

CLASS-XI
ECONOMICS (2022-23)

Time allowed: 3 Hrs

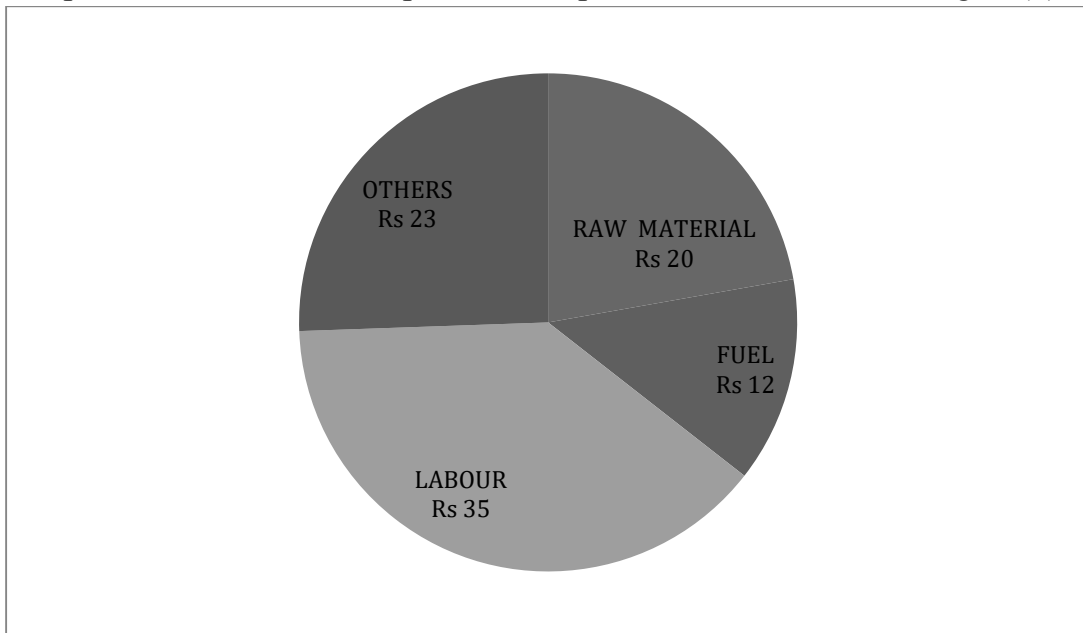
Maximum Marks: 80

General Instructions:

1. All questions in both the sections are compulsory.
2. Marks for questions are indicated against each question.
3. Question Nos. 1-10 and 18-27 are very short answer questions carrying one mark each. They are required to be answered in one sentence each.
4. Question Nos. 11-12 and 28-29 are short answer questions carrying three marks each. Answers to them should normally not exceed 60 words each.
5. Question Nos. 13-15 and 30-32 are also short answer questions carrying four marks each. Answers to them should normally not exceed 70 words each.
6. Question Nos. 16-17 and 33-34 are long answer questions carrying six marks each. Answers to them should normally not exceed 100 words each.

Part – A

1. The pie chart shows the component of expenditure for the cost of sugar. (1)



What will be the angle representing the cost of raw material of sugar?

- A. 80°
- B. 52°
- C. 84°
- D. 25°

2. The most suitable average for qualitative measurement is (1)
- Arithmetic mean
 - Median
 - Mode
 - Weighted mean
3. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below: (1)

Assertion(A): A low value of r (close to zero) always indicates a weaker relation between the two variable X and Y.

Reason (R): A low value of r (close to zero) indicate a weak linear relation but there may be a non linear relation too.

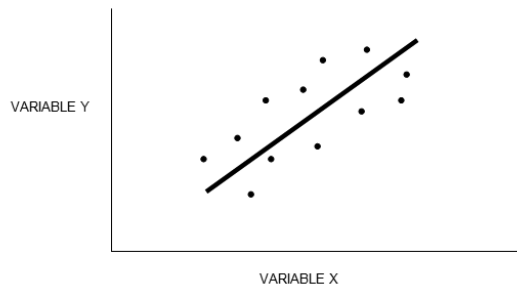
Alternatives:

- Both Assertion (A) & Reason (R) are True & Reason (R) is the correct explanation of Assertion (A)
- Both Assertion (A) & Reason (R) are True & Reason (R) is not the correct explanation of Assertion (A).
- Assertion (A) is True but Reason (R) is False.
- Assertion (A) is False but Reason (R) is True.

OR

Diagram given below represents _____ degree of correlation between the variable X and Y.

Choose the correct alternative.



- Perfect positive correlation
 - High degree of negative correlation
 - Perfect negative correlation
 - Positive correlation
4. Choose the correct alternative to find the combined mean: (1)
- $\frac{N_1\bar{X}_1 + N_2\bar{X}_2}{N_1 + N_2}$
 - $\frac{N_1\bar{X}_1 - N_2\bar{X}_2}{N_1 + N_2}$
 - $\frac{N_1\bar{X}_1 + N_2\bar{X}_2}{N_1 \times N_2}$

$$D. \frac{N_1\bar{X}_2 + N_2\bar{X}_1}{N_1 + N_2}$$

5. Read the following statements carefully and choose the correct alternative: (1)

1. Median can be derived graphically by histogram.
2. Median can be derived graphically by less than ogive.
3. Median can be derived graphically by frequency polygon.
4. Median can be derived graphically by both the ogive.

Alternatives:

Choose the correct alternative:

- A. 1 and 2 are correct
- B. 2 and 4 are correct
- C. 2 and 3 are correct
- D. 1 and 4 are correct

6. Read the following statements carefully: (1)

Statement 1 - Correlation measures covariance, not causation.

Statement 2 - If $r = 0$, There is no relationship between the two variables.

Choose the correct alternative:

- A. Statement 1 is true and statement 2 is false.
- B. Statement 1 is false and statement 2 is true
- C. Both statements 1 & 2 are true.
- D. Both statements 1 & 2 are false.

7. Mean marks obtained by 200 students are 80. Later on, it was found one value was read as 166 instead of 106. The correct Arithmetic mean of the data will be _____ . (1)

- A. 79.00
- B. 70.90
- C. 77.90
- D. 79.70

OR

Weighted mean of three values 10, 20, 30 will be _____ if they are given 1,2,3 as weights respectively.

Choose the correct alternative:

- A. 22.3
- B. 23.2
- C. 23.3
- D. 33.2

8. In a class of 15 students, 5 students failed in an examination. The marks of the students who cleared the examination are given below, choose the median marks of the passed students from the following alternatives.

STUDENT	1	2	3	4	5	6	7	8	9	10
MARKS	8	7	6	4	6	5	6	5	7	8

Alternatives

- A. 5
- B. 4
- C. 6
- D. 8

9. Salary of Rahul was Rupees 10,000 in base year. The current CPI is 225 and his current salary is 21000.

How much salary should Rahul earn to maintain the same standard of living as of base year? (1)

- A. 21,500
- B. 22,500
- C. 23,500
- D. 24,500

OR

Which of the following statements is correct about average prices if the price index is 110?

- A. The prices have increased by 10 per cent.
- B. The prices have increased by 110 per cent.
- C. The prices have decreased by 10 per cent.
- D. The prices have decreased by 110 per cent.

10. If the mean of a series is 38 and mode is 44. Median of the data will be _____. (1)

- A. 40
- B. 45
- C. 46
- D. 48

11. Statistics is an indispensable tool for economists. Elaborate. (3)

OR

Identify the features of statistics as statistical data from the following statements.

- A. Aditya has rupees hundred in his pocket is not an example of statistics.
- B. The teacher counted the number of girls in a class while the number of people who witnessed the Republic Day parade were approximated to be 1 lakh.
- C. The population of India is rapidly increasing.

12. In classified data an individual observation has no significance in further statistical calculation. Validate the given statement with the help of suitable example. (3)
13. Suppose you want to know about the popularity of soccer player among the school students. For this, you will have to enquire from a large number of school students to collect desired information.
- A. From the given information, identify the source of data involved in drawing such information.
- B. State and explain three different methods of collecting such data. (4)
14. A school organized an inter school competition for two consecutive years. In 2018, out of a total of 1000 students, 775 participated in an Inter school competition. The number of girls were 125, out of which 100 did not participate. In 2019, the number of students participated in inter school competition were 850 out of which 800 were boys. The number of non participants was 190 among which 75 were girls. Tabulate the above information. (4)
15. Calculate the weighted average price index from the following information: (4)
- A. by taking current year's quantity as weight
- B. by taking base year's quantity as weight

COMMODITY	BASE YEAR		CURRENT YEAR	
	P	Q	P	Q
RICE	10	6	15	8
WHEAT	25	10	40	20
OIL	30	15	45	12
PULSES	15	20	30	15
SUGAR	20	8	25	6

OR

Elucidate precautions to be taken while construction of an index number?

16. A. Derive the median graphically using less than Ogive.

MORE THAN	CF
More than 60	9
More than 50	11

More than 40	14
More than 30	21
More than 20	25

A. Prove that sum of the deviations from arithmetic mean is always zero. (4+2)

17. Examine whether there is any correlation between years of schooling of farmers and annual yield on the basis of following data, using Karl Pearson's method and interpret the result. (6)

Years of schooling	1	3	4	5	7	8
Annual yield	2	6	8	10	14	16

OR

Seven contestants in a poetry competition are judged by two judges in the following order. Calculate rank coefficient of correlation and also interpret the results.

JUDGE 1	12	10	8	10	11	9	15
JUDGE 2	26	20	24	20	18	22	20

Part – B (Micro Economics)

18. Which of the following statement is normative? (1)

- A. People work harder if the wage is higher.
- B. Large government deficits cause an economy to grow more slowly.
- C. Reducing inequality should be a major priority for mixed economy.
- D. Printing too much money cause inflation.

19. Mr. John derives TU of 10 utils after having 4 burgers and TU of consuming 5 burgers is 9. What is the MU of Mr. John for the 5th burger? (1)

- A. +1 Util
- B. -1 Util
- C. 0 Util
- D. 9 Util.

OR

Marginal Utility of a good is :

- A. Always Positive

- B. Always Negative
- C. Initially positive then negative
- D. Initially Negative then Positive

20. Choose the Correct Pair from the following. (1)

Column 1	Column 2
1. Law of DMU	1. Point of Satiety
2. Marginal Utility	2. Fundamental Psychological Law
3. MRS	3. Slope of Indifference Curve
4. Indifference Map	4. $\Delta TU / \Delta Q$

Alternatives :

- A. (1,1)
- B. (2,2)
- C. (4,4)
- D. (3,3)

OR

TU is _____ at the point of Satiety. (Fill in the blank)

- A. Maximum
- B. 0
- C. Infinity
- D. Minimum

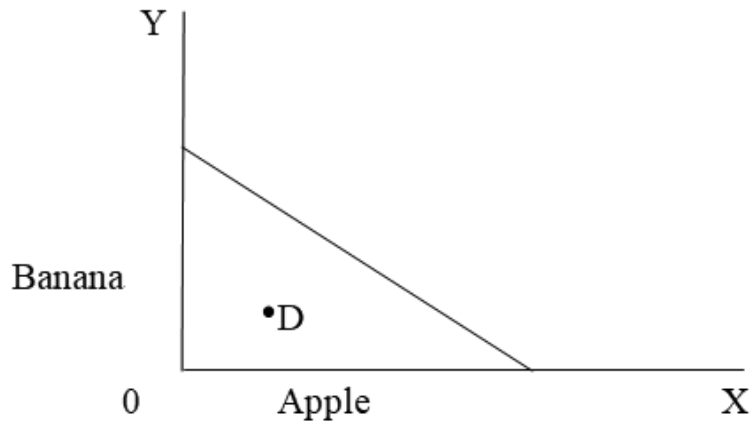
21. There are only two consumer (x and y) in a market and their demand function are given as

$$Q_x = 30 - 2P \quad Q_y = 40 - 3p$$

Choose the market demand at price Rs. 10/- per unit. (1)

- A. 30
- B. 20
- C. 40
- D. 10

22. In the following figure point 'D' represents _____. (1)



- A. Bundle which cost exactly the consumer's income.
- B. Bundle which cost less than the consumer's income
- C. Bundle which is unattainable
- D. Both B and C.

23.

Read the following statements carefully: (1)

Statement 1 - When price falls with rise in output then both AR and MR curves slope upwards.

Statement 2 - When firms can increase their volumes of sales only by decreasing the price, then AR curve is steeper than MR curve.

Choose the correct alternative:

- A. Statement 1 is true and statement 2 is false.
- B. Statement 1 is false and statement 2 is true
- C. Both statements 1 & 2 are true.
- D. Both statements 1 & 2 are false.

24. Read the following statements carefully: (1)

Statement 1: Every producer aims to maximize the total profits and profits increase as long as MR exceeds MC.

Statement 2 : At producer's equilibrium, AR should be at least equal to AVC.

Choose the correct alternative:

- A. Statement 1 is true and statement 2 is false.
- B. Statement 1 is false and statement 2 is true
- C. Both statements 1 & 2 are true.
- D. Both statements 1 & 2 are false.

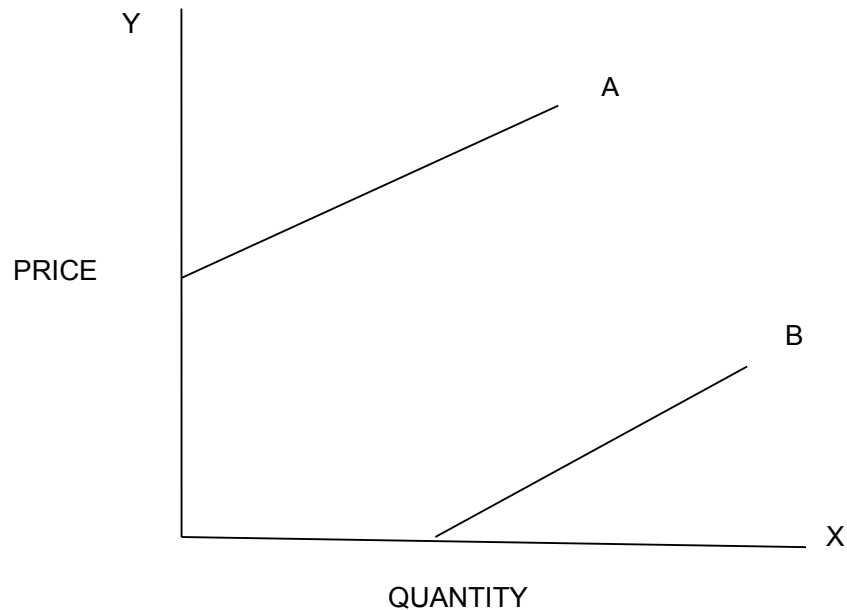
Q. 25. The Coefficient of Es of a commodity is 0.4. What percentage change in supply will take place if its price rises by 20%. (1)

- A. 10%
- B. -8%
- C. 8%

D. -10%

OR

Identify the Elasticity of supply of curve A and B from the following diagram:



- A. A ($E_s > 1$), B ($E_s < 1$)
- B. A ($E_s < 1$), B ($E_s > 1$)
- C. A ($E_s > 1$), B ($E_s < 1$)
- D. A ($E_s < 1$), B ($E_s < 1$)

26. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below: (1)

Assertion (A) : There is absence of abnormal profits and abnormal losses in the short run in case of perfect competition.

Reason (R) : Under perfect competition, each firm faces a perfectly elastic demand curves.

Alternatives:

- A. Both Assertion (A) & Reason (R) are True & Reason (R) is the correct explanation of Assertion (A)
- B. Both Assertion (A) & Reason (R) are True & Reason (R) is not the correct explanation of Assertion (A).
- C. Assertion (A) is True but Reason (R) is False.
- D. Assertion (A) is False but Reason (R) is True.

27. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below: (1)

Assertion (A) : Minimum wage legislation is an example of imposition of price floor.

Reason (R) : Under Minimum wage legislation, minimum wages are set below the equilibrium wages.

Alternatives:

- A. Both Assertion (A) & Reason (R) are True & Reason (R) is the correct explanation of Assertion (A)
- B. Both Assertion (A) & Reason (R) are True & Reason (R) is not the correct explanation of Assertion (A).
- C. Assertion (A) is True but Reason (R) is False.
- D. Assertion (A) is False but Reason (R) is True.

28. Economic slowdown due to Covid has adversely affected demand for Indian Exports. What will be its effect on the production possibility frontier? (3)

OR

Why does the problem of choice arise for producer and consumers?

29. In order to attract tourism to Jammu, Indian Government has recently launched special train Vande Bharat from Delhi to Katra, which has made journey comfortable and cheaper, compared to air travel.

Comment how will the launch of this train effect the demand for the air travel. Use diagram and schedule. (3)

30. If consumer consumes only two goods, for the consumer to be in equilibrium, why MRS between the two goods must be equal to the ratio of prices of these two goods. Is it enough to ensure equilibrium? (4)

OR

Giving suitable reason, state whether the following statements are true or false.

- a) Indifference curve to the right in indifference map always shows higher utility level.
- b) Marginal rate of substitution increases as we move downward along the indifference curve.

31. The demand curve of a commodity is expressed as $D_x = 40 - 2p$. If slope of demand curve is given to be (-2). (4)

- a) Calculate price elasticity of demand for the commodity when price of the commodity is Rs. 5/- unit.
- b) If price rises to Rs. 6/- unit. Calculate the price elasticity of demand using expenditure method.

32. Government of India has reduced the custom duty on the import of lithium, a vital

component for batteries used for electronic vehicles. How does this effects the equilibrium price of the electronic vehicles in India. Explain the chain effects. (4)

33. A. What type of changes take place in TP and MP when there are increasing and diminishing returns to a factor?

B. Differentiate between returns to a factor and returns to scale. (3+3)

OR

Giving suitable reason state whether the following statements are True or false:

A. Can AP rise when MP is falling?

B. Average Revenue is always equal to Price.

C. A rational producer always operates in the first phase of production. (2+2+2)

34. Recently Times of India covered a real life story of a budding entrepreneur, Virat an engineering graduate who has launched his company Virat Engineering, a transportation venture. He purchased a goods carrier using partly his own saving Rs. 5,00,000 and partly by borrowing money Rs. 4,00,000 from bank at interest rate of @ 10% per annum. He hires a driver to drive the carrier and salary of driver is Rs. 15,000 per month(fixed), taken an office on rent for Rs. 8,000 per month. He also incurred the other expenses electricity bill Rs. 50,000, Telephone Bill Rs. 10,000. At the end of fiscal year, he found that both the average and marginal costs has increased so he immediately arranged meeting to form strategies to increase profit and reduce cost of the company.

i) Calculate explicit and implicit cost.

ii) Fill in the blank. (3+3)

OUTPUT (UNIT)	1	2	3	4	5	6
AC	12	10	_____	10.5	11	_____
MC	_____	_____	10	_____	_____	17

ECONOMICS 2022-23
MARKING SCHEME / HINTS TO SOLUTIONS

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

TIME 3 HRS

M.M. 80

Q. No	Value points	Marks	Total Marks
1.	(A) 80°	1	1
2.	(B) Median	1	1
3.	(B) Both Assertion (A) & Reason (R) are True & Reason (R) is not the correct explanation of Assertion (A). OR (D) Positive correlation	$\frac{1}{2}$ $\frac{1}{2}$	1
4.	A. $\frac{N_1\bar{X}_1 + N_2\bar{X}_2}{N_1 + N_2}$	1	1
5.	(B) 2 and 4 are correct	1	1
6.	(C) Both statements 1 & 2 are true.	1	1
7.	(D) 79.70 OR (C) 23.3		
8.	(C) 6	1	1
9.	(B) 22500 OR (A) The prices have increased by 10 per cent.	$\frac{1}{2}$ $\frac{1}{2}$	1

10.	<p>(A) Median = 40 Mode = 3 Median - 2 Mean 44 = 3 Median - 2(38) 44 + 76 = 3 Median 120 = 3 Median Median = 40</p>	<p>$\frac{1}{2}$ $\frac{1}{2}$</p>	
11.	<ul style="list-style-type: none"> • It enables an economist to present economic facts in a precise and definite form. • It helps in condensing mass data into few numerical measures. • It is used in finding relationship between different economic factors. <p style="text-align: center;">OR</p> <ol style="list-style-type: none"> 1. Aggregate of facts 2. Enumeration and estimation 3. Numerically expressed. 	<p>1 1 1 1 1 1</p>	<p>3</p>
12.	<p>There is a loss of information in classifying raw data though much is gained by summarizing it as a classified data. Once the data are group in classes, an individual observation has no significance in further statistical calculation.</p> <p>For example : In class 20 - 30 contains six observations 25,20,25,22,25 and 28. All the values in the class assumed to be equal to the middle value of the class interval that is 25. Thus the use of middle value instead of the actual values of the observation in the statistical methods involves considerable loss of information.</p>	<p>1 $\frac{1}{2}$ 1 $\frac{1}{2}$</p>	<p>3</p>
13.	<p>A. Primary source of data B. Three sources of collecting primary data:</p> <ol style="list-style-type: none"> 1. Personal interviews - This method is used when the researcher has to accept all the members the investigator conduct face to face interview with respondents. 2. Mailing questionnaires - When the data in a survey are collected by mail the questionnaire is sent to each and every individual by mail with the request to complete and return it by a given date. 3. Telephonic interview - In our telephonic interview the investigator asked questions over the telephone. They are cheaper than the personal interviews and can be conducted in shorter time. 	<p>1 1 1 1</p>	<p>4</p>

14.

Table number I
Table showing the number of students in inter school competition
(Data is for 2018 and 2019)

	2018			2019		
	Participants	Non-Participants	Total	Participants	Non-Participants	Total
BOYS	750	125	875	800	115	915
GIRLS	25	100	125	50	75	125
TOTAL	775	225	1000	850	190	1040

Footnote :
Source :

 $\frac{1}{2}$

3

 $\frac{1}{2}$

4

15.

COMMODITY	P ₀	Q ₀	P ₁	Q ₁	P ₀ Q ₀	P ₁ q ₀	P ₀ Q ₁	P ₁ Q ₁
Rice	10	6	15	8	60	90	80	120
Wheat	25	10	40	20	250	400	500	800
Oil	30	15	45	12	450	675	360	540
Pulses	15	20	30	15	300	600	225	450
Sugar	20	8	25	6	160	200	120	150
TOTAL					1220	1965	1285	2060

A. CURRENT YEARS QUANTITY AS WEIGHTS

$$Po1 = \frac{\sum P1Q1}{\sum PoQ1} * 100$$

$$= \frac{2060}{1285} * 100 = 160.3\%$$

B. BASE YEARS QUANTITY AS WEIGHTS

$$Po1 = \frac{\sum P1Qo}{\sum PoQo} * 100$$

$$= \frac{1965}{1220} * 100 = 161.06\%$$

OR

1. Purpose of index number
2. Items to be collected carefully
3. Base year should be a normal year
4. Choice of the formula
5. Collection of data should be by reliable method.
(With relevant explanation)

2

1

1

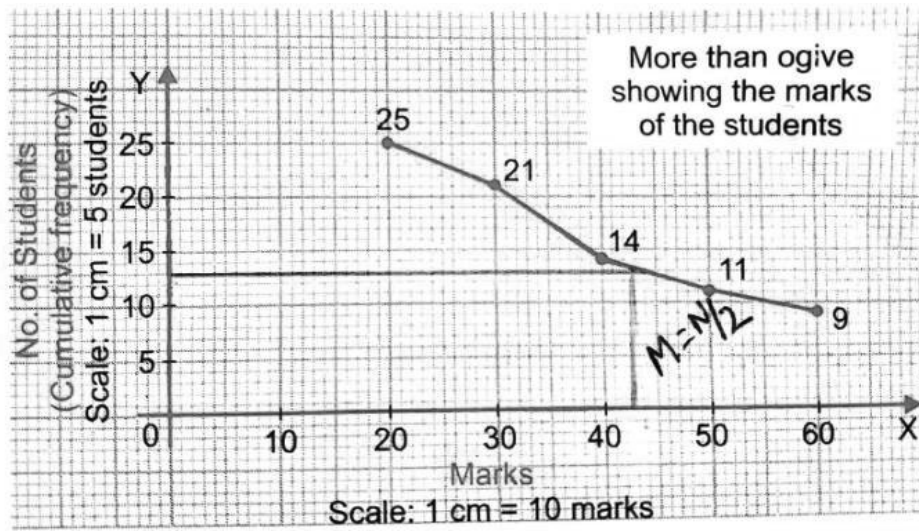
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1*4

4

16.

A.



Median = 45

B.

Actual mean = $(1+2+3+4+5) / 5 = 3$

X	Deviation from actual mean (3)
1	-2
2	-1
3	0
4	1
5	2

Sum of deviation = 0

1

4

2

1

2

6

17.

YEAR OF SCHOOLING (X)	dx (X-5)	dx ²	ANNUAL YIELD (Y)	dy (y-8)	dy ²	dx dy
1	-4	16	2	-6	36	24
3	-2	4	6	-2	4	4
4	-1	1	8	0	0	0
5	0	0	10	2	4	0
7	2	4	14	6	36	12
8	3	9	16	8	64	24
TOTAL	-2	34		8	144	64

2 ½

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

Here $\sum dx * dy = 64$; $\sum dx = -2$; $\sum dy = 8$; $N = 6$; $\sum dx^2 = 34$; $\sum dy^2 = 144$

$$r = \frac{(6 * 64) - (-2 * 8)}{\sqrt{(6 * 34) - (-2)^2} \times \sqrt{(6 * 144) - (8)^2}}$$

$$r = \frac{384 + 16}{\sqrt{200} \times \sqrt{800}}$$

$$r = \frac{400}{\sqrt{160000}}$$

$$r = \frac{400}{400}$$

$$r = 1$$

$$r = 1$$

There exists a perfect positive correlation between the two variables.

1

1 ½

1

6

JUDGE 1	JUDGE 2	R1	R2	D (R1- R2)	D ²
12	26	2	1	1	1
10	20	4.5	5	-0.5	0.25
8	24	7	2	5	25
10	20	4.5	5	-0.5	0.25
11	18	3	7	-4	16
9	22	6	3	3	9
15	20	1	5	-4	16
TOTAL				$\sum D = 0$	67.50

$$r_k = 1 - \frac{6 \left[\sum D^2 + \frac{1}{12}(m^3 - m) + \frac{1}{12}(m^3 - m) \right]}{N^3 - N}$$

$$r_k = 1 - \frac{6 \left[67.50 + \frac{1}{12}(2^3 - 2) + \frac{1}{12}(3^3 - 3) \right]}{7^3 - 7}$$

$$r_k = 1 - \frac{6 \left[67.50 + 0.5 + 2 \right]}{7^3 - 7}$$

$$r_k = 1 - \frac{6 \left[70 \right]}{336}$$

$$r_k = 1 - \frac{420}{336}$$

$$r_k = 1 - \frac{5}{4}$$

$$r_k = 1 - 1.25$$

$$r_k = -0.25$$

Interpretation : There exist moderate degree of negative correlation between the variables.

2

1

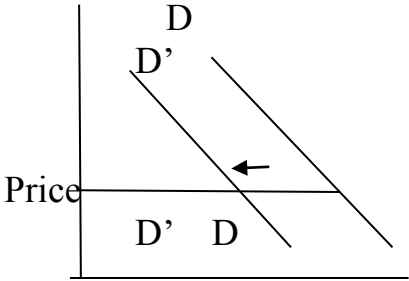
2

1

6

Section-B (Microeconomics)

18	(C) Reducing inequality should be a major priority for mixed economy.	1	1
19	(B) -1 Utils OR (C) Initially positive then negative.	1	1
20	(D) 3,3 OR (A) Maximum	1	1
21	(B) 20	1	1
22	(B) Bundle which cost less than the consumer's income.	1	1
23	(D) Both statements 1 & 2 are false.	1	1
24	(A) Statement 1 is True, and Statement 2 is False.	1	1
25	(C) 8% Or (A) A [$E_s > 1$], B [$E_s < 1$]	1	1
26	(D) Assertion (A) is False and Reason(R) is True	1	1
27	(C) Assertion (A) is True and Reason(R) is False	1	1

28	<p>There will be no effect on production possibility frontier of India. It is because PPF shows only what a country can potentially produce and not what is actually produce.</p> <p>Reduction in demand for Indian exports, may bring down output, therefore production will take place at a point somewhere in the economy will be below its potential.</p> <p style="text-align: center;">Or</p> <p>The Problem of choice arises for producers because of</p> <ul style="list-style-type: none"> ● Limited resources ● Having alternative uses <p>The Problem of choice arises for the consumers because</p> <ul style="list-style-type: none"> ● Their wants are unlimited ● Scarce means. 	1.5 1.5 1.5	3
29.	<p>Demand for air travel will fall as train travel is cheaper.</p>  <p style="text-align: center;">Demand for Air travel</p>	1 1	

Air Fare (Rs)	Demand (No. of passengers)
2500	50
2500	30

1

3

30	<p>For the consumer to be in equilibrium, MRS_{xy} must be equal to P_x/P_y.</p> <p>If $MRS_{xy} > P_x/P_y$, it means consumers is willing to sacrifice more units of good Y to have an additional unit of good X than what market requires. So he will consume more units of Good X as a result MRS starts falling till equality is attained i.e. $MRS_{xy} = P_x/P_y$.</p> <p>If $MRS_{xy} < P_x/P_y$, it means consumers is willing to sacrifice less units of good Y to have an additional unit of good X than what market requires. So he will consume more units of good Y as a result MRS starts increasing till equality is attained i.e. $MRS_{xy} = P_x/P_y$.</p> <p>The first condition that is $MRS_{xy} = P_x/P_y$ is not the only condition to ensure equilibrium. It is the second condition that is falling MRS that ensures the equality between the two.</p>	1	
		1	
		1	
		1	
	Or	2	
	(a) True, as combinations depicted by indifference curve towards right shows more units of either one good or both the goods which represent higher level of satisfaction. Since consumer is monotonic in his preferences, IC towards right shows higher utility.	2	4
	(b) False, As MRS tends to fall as we move downward along the indifference curve due to the operation of the law of Diminishing Marginal Utility.	2	

31	<p>(a) $E_d = \frac{1}{\text{slope}} \times \frac{P}{Q}$</p> $= \frac{1}{-2} \times \frac{5}{10}$ $= -0.25$ <p>(b) $P_0 = 5, Q_0 = 40 - 2 \times 5 = 30$ $P_1 = 8, Q_1 = 40 - 2 \times 8 = 24$</p> <table border="1" data-bbox="188 527 786 783"> <thead> <tr> <th>Price</th> <th>Quantity</th> <th>Total Expenditure</th> </tr> </thead> <tbody> <tr> <td>$P_0 = 5$</td> <td>$Q_0 = 30$</td> <td>150</td> </tr> <tr> <td>$P_1 = 8$</td> <td>$Q_1 = 24$</td> <td>192</td> </tr> </tbody> </table> <p>As both price and total expenditure move in same direction so $E_d < 1$.</p>	Price	Quantity	Total Expenditure	$P_0 = 5$	$Q_0 = 30$	150	$P_1 = 8$	$Q_1 = 24$	192	2	
Price	Quantity	Total Expenditure										
$P_0 = 5$	$Q_0 = 30$	150										
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32	<p>It leads to decrease in the price of Lithium, (Raw ,material to be used in the production of batteries) hence the supply increases and the supply curve shifts to the right.</p> <ul style="list-style-type: none"> ● It creates an excess supply at the original equilibrium price. ● It leads to competition among the sellers. ● Reduction in prices which leads to expansion in demand and contraction in supply. ● These changes continue till the new equilibrium is established. ● Equilibrium price falls and Equilibrium quantity rises. 	1										

33

- A. TP increases at increasing Rate and MP also rises due to
- Better utilisation of fixed factors
 - Increased efficiency of variable factors.
- TP increases at diminishing rate and MP starts declining due to
- factors of production are imperfect substitute of each other.
 - Over utilisation of fixe factors.

1 ½

B.

Returns to a factor	Returns to Scale
<ul style="list-style-type: none"> • Change in the TP when only one factors is increased, keeping all other factors fixed. 	<ul style="list-style-type: none"> • Change in output when all the factors inputs are change in the same proportions.
<ul style="list-style-type: none"> • There is no change in scale of production. 	<ul style="list-style-type: none"> • There is a change in scale of production.
<ul style="list-style-type: none"> • It applies in short Run 	<ul style="list-style-type: none"> • It applies in Long run.

1 ½

3

Or

- A. Yes, AP can rise when MP starts declining. It can happen as long as falling MP is more than AP. However, when MP becomes equal to AP, then further decline in MP will also reduce the AP.

2

B. True,

$$AR = \frac{TR}{output}$$

2

$$AR = \frac{Price \times Output}{Output}$$

2

$$AR = Price$$

- C. False, a rational producer always operates in the II phase as here TP reaches its maximum and MP of each variable factor is positive.

6

34.	<p>A. Explicit cost = 40,000 + 1,80,000 + 96,000 + 50,000 + 10,000 = 3,76,000</p> <p>Implicit cost = 5,00,000</p> <p>B.</p> <table border="1" data-bbox="290 275 1057 705"> <thead> <tr> <th data-bbox="290 275 459 485">OUTPUT T (UNIT)</th> <th data-bbox="459 275 553 485">1</th> <th data-bbox="553 275 638 485">2</th> <th data-bbox="638 275 732 485">3</th> <th data-bbox="732 275 852 485">4</th> <th data-bbox="852 275 946 485">5</th> <th data-bbox="946 275 1057 485">6</th> </tr> </thead> <tbody> <tr> <td data-bbox="290 485 459 606">AC</td> <td data-bbox="459 485 553 606">12</td> <td data-bbox="553 485 638 606">10</td> <td data-bbox="638 485 732 606"><u>10</u></td> <td data-bbox="732 485 852 606">10.5</td> <td data-bbox="852 485 946 606">11</td> <td data-bbox="946 485 1057 606"><u>12</u></td> </tr> <tr> <td data-bbox="290 606 459 705">MC</td> <td data-bbox="459 606 553 705"><u>12</u></td> <td data-bbox="553 606 638 705"><u>8</u></td> <td data-bbox="638 606 732 705">10</td> <td data-bbox="732 606 852 705"><u>12</u></td> <td data-bbox="852 606 946 705"><u>13</u></td> <td data-bbox="946 606 1057 705">17</td> </tr> </tbody> </table>	OUTPUT T (UNIT)	1	2	3	4	5	6	AC	12	10	<u>10</u>	10.5	11	<u>12</u>	MC	<u>12</u>	<u>8</u>	10	<u>12</u>	<u>13</u>	17	2	
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