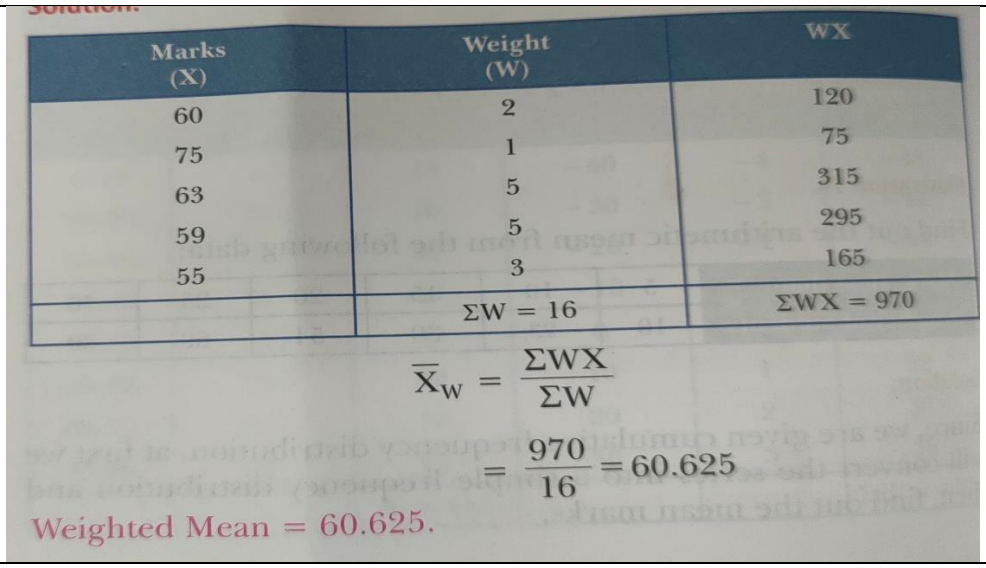
INDIAN SCHOOL AL WADI AL KABIR

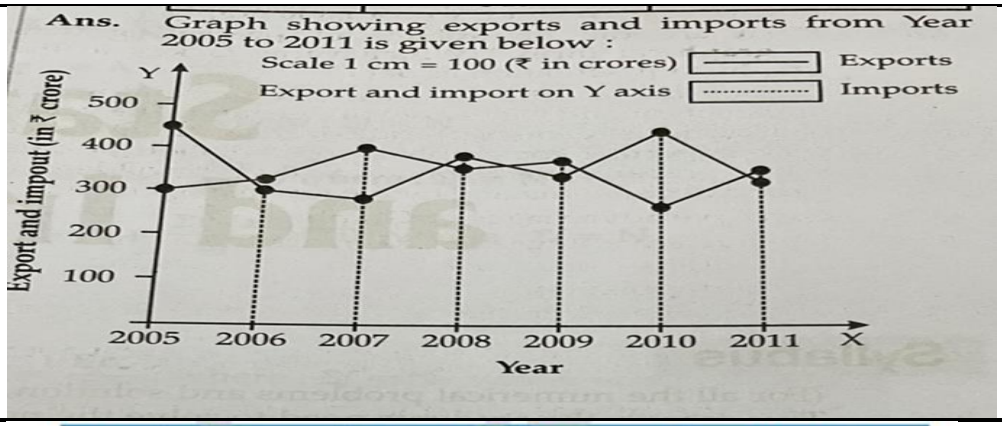
DEPARTMENT OF COMMERCE

ASSESSMENT 1 -XI 2025-26

ANSWER KEY-ECONOMICS (030)

Q. NO	SECTION A –STATISTICS	MARKS
1	A: a	1
2	A; b	1
3	A: b	1
4	A: d	1
5	A: c	1
6	A: b	1
7	A: b	1
8	A: a	1
9	A: b	1
10	A: 49	1
11	1. **Table Number**: A unique number for identification and easy reference, especially when multiple tables are present. 2. **Title**: A brief and clear statement that explains the content of the table, telling the reader what the data is about. 3. **Headings**: **Column Headings (Box Head)**: These are the captions or headings for the columns. **Row Headings (Stub)**: These are the captions for the rows. 4. **Body**: The main part of the table where the actual data is presented in cells, which are formed by the intersection of rows and columns. 5. **Prefatory Notes (Headnotes)**: An optional note, often placed below the title, that provides clarifying information such as the unit of measurement (e.g., 'in thousands'). 6. **Footnotes**: Notes at the bottom of the table that provide additional details, explain unusual data, or clarify specific entries within the table. 7. **Source Note**: A mandatory component that indicates the original source of the data, ensuring credibility and allowing for verification. (ANY THREE POINTS)	1+1+1

12		3
13	a. A measurable characteristic which takes different value at different points of time and in different circumstance is called a variable. Different variable varies differently and depending on the way they vary, they are broadly classified into two types. Discrete and Continuous variable. A discrete variable is one that can only take on a specific set of values, while a continuous variable is one that can take on any value within a certain range. The main difference between discrete and continuous variables is that discrete variables can be counted, while continuous variables can be measured. For example, the number of children in a family is a discrete variable, because it can only take on whole number values such as 0, 1, 2, etc. On the other hand, the height of a person is a continuous variable, because it can take on any value within a certain range, such as between 1 and 2 meters b. i. A frequency distribution is a representation, either in a graphical or tabular format, that displays the number of observations within a given interval. ii. Exclusive series is that series in which the upper limit is not included in that class and is included in upcoming class. The exclusive series is a type of continuous series. For example: - 0-110, 110-120, 120-130, 130-140, 140-150 we can see that upper limit of the class is included in the next class interval.	2+2

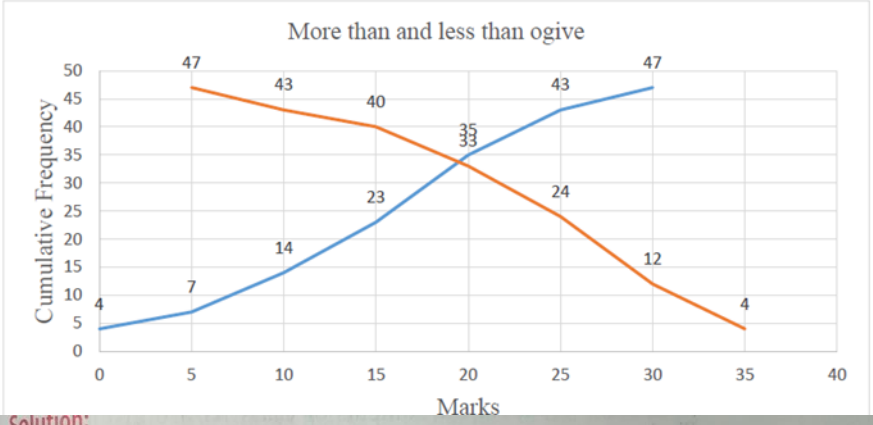
14	**Ans.** Graph showing exports and imports from Year 2005 to 2011 is given below :  	1+1+1+1
15		4

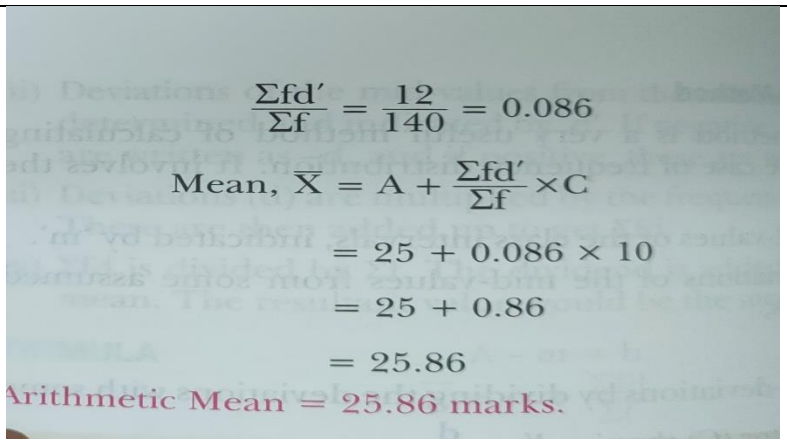
Marks (X)	Mid-value $\left(m = \frac{l_1 + l_2}{2}\right)$	Number of Students or Frequency (f)	Deviation (d = m – A) (A = 25)	Multiple of Deviation and Frequency (fd)
0–10	$\frac{0+10}{2} = 5$	20	5 – 25 = –20	20 × – 20 = – 400
10–20	$\frac{10+20}{2} = 15$	24	15 – 25 = –10	24 × –10 = – 240
20–30	$\frac{20+30}{2} = 25$	40	25 – 25 = 0	40 × 0 = 0
30–40	$\frac{30+40}{2} = 35$	36	35 – 25 = +10	36 × +10 = + 360
40–50	$\frac{40+50}{2} = 45$	20	45 – 25 = +20	20 × + 20 = + 400
		Σf = 140		Σfd = 120

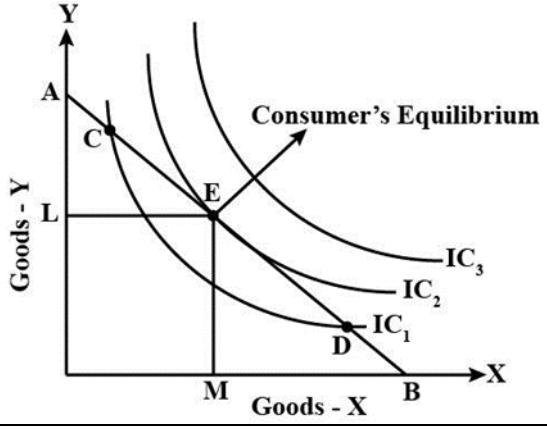
$$\overline{X} = A + \frac{\Sigma fd}{\Sigma f}$$

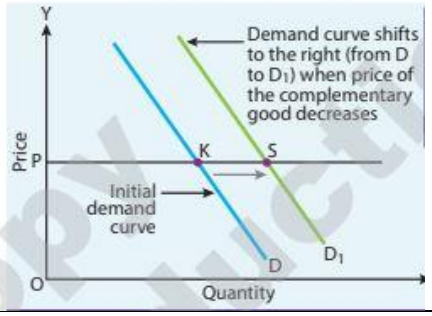
$$= 25 + 0.86$$

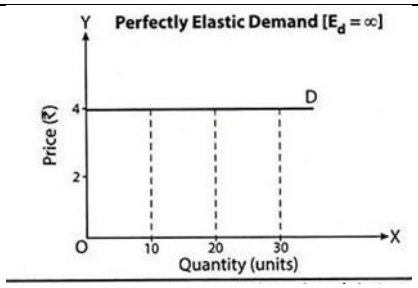
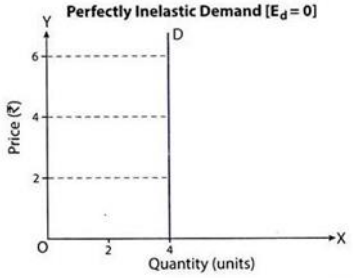
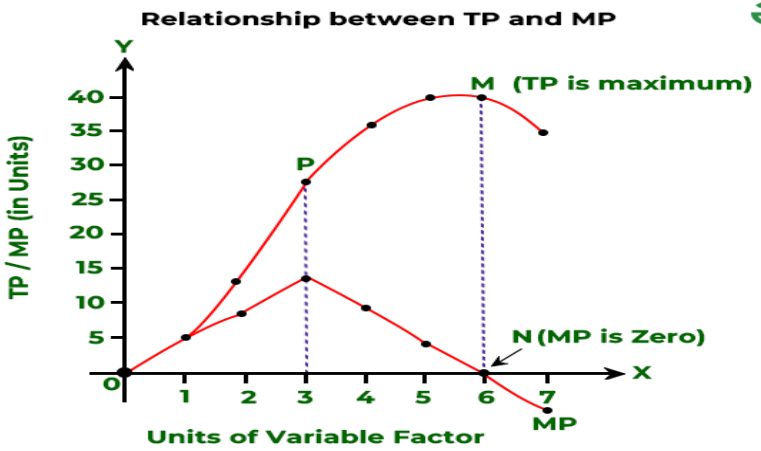
$$= 25.86$$

16	limit of the first-class interval. <table><tr><th>Class</th><th>Workers</th><th>More than ogive</th><th>CF</th><th>less than ogive</th><th>CF</th><th>More than ogive</th></tr><tr><td>(0-5)</td><td>4</td><td>0</td><td>4</td><td>5</td><td>47</td><td>0</td></tr><tr><td>(5-10)</td><td>3</td><td>5</td><td>7</td><td>10</td><td>43</td><td>5</td></tr><tr><td>(10-20)</td><td>7</td><td>10</td><td>14</td><td>15</td><td>40</td><td>10</td></tr><tr><td>(15-20)</td><td>9</td><td>15</td><td>23</td><td>20</td><td>33</td><td>15</td></tr><tr><td>(20-25)</td><td>12</td><td>20</td><td>35</td><td>25</td><td>24</td><td>20</td></tr><tr><td>(25-30)</td><td>8</td><td>25</td><td>43</td><td>30</td><td>12</td><td>25</td></tr><tr><td>(30-35)</td><td>4</td><td>30</td><td>47</td><td>35</td><td>4</td><td>30</td></tr></table> 	2+2+1+1
17	Solution: (Assumed Mean, A = 25) <table><tr><th>Marks</th><th>Mid-value $\left(m = \frac{l_1 + l_2}{2}\right)$</th><th>Number of Students or Frequency (f)</th><th>Deviation (d = m – A) (A = 25)</th><th>Step-deviation (d′) $\left(d' = \frac{m - A}{C}\right)$ (C = 10)</th><th>Multiple of Step-deviation and Frequency (fd′)</th></tr><tr><td>0–10</td><td>5</td><td>20</td><td>–20</td><td>–2</td><td>– 40 } – 64</td></tr><tr><td>10–20</td><td>15</td><td>24</td><td>–10</td><td>–1</td><td>– 24</td></tr><tr><td>20–30</td><td>25</td><td>40</td><td>0</td><td>0</td><td>0</td></tr><tr><td>30–40</td><td>35</td><td>36</td><td>+10</td><td>+1</td><td>+ 36 } 76</td></tr><tr><td>40–50</td><td>45</td><td>20</td><td>+20</td><td>+2</td><td>+ 40</td></tr><tr><td></td><td></td><td>Σf = 140</td><td></td><td></td><td>Σfd′ = 12</td></tr></table>	1+1+1+1+1+1

		
	SECTION B – MICRO ECONOMICS	
18	A: b	1
19	A; b	1
20	It means that the consumer prefers a particular bundle over the other bundle if the former consists of at least more of one good and no less of the other good.	1
21	A: d	1
22	A: b	1
23	A: a	1
24	A: b	1
25	A: a	1
26	A: a	1
27	A: b	1
28	Opportunity cost describes the cost of making a choice, in terms of the value of the next best alternative that is forgone. When some of the given resources are shifted from use 1 to use 2, the gain of output in use 2 is accomplished with a loss of output in use 1. Loss of output in use 1 is the opportunity cost of gain of output in use 2. The given table illustrates how opportunity cost arises.	3

	<table><tr><th>Production Possibilities</th><th>Production of Goods-X (Units)</th><th>Production of Goods-Y (Units)</th><th>Opportunity Cost of producing an additional unit of Goods-X</th></tr><tr><td>A</td><td>0</td><td>20</td><td>–</td></tr><tr><td>B</td><td>1</td><td>18</td><td>2</td></tr><tr><td>C</td><td>2</td><td>15</td><td>3</td></tr><tr><td>D</td><td>3</td><td>11</td><td>4</td></tr></table> The table shows that at point B, production of an additional unit of good X leads to a reduction of good Y by 2 units. Likewise, at point D, opportunity cos of an additional unit of good X is estimated to be 4 units of good Y. At point C another unit of good X, leads to a higher opportunity cost of 3 units of good Y Likewise, at point D, opportunity cost of an additional unit of good X is estimated to be 4 units of good Y.	
29	Indifference curve analysis: An indifference curve depicts all the combinations of two goods that provide the consumer with equal satisfaction. When the Budget line is tangent to the indifference curve, a consumer will be in equilibrium, according to the indifference curve approach. (Draw n Explain the graphs) 	3
30	a. Substitute goods: Pepsi n Cola – Explain. b.	4

	Use a diagram and economic theory to analyse the impact on the demand for cars in India. s. When the prices of petrol and diesel are cut, the demand for cars is expected to rise. Because car and petrol are complementary goods. It implies that demand curve for cars will shift to the right. More cars are demanded at their existing price. Fig. 17 illustrates this situation. Initially PK cars were purchased. As price of petrol and diesel decreases, PS cars are purchased even when price of cars is constant. Accordingly, demand curve for cars shifts forward from D to D_1.  	
31	A: b c b c	4
32	The production function of a firm depicts the relationship between the inputs used in the production process and the final output. It specifies how many units of different inputs are needed in order to produce the maximum possible output. In short run, a firm cannot change all the inputs, which means that the output can be increased (decreased) only by employing more (less) of the variable factor (labour). It is generally assumed that in short run a firm does not have sufficient or enough time to vary its fixed factors such as, installing a new machine, etc. Hence, the output levels vary only because of varying employment levels of the variable factor. In long run, a firm can change all its inputs, which means that the output can be increased (decreased) by employing more (less) of both the inputs − variable and fixed factors. In the long run, all inputs (including capital) are variable and can be changed according to the required levels of output	4
33	a. 1. The demand for textbooks is inelastic because even if the price rises the demand will never change. b. The demand for cars is elastic as it is a luxury good so when the price of a car goes up,the demand for it comes down b. New Quantity (Q_1) = 500 units | Rise in Price (ΔP) = ₹ 10 Original Quantity (Q) = 600 units | Original Price (P) = ₹ 30 Change in Quantity (ΔQ) = –100 units | New Price (P_1) = ₹ 40 Elasticity of Demand (ED) = ? Price Elasticity of demand $(ED) = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q} = \frac{-100}{10} \times \frac{30}{600} = (-)0.5$ ED = (–)0.5 (Demand is inelastic as ED < 1) Negative sign indicates the inverse relationship between price and quantity demanded. The horizontal demand curve parallel to X-axis implies that the elasticity of demand is infinite	6

	 The demand curve parallel to Y-axis implies that the elasticity of demand is Zero 	
34	TP: Total output produced by a firm with gvn inputs at a particular point of time. AP = TP/Var Input MP: Addition to TP bcos of using one extra unit of variable input. ii. a.TP rises at an increasing rate, then increases at a decreasing rate, then reaches a max and then starts falling. b.MP rises, then falls, reaches zero when TP is max and then becomes –ve.  iii.	6