

**B.Sc. Semester–III Examination, (Under CCF), 2025**

**St. Paul's Cathedral Mission College**

**STATISTICS (IDC) THOERY**

**(STAT-H-IDC3-3-TH-1)**

**Time: 2 hours**

**Full Marks: 50**

**1. Answer any *five* questions: -**

**5×2=10**

- a) What is Statistics?
- b) What is population?
- c) What are different parts of a statistical table?
- d) Explain the terms class frequency, class-mark.
- e) The a.m. of a variable is 45.find the mean of the variable 3y-20.
- f) What do you by central tendency of a frequency distribution?
- g) Explain a Step-diagram?
- h) What is meant by skewness?

**2. Answer any *four* questions:**

**4×5=20**

- a) What is a pie diagram? What are its uses?
- b) Distinguish between a ordinal and a nominal data. Give examples of each.
- c) Define mean. Prove that the sum of deviations from mean is zero.
- d) Write note on i) column diagram ii) Bar diagram and Histogram.
- e) Compare mean, median and mode.
- f) What is coefficient of variation and its importance? Define range?

**3. Answer any *two* questions:**

**2×10=20**

- a) i) Define the terms: Discrete data and Continuous data with examples. ii) What is questionnaire? Mention the chief features of a good questionnaire.
- b) Define mean deviation and standard deviation. Find the mean and the standard deviation of the first n natural numbers.
- c) Define Spearman's rank correlation coefficient? Discuss the properties of Pearson's correlation coefficient. Interpret the values of r as -1. +1.0.Define the term regression.

.....**THE END**.....