25U183 (Pages: 2) Name : .....

Reg. No : .....

FIRST SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2025

(FYUGP)

(Regular/Supplementary/Improvement)

CC24USTA1MN109 - ELEMENTARY STATISTICS

(Statistics - Minor Course)

(2024 Admission onwards)

Time: 2.0 Hours Maximum: 70 Marks

Credit: 4

Part A (Short answer questions)

Answer ***all*** questions. Each question carries 3 marks.

1. Explain qualitative variables with examples. [Level:2] [CO1]

2. Explain quantitative classification. [Level:2] [CO2]

3. Explain frequency distribution with example. [Level:2] [CO1]

4. Calculate AM of 305, 320, 332, 350. [Level:3] [CO3]

5. Briefly explain range graph. [Level:2] [CO2]

6. Calculate arithmetic mean of the following data. [Level:3] [CO3]

Class	0-4	4-8	8-12	12-16
Frequency	1	4	3	2

7. Briefly explain rectangle diagram and circle diagram [Level:2] [CO2]

8. Calculate harmonic mean of 5, 11, 12, 16, 7, 9, 15, 13, 10 and 8. [Level:3] [CO3]

9. Define correlation and regression. Establish the relationship between correlation and regression coeffients. [Level:2] [CO4]

10. Explain correlation. Discuss the any two applications of correlation. [Level:2] [CO4]

(Ceiling: 24 Marks)

Part B (Paragraph questions/Problem)

Answer ***all*** questions. Each question carries 6 marks.

11. Explain different sources of data. [Level:2] [CO1]

12. Explain the interrelationship between accuracy, validity and precsion in measurement evaluation. [Level:2] [CO1]

13. Calculate both "less than" and "more than" cumulative frequency distributions from the following data. [Level:3] [CO2]

Class	Frequency
5-10	4
10-15	6
15-20	9
20-25	7
25-30	3

14. Explain measures of dispersion.Explain the purpose of measuring variation. [Level:2] [CO3]

15. Calculate Standard deviation for the following data. [Level:3] [CO3]

Class	0-8	8-16	16-24	24-32	32-40
Frequency	6	8	10	15	12

16. Compute median for the following data. [Level:3] [CO3]

Class	40-49	50-59	60-69	70-79	80-89	90-99
Frequency	6	8	12	14	7	3

17. Compute mode from the following data. [Level:3] [CO3]

Age last birthday	15-19	20-24	25-29	30-34	35-39	40-44
No of persons	4	20	38	24	10	4

18. Discuss different types of correlation with example. [Level:2] [CO4]

(Ceiling: 36 Marks)

Part C (Essay questions)

Answer any ***one*** question. The question carries 10 marks.

19. Demonstrate Ogive. Draw both Ogives for the following data. [Level:3] [CO2]

Marks	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60
No. of students	50	70	100	180	150	120	70	59

20. A group of five students obtained the following scores on two achievement tests X and Y. [Level:3] [CO4]

X	10	11	12	9	8
Y	12	18	2	10	10

Determine both the regression equations.

(1 × 10 = 10 Marks)

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