Reg No:	K24FY1493 (C)
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Name :....

First Semester FYUGP Statistics Examination November 2024 (2024 Admission onwards) KU1DSCSTA122 (STATISTICAL METHODS)

(EXAM DATE: 06-12-2024)

Time: 120 min Maximum Marks: 70

Part A (Answer any 6 questions. Each carries 3 marks)

1. Define the target population in a sample survey.

2. What is primary data? Give two sources.

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3. What is diagrammatic presentation of data? List out different types of diagrams.

4. Draw a frequency polygon for the following data.

Class:	0-10	10-20	20-30	30-40	40-50	50-60
Frequency:	7	14	20	10	9	3

5. What are the uses of ogive curve?

6. What is the median, and how is it calculated?

7. Write any two merits and two demerits of geometric mean.

8. Determine the value of k if the arithmetic mean of 9, 8, 10, k and 12 is 15 . $$ 3

Part B (Answer any 4 questions. Each carries 6 marks)

9. Explain a bar diagram and different types of bar diagrams using examples. 6

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
									6

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	6
Frequency	5	10	12	17	13	11	16	0

12. What are requisites of a good measure of central tendency?

- 13. Define the harmonic mean of a set of data. Discuss the advantages and disadvantages of using the harmonic mean as a measure of central tendency. 6
- 14. Explain the geometric mean and calculate it for the following numbers: 4, 16, 64.

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Part C (Answer any 2 question(s). Each carries 14 marks)

- 15. A class of students scored the following marks: 45, 56, 58, 60, 65, 72, 75, 80, 85, 90. Calculate the range, mean deviation, quartile deviation, and standard deviation. Analyze what these values tell about the dataset.
- 16. Compare the different measures of dispersion. Discuss their uses and limitations with examples.
- 17. Define census and sampling. Compare the advantages and disadvantages of census method and sample survey method in data collection.