MODEL QUESTION PAPER
B.SC. FOOD TECHNOLOGY
1st Year –Second Semester
DSC-2 Paper-3: APPLIED STATISTICS
(Effective from 2020-2021 admitted batches)

Time: 3 Hours

Max. Marks: 75

Answer any FIVE from the following eight questions

$5 \times 5 = 25$

1. Distinguish between cluster sampling and systematic sampling.
2. Define coefficient of variation
3. Standard deviation & errors.
4. Rank correlation
5. Define Bar diagram with example
6. Hypothesis testing
7. Level of significance
8. F-test

Answer the following questions

$5 \times 10 = 50$

9. Explain various types of measures of central tendency with formulae. What is the arithmetic mean of the first 25 natural numbers?

OR

10. Define relative measures of dispersion. Find the coefficient of variation of the data, 43, 32, 60, 12, 8, 4, 1

11. Explain different types of correlation. Add note on Karl Pearson's coefficient of correlation

OR

12. What is regression? Explain the fitting of linear regression equations of Y on X and X on Y.

13. What is sampling. Enumerate various probability and non probability sampling methods

OR

14. Write about various methods of diagrammatic representation of data.

15. Explain about the chi-square test for goodness of fit and its applications.

OR

16. Draw the ogive and find the median of the data. Also find the mean deviation about the median.

Class	0-10	10-20	20-30	30-40	40-50
Frequency	7	13	20	10	5