(7 pages)

Reg. No. : .....

Code No. : 10613 E **Sub. Code : CMEC 12**

B.A. (CBCS) DEGREE EXAMINATION, NOVEMBER 2023.

First Semester

Economics – Core

STATISTICS FOR ECONOMICS – I

(For those who joined in July 2021 – 2022)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The Latin word 'Status' means
   (a) Collection of data
   (b) Presentation of data
   (c) Political state
   (d) Data relation
2. Statistical methods are most dangerous tools in the hands of
   (a) Expert (b) Trained
   (c) Experienced (d) Inexpert
3. Graphs of time series are called _____.
   (a) Line graph (b) Histograms
   (c) Pie diagram (d) Pictogram
4. Classification is the process of arranging data in
   (a) different columns
   (b) different rows
   (c) different columns and rows
   (d) grouping of related facts in different classes
5. For calculating _____, it is necessary to arrange the data.
   (a) Arithmetic Mean
   (b) Geometric Mean
   (c) Median
   (d) Mode
6. Calculate Mode from the following data : 25, 36, 25, 30, 32, 25, 32, 37, 40
   (a) 25 (b) 32
   (c) 40 (d) 30

7. _____ is a graphic method of studying dispersion.
   (a) Frequency Polygon
   (b) Band Graph
   (c) Lorenz Curve
   (d) All the above
8. When Mean is 79 and Standard deviation is 8. C.V. =
   (a) 10.12 (b) 9.88
   (c) 87 (d) 6.32
9. If $\beta_2 = 3$, the distribution is called _____.
   (a) Mesokurtic (b) Leptokurtic
   (c) Platykurtic (d) Skewed
10. When coefficient of skewness is zero, the distribution is _____.
    (a) J shaped (b) U shaped
    (c) Symmetrical (d) L shaped

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 250 words.

11. (a) Write a brief note on Census method.

Or

(b) Describe the sources of secondary data.

12. (a) Explain the essential parts of a Table.

Or

(b) Construct a frequency polygon from the given data.

Marks :	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of students :	4	6	14	16	14	8	16	5

13. (a) Estimate the value of Harmonic mean from the following data.

Class Interval :	10-20	20-30	30-40	40-50	50-60
Frequency :	4	6	10	7	3

Or

(b) The mean marks of 100 students were found to be 40. Later on it was discovered that a score 53 was misread as 83. Find the correct mean.

14. (a) Explain the concept of standard deviation. What are its merits and demerits?

Or

(b) Calculate the mean deviation from the mean for the following data.

X:	2	4	6	8	10	12	14	16
F:	2	2	4	5	3	2	1	1

15. (a) Write a short note on Kurtosis.

Or

(b) If Mean 40, Standard Deviation 10, Karl Pearson's coefficient of Skewness = 0.5, find Median and Mode.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 600 words.

16. (a) Describe the importance and limitations of Statistics.

Or

(b) Examine the merits and demerits of Sampling method.

17. (a) Illustrate the types of classification.

Or

(b) Discuss the merits and demerits of diagrammatic presentation.

18. (a) Calculate the Mode by grouping method from the following data.

Class Interval :	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
Frequencies :	5	9	13	21	19	15	8	3

Or

(b) Compute Median and Arithmetic mean from the following series.

X:	0-5	5-10	10-15	15-20	20-25	25-30
F:	5	7	10	8	6	4

19. (a) The data relating to the monthly production of a product in two factories are given below.

Factory	Monthly production (in tonnes)
A	30 50 45 54 49 53 60 46 41 56 59 45
B	70 120 20 15 130 100 90 80 10 25 95 85

Analyse which factory is more efficient and which factory is more consistent.

Or

(b) Explain the different methods of measuring dispersion.

20. (a) Estimate Karl Pearson's coefficient of skewness.

Class :	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
f:	11	22	30	35	21	11	6	5

Or

(b) With the help of diagrams show the types of Skewness and describe the various measures of skewness.

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