(7 pages) Reg. No. : .....

Code No. : 10327 E **Sub. Code : EMEC 12/ FCEC 12**

B.A.. (CBCS) DEGREE EXAMINATION, APRIL 2025.

First Semester

Economic — Core

STATISTICS FOR ECONOMICS — I

(For those who joined in July 2023 onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. Which of the following is a branch of statistics?
   (a) Descriptive statistics
   (b) Inferential statistics
   (c) Industry statistics
   (d) Both (a) and (b)

2. To which of the following options do individual respondents, focus groups and panels of respondents belong?
   (a) Primary data source
   (b) Secondary data source
   (c) Pointed data source
   (d) None of these

3. The term "data" came from the Latin root term _____
   (a) Detem (b) Datam
   (c) Datum (d) Dato

4. The frequency distribution of a numerical data can be graphically represented by a _____.
   (a) Histogram (b) Monogram
   (c) Both (d) None

5. "An average is only a short way of expressing an arithmetical result" according to _____
   (a) M.R. Speigal (b) Bowley
   (c) Wallis (d) Adam

6. When the values in a series don't have equal importance, we calculate the ————.

(a) Mode (b) Weighted mean

(c) Median (d) None

7. The numerical value of a standard deviation can never be ————.

(a) Negative

(b) Zero

(c) Larger than the variance

(d) None

8. Third moment about the mean :

(a) Variance (b) Skewness

(c) Kurtosis (d) All of these

9. Which of the following statements is true for correlation analysis?

(a) It is a bivariate analysis

(b) It is a multivariate analysis

(c) Both (a) and (b)

(d) None of these

10. The term 'regression' was coined by ————.

(a) Francis Galton (b) H. Galton

(c) Yun Chao (d) None

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Explain the uses of statistics.

Or

(b) State the sources of secondary data.

12. (a) Narrate the objects of classification.

Or

(b) Write a short note on Lorenz curve.

13. (a) Mention the functions of an average.

Or

(b) Calculate mean from the following data.

Roll Nos :	1	2	3	4	5	6	7	8	9	10
Marks :	40	50	55	78	58	60	73	35	43	48

14. (a) Outline the purpose of measuring variation.

Or

(b) Find the range of weights of seven students.

From the following data 27, 30, 35, 36, 38, 40, 43.

15. (a) Explain the types of correlation.

Or

(b) Write a short note on "Regression Equations".

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Discuss the nature and scope of statistics.

Or

(b) Elucidate the tools for collecting primary data.

17. (a) Examine the types of diagrams.

Or

(b) Enumerate the uses of Histogram.

18. (a) Calculate Mean, Median and Mode from the following frequency table of marks obtained by 22 students.

Marks :	Below 10	Below 20	Below 30	Below 40	Below 50
No. of Students :	3	8	17	20	22

Or

(b) Describe the relative measured of dispersion.

19. (a) Calculate standard deviation from the following :

Marks :	10	20	30	40	50	60
No. of Students :	8	12	20	10	7	3

Or

(b) Distinguish between Skewness and Kurtosis.

20. (a) Calculate Pearson's co-efficient of correlation from the following data. Take 65 and 70 as the assumed average of the variate X and Y respectively.

X :	45	55	56	58	60	65	68	70	75	80	85
Y :	56	50	48	60	62	64	65	70	74	82	90

Or

(b) The following table gives the age of cars of certain make and annual maintenance costs. Obtain the regression equation for costs related to age.

Age :	2	4	6	8
Cost :	10	20	25	30
