

D 136045**(Pages : 3)****Name.....****Reg. No.....****FIRST SEMESTER INTEGRATED P.G. DEGREE SUPPLEMENTARY /
IMPROVEMENT EXAMINATION, NOVEMBER 2025****Allied Core Course****STAI1C02—DESCRIPTIVE STATISTICS****(2020 Admission onwards)****Time : Two Hours****Maximum : 60 Marks****Section A**

*Each question carries 2 marks.
Maximum marks in this section 20.
(Ceiling 20 marks)*

1. Define a primary data and give an example.
2. What is a class interval ?
3. State any two advantages of geometric mean.
4. Define percentile and mention its use.
5. What do you mean by a frequency polygon ?
6. What is meant by cumulative frequency distribution ?
7. State the formula for standard deviation of grouped data.
8. What are relative measures of dispersion ?
9. Calculate the mean of the data : 10, 20, 30, 40, 50.
10. What are the uses of diagrams in statistical analysis ?
11. Differentiate between symmetrical and skewed distribution.
12. Draw a pie diagram for the following :

Categories : A- 30%, B - 25%, C - 20%, D - 15%, E - 10%

(Ceiling 20 marks)**Turn over**

Section B

*Each question carries 5 Marks.
Maximum Marks in this section 30.
(Ceiling 30 marks)*

13. Define skewness. Explain the types with examples.
14. Explain different types of graphs used in representing statistical data.
15. Find the arithmetic mean and standard deviation of the following data:
- Values : 5, 10, 15, 20, 25
- Frequencies : 2, 3, 5, 4, 1
16. Explain the difference between bar diagram, histogram, and frequency polygon.
17. Define tabulation. What are the objectives and parts of a statistical table?
18. Calculate the quartile deviation and its coefficient from the following data: :
- Data : 12, 15, 17, 18, 19, 21, 23, 24, 27
19. Compute the arithmetic mean and standard deviation for the following grouped data:
- Class : 0-10, 10-20, 20-30, 30-40, 40-50
- Frequency : 5, 8, 10, 6, 1

(Ceiling 30 marks)

Section C

*Answer any one.
The question carries 10 Marks.
Maximum Marks in this section 10.*

20. (a) Define and explain Pearson's Coefficient of Skewness.
- (b) Calculate the coefficient of skewness for the following data :
- Class : 20-30, 30-40, 40-50, 50-60, 60-70
- Frequency : 3, 6, 10, 8, 3

21. The following table shows marks scored by students in an exam:

Marks : 0-10, 10-20, 20-30, 30-40, 40-50, 50-60

Frequency : 2, 4, 8, 10, 4, 2

- (a) Calculate mean deviation about the mean.
- (b) Comment on the result.

(1 × 10 = 10 marks)