



विद्या सर्वार्थ साधिका

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PERIODIC TEST- 3

Class: XI

Subject : Economics
Date : 07- 01- 2025

M.M : 40
Time : 1 Hour 30 mins

General Instructions:

- This question paper contains two sections:
Section A – Statistics for Economics
Section B – Micro Economics
- This paper contains 10 Multiple Choice Questions of 1 mark each.
- This paper contains 2 Short Answer Questions of 3 marks each to be answered in 60 to 80 words.
- This paper contains 3 Short Answer Questions of 4 marks each to be answered in 80 to 100 words.
- This paper contains 2 Long Answer Questions of 6 marks each to be answered in 100 to 150 words.

SECTION A: STATISTICS FOR ECONOMICS

- The median of the following data will be _____. (1)

Size	10	12	14	16	18	20	22
Frequency	2	5	12	20	10	7	3

- (A) 16 (B) 30 (C) 59 (D) 20

- There is direct association between 'cigarette smoking' and 'lung damage'. The correlation coefficient consistent with the above statement is _____. (1)

- (A) 0.20 (B) 0 (C) 0.85 (D) – 0.75

- Arithmetic mean of 5, 7, 9, 15 and 20 is _____. (1)

- (A) 10 (B) 10.2 (C) 11.2 (D) 12

- The second quartile is same as _____ of the series. (1)

- (A) mean (B) median (C) mode (D) first quartile

- Calculate mode from the following data: (3)

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No. of Students	4	10	25	15	10	6

- Draw a scatter diagram to represent the following data and identify the type of correlation between X and Y: (3)

X	8	16	24	31	42	50
Y	70	58	50	32	26	12

- From the following data of the monthly profits of 100 shops, calculate the value of median: (4)

Profits (₹ in lakhs)	0-10	10-20	20-30	30-40	40-50	50-60
No. of shops (Frequency)	12	18	27	20	17	6

- In a poetry recitation competition, 10 participants were given the following marks by two judges. (6)

Judge 1	15	17	14	13	11	12	16	18	10	9
Judge 2	15	12	4	6	7	9	3	10	2	5

Calculate the coefficient of rank correlation.

SECTION B: MICRO ECONOMICS

9. If Total Variable Cost and Total Fixed Cost of producing 10 units are ₹ 500 & ₹ 200, the value of average cost would be _____. (1)
 (A) ₹ 50 (B) ₹ 70
 (C) ₹ 20 (D) ₹ 80
10. When price falls with rise in output, then _____. (1)
 (A) AR curve is steeper than MR curve
 (B) AR and MR coincide
 (C) MR curve is steeper than AR curve
 (D) MR curve is horizontal straight line parallel to X-axis.
11. Point of inflexion refers to that point from where _____. (1)
 (A) slope of TP changes (B) Slope of AP changes
 (C) slope of TR changes (D) MP rises
12. **Statement 1:** MR can be negative but not AR. (1)
Statement 2: When MR is zero, TR is also zero.
 (A) Statement 1 is true and statement 2 is false
 (B) Statement 1 is false and statement 2 is true
 (C) Both statements 1 and 2 are true
 (D) Both statements 1 and 2 are false
13. Suppose total revenue is rising at a constant rate as more and more units of a commodity are sold, marginal revenue would be _____. (1)
 (A) Greater than average revenue (B) Equal to average revenue
 (C) Less than average revenue (D) Rising
14. If MR is more than MC at a particular level of output, then producer will _____. (1)
 (A) reduce production (B) keep the production at current level
 (C) stop production (D) increase production
15. On the basis of the following data, determine producer's equilibrium through marginal cost-marginal revenue approach. Give reasons for your answer. (4)

Output (units)	1	2	3	4	5	6	7
Price (₹)	24	24	24	24	24	24	24
Total Cost (₹)	26	50	72	92	115	139	165

16. (i) Complete the following table. (3)

Units of Labour (Units)	Average Product (Units)	Marginal Product (Units)
1	8	_____
2	10	_____
3	_____	10
4	9	_____
5	_____	4
6	7	2
7	6	0
8	5	_____

- (ii) Identify Phase I (Increasing Returns to a Factor) and Phase III (Negative Returns to a Factor) from the above table. (1)

17 Read the following text carefully.

In economics, understanding the short-run costs of production is essential for businesses aiming to optimize their operations and maximize profits. The short-run is a time frame in which at least one factor of production (e.g., capital) is fixed, while others (e.g., labor, raw materials) can vary. This distinction leads to specific cost structures that influence decision-making.

Applications in Business Decision-Making

1. **Break-Even Analysis:** Understanding fixed and variable costs helps businesses calculate the break-even point, where total revenue equals total costs.
2. **Pricing Strategy:** Firms use marginal cost to set competitive prices, especially in markets with marginal competition.
3. **Production Planning:** By analyzing cost structures, businesses can determine the most cost-effective production levels in the short run.

Short-run costs are a foundational concept in economics, highlighting the interplay between fixed and variable expenses. By analyzing these costs, businesses can make informed decisions to balance efficiency, profitability, and resource allocation. While the short-run offers limited flexibility due to fixed factors, a deep understanding of cost dynamics paves the way for long-term growth and competitiveness.

On the basis of the given text and common understanding, answer the following questions:

- (i) Marginal cost is indicated by _____. (1)
- (A) a straight line parallel to X-axis (B) a straight line parallel to Y axis
(C) a U-shaped curve (D) an inverse S-shaped curve
- (ii) 'As the output rises, the difference between total cost and total variable cost tends to fall.' (2)
Defend or refute the given statement with valid argument.
- (iii) Distinguish between Fixed cost and variable costs. (3)