विद्या सर्वार्थ साधिका

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PERIODIC TEST- 2

Class: XI

Subject : Economics (030) M.M : 80

Date : 22-09-2025 Time : 3 hours

General Instructions:

1. This question paper contains two sections:
   Section A – Statistics
   Section B – Micro Economics
2. This paper contains 20 Multiple Choice Questions of 1 mark each.
3. This paper contains 4 Short Answer Questions of 3 marks each to be answered in 60 to 80 words.
4. This paper contains 6 Short Answer Questions of 4 marks each to be answered in 80 to 100 words.
5. This paper contains 4 Long Answer Questions of 6 marks each to be answered in 100 to 150 words.

SECTION A: STATISTICS

1. Data represented through a histogram can help in finding graphically the _____. (1)
   (A) mean (B) median (C) mode (D) range

2. The following table shows the monthly expenditure (in ₹) of a household on different items: (1)

Item	Food	Rent	Education	Transport	Miscellaneous
Expenditure (₹)	6,000	4,000	3,000	2,000	1,000

   What percentage of the total expenditure is spent on food?
   (A) 37.5% (B) 38% (C) 36.5% (D) 60%

3. In a good questionnaire, the questions should not _____. (1)
   (i) use double negatives (ii) be a leading question
   (iii) indicate alternatives to the answer (iv) move from general to specific
   (A) only i and ii are corrrect (B) i, ii and iii are correct
   (C) only iii and iv are correct (D) only iv is correct

4. _____is the difference between the largest and the smallest observation. (1)
   (A) Frequency array (B) Mode (C) Range (D) Mean

5. If you are interested to know the expenditure pattern in a typical Indian family (example: food, rent, medicine, education and power etc.) which of the following diagrammatic presentation is the most suitable? (1)
   (A) Component Bar Diagram (B) Time Series Graph
   (C) Frequency Polygon (D) Histogram

6. Bar diagram is _____ dimensional diagram, while histogram is _____ dimensional diagram. (1)
   (A) two, three (B) two, one (C) multi, two (D) one, two

7. Identify the kind of classification presented in the following table. (1)

States	Tamil Nadu	Punjab	Kerala	Gujarat	Odisha
Population (in lakhs)	721.38	277.04	333.87	603.83	419.47

   (A) Chronological classification (B) Temporal classification
   (C) Spatial classification (D) Qualitative classification

8. The data on the weight of school students are collected by measuring them with a weighing machine. The data so collected are _____ data. (1)

(A) Primary (B) Secondary (C) Second hand (D) Qualitative

9. Which of the following is an example of discrete variable? (1)

(A) Volume (B) Number of cars in a parking lot
(C) Height of students (D) Distance between two cities

10. Statement 1: Class limits are the two ends of a class. (1)
Statement 2: Classification of things or data saves our valuable time and effort.
(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.

11. (I) List any two functions of statistics. (1)
(II) Categorise the following as quantitative and qualitative data. (2)
(a) Beauty
(b) Income
(c) Marks
(d) Gender

12. (I) 'Non-sampling errors are more serious than sampling errors.' Defend or refute. (1)
(II) Once the questionnaire is ready, it is advisable to conduct a try-out with a small group which is known as _____. (1)
(III) Which mode of data collection cannot be used by illiterates? (1)

13. (I) Distinguish between univariate and bivariate frequency distribution. (2)
(II) The following table shows the distribution of marks obtained by students in a Statistics test: (2)

Marks in Statistics	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60
Number of Students	2	4	6	10	5	3

(a) Find the class mark of the class with highest frequency.
(b) What is the class interval of the given data?

14. The following data relates to the monthly expenditure on vegetables (in ₹) for 30 households in a locality.

115	159	196	205	212	223
256	271	310	129	335	169
184	234	245	241	265	298
144	135	172	173	229	243
220	238	278	243	220	238

(I) Prepare an exclusive frequency distribution taking first class as 100-150 (3)
(II) How many households spend more than ₹ 200 per month on vegetables? (1)

15. 'A good table should essentially have some parts.' In the light of the given statement, discuss any four parts of a good statistical table. (4)

16. Draw a less than ogive curve on the basis of the given data: (6)

Marks	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40
No. students	3	10	20	30	20	9	5	3

17. Read the following hypothetical case study carefully.

The State Board of Education is concerned about the rising screen time among school students due to online learning, mobile usage, and social media. To understand the pattern of screen time, the Board decides to conduct a study among school students across the state, especially in Classes 9 to 12.

There are over 10 lakh students enrolled in these classes in affiliated schools alone. The Board discusses two approaches to collect data:

- Census Method: Collect data from every Class 9 to 12 student across the state.
- Sample Method: Select a smaller, representative group of 10,000 students from different schools, genders, and socio-economic backgrounds to collect the data

If the board decides to collect data through the sample method, it also needs to decide how to choose the students i.e. either through Random Sampling or Non-Random Sampling.

The Board's goal is to analyze screen time habits, compare them across regions and age groups, and then issue guidelines to schools and parents for better screen-time management.

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

(I) Distinguish between Census and Sample methods of collecting data. (4)

(II) If the board decides to collect data through the sample method, it also needs to decide how to choose the students i.e. either through Random Sampling or Non-Random Sampling. What do you mean by random and non-random sampling? (2)

SECTION B – MICRO ECONOMICS

18. The price of burger increases by 22% and the quantity demanded of burger falls by 25%. This indicates that demand for burger is _____. (1)

(A) Highly Elastic (B) Inelastic

(C) Unitary Elastic (D) Perfectly Elastic

19. Using total expenditure method, find Ed, when price and demand are as under: (1)

Price (₹)	Quantity Demanded (units)
10	40
15	20

(A) Ed =1 (B) Ed > 1 (C) Ed < 1 (D) Ed = 0

20 _____ economics deals with what ought to be or how the economic problems should be solved. (1)

(A) Micro (B) Macro (C) Positive (D) Normative

21. In case of Ed = 0, demand curve is _____. (1)

(A) a horizontal straight line parallel to x axis

(B) downward sloping curve

(C) a vertical straight line parallel to y axis

(D) upward rising curve

22. Law of demand explains the inverse relationship between _____ and _____ of the commodity, ceteris paribus. (1)

(A) price, supply (B) income, demand

(C) income, price (D) price, quantity demanded

23. In case of single commodity X, consumer's equilibrium is achieved when _____. (1)

(A) $MU_X > P_X$ (B) $MU_X = P_X$ (C) $MU_X = TU_X$ (D) $MU_X < P_X$

24. Statement 1: Increase in price of bulbs will shift its demand curve towards left. (1)
Statement 2: If the goods X and Y are substitutes, a rise in price of X will result in a rightward shift in demand curve of Y.
(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.

25. A rise in income of the consumer leads to a fall in the demand for the good X by him. What is good X called? (1)
(A) Complementary good (B) Substitute good
(C) Normal good (D) Inferior good

26. In which of the following situations does scarcity arise? (1)
(A) Supply of resources > Demand of resources
(B) Supply of resources = Demand of resources
(C) Supply of resources < Demand of resources
(D) Supply of resources ≥ Demand of resources

27. What will be the impact of massive Tsunami on a Production Possibilities curve of an economy? (1)
(A) Rightward shift (B) Leftward shift (C) No impact (D) Rightward rotation

28. When price of a good is ₹ 5, the consumer buys 20 units of that good. When price changes to ₹ 7, the quantity purchased changes to 12 units. Calculate the price elasticity of demand and comment on its degree. (3)

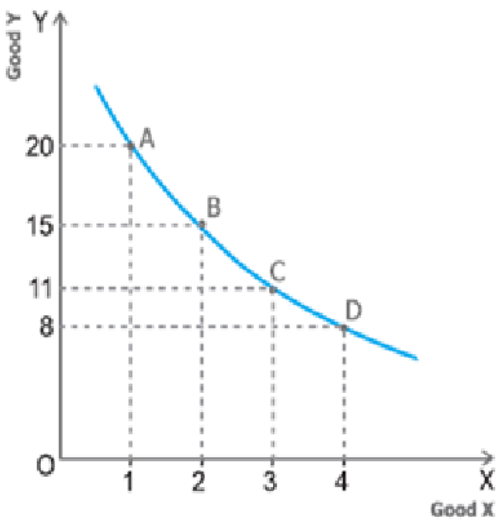
29. Distinguish between 'Contraction in Demand' and 'Decrease in Demand.' (3)

30. (I) Explain the Central problem of 'How to produce.' (3)
(II) Draw a production possibility curve and indicate the situation of underutilization of resources through the diagram. (1)

31. Explain the 'Law of Diminishing Marginal Utility' with the help of a diagram. (4)

32. Study the given diagram and answer the questions that follow: (4)
(I) Identify the curve indicated in the given diagram.
(II) State the properties of the depicted curve.
(III) _____ measures the slope of the given curve.

(A) Marginal Rate of Transformation
(B) Marginal Rate of Substitution
(C) Market Rate of Exchange
(D) Price Ratio



33. (I) Suppose a consumer can afford to buy 6 units of good X and 8 units of good Y, if she spends her entire income. The price of good X is ₹6 and price of good Y is ₹ 8 respectively. Write the equation of Budget line and find the money income of the consumer. (3)

(II) What do you mean by Budget line? State the reasons for rightward shift in budget line. (3)

34. Read the following hypothetical case study carefully.

During the Diwali season, TechZone, a major electronics retail chain in India, introduced several promotional offers on its products. One of the most popular deals was on LED Smart TVs, which were being sold at a 20% discount. As a result, the quantity demanded of Smart TVs increased by 40%.

At the same time, the sales of traditional non-smart TVs declined sharply. Customers stated that Smart TVs were now more affordable and offered better features like internet connectivity and apps.

TechZone also noticed that as the price of home theatre systems remained constant, their sales increased. Upon customer feedback, it was revealed that many customers were buying Smart TVs and home theatre systems together to enhance their entertainment experience.

Additionally, TechZone observed that as consumer incomes rose post-COVID recovery, the demand for high-end electronics also increased. However, during the off-season (January to March) sales dipped even though prices remained the same.

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

(I) 'TechZone also noticed that as the price of home theatre systems remained constant, their sales increased.' (3)

What type of relationship exists between Smart TVs and home theatre systems? In the light of the given statement, explain with the help of a diagram, what will be the change in demand curve of home theatre systems.

(II) 'One of the most popular deals was on LED Smart TVs, which were being sold at a 20% discount. As a result, the quantity demanded of Smart TVs increased by 40%. (1)

Identify the impact on the demand curve of LED Smart TVs in the situation given above.

(III) Which factor affecting demand lead to decline in sales of traditional non-smart TVs? (1)

(A) Increase in price of smart TVs.
(B) Increase in price of traditional non-smart TVs.
(C) Unfavourable change in tastes and preferences of the consumers in case of traditional non-smart TVs.
(D) Decrease in income of the consumers.

(IV) 'The sales of traditional non-smart TVs declined sharply.' Draw a demand curve to depict the change in demand of traditional non-smart TVs in the given situation. (1)