own price, resulting in an increase in the quantity demanded. An increase in demand is a rightward shift of the entire demand curve, showing a higher quantity demanded at every price level, and is caused by non-price factors like changes in income or the price of substitutes. b. Printers and ink cartridges are complementary goods because they are used together. An increase in the consumption of one leads to an increase in the demand for the other. When the price of printers falls, more people can afford to buy printers. As a result, the demand for printers increases. Since ink cartridges are required to use printers, the demand for ink cartridges also increases.	6



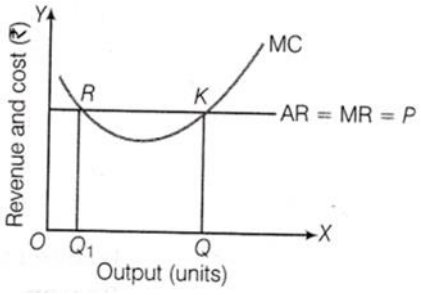
When the price of printers falls, the demand for ink cartridges increases, shifting the demand curve for ink cartridges to the right (from D1 to D2).

34

a. Producer's Equilibrium refers to that price and output combination, which brings maximum profit to the producer and profit declines as more is produced.

The conditions needed for the producer's equilibrium are,

- MC=MR
- MC is greater than MR after the MC = MR output level



b. A producer is someone who creates and supplies goods or services

Output (Q) (in units)	AR (₹)	TC (₹)	MC (₹) $MC_n = TC_n - TC_{n-1}$	MR (₹) $MR_n = TR_n - TR_{n-1}$
1	7	8	8	7
2	7	15	7	7
3	7	22	7	7
4	7	28	6	7
5	7	33	5	7
6	**7**	**40**	**7**	**7**
7	7	48	8	7

6