# First Semester FYUGP Degree Examination November 2024 KU1DSCSTA122 - STATISTICAL METHODS

2024 Admission onwards

Time: 2 hours

Maximum Marks: 70

### Section A

## Answer any 6 questions. Each carry 3 marks.

- 1. Explain the difference between a frequency curve and frequency polygon.
- 2. Draw a frequency curve for the following data.

Class	: 0-10	10-20	20-30	30-40	40-50	50-60
Frequency:	6 .	13	20	11	8	2

- 3. Describe an ogive curve in brief.
- 4. Write any two merits and two demerits of geometric mean.
- 5. Explain the concept of mode
- 6. Define mean deviation about AM
- 7. What is the role of kurtosis in statistical analysis?
- 8. What purpose is served by measuring skewness?

### Section B

# Answer any 4 questions. Each carry 6 marks.

9. Draw a frequency curve and frequency polygon for the following data.

Marks	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. of students	3	7	8	12	13	18	15	10	4

10. Draw the two ogives for the following data

Marks	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. of students	3	7	8	12	13	18	15	10	4

11. Draw a histogram and frequency polygon for the following data.

Class	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	5	10	12	17	13	11	16

12. What are the uses of measures of dispersion?

- 13. Define quartiles of a set of data. Calculate the range and quartile deviation for the following data set: 10, 12, 15, 18, 22, 24.
- 14. Define kurtosis and its various measures. Also explain its significance in statistical analysis.

#### Section C ·

## Answer any 2 questions. Each carry 14 marks.

- 15. Examine the importance and nature of statistics across various disciplines.
- 16. Differentiate between primary and secondary data. Provide examples of sources for each type and discuss their advantages and disadvantages.
- es, strengths, and value examples of when ex 17. Compare and contrast the properties, strengths, and weaknesses of the arithmetic mean, median, and mode. Provide examples of when each measure is most appro-