DISCIPLINE SPECIFIC CORE COURSE: DSC-152 LAB
(Descriptive Statistics and Probability Distributions)
Full Marks=100 [End Semester Exam (70) +Internal (30)]
Pass Marks =40 [End Semester Exam (28) +Internal (12)]

(Credits: 03)
Contact Hours: 90 Hours

Learning objectives

- To develop skills in graphical representation of data.
- To compute measures of central tendency, dispersion, moments, and correlation coefficients.
- To gain proficiency in fitting curves, such as polynomials and exponential curves, to data.

Learning outcomes

- Interpret graphs of visually represented data.
- Interpret measures of central tendency, dispersion, moments, and correlation coefficients.
- Identification of best fitted model to a given set of data

.

List of Practicals

1. Graphical representation of data.
2. Problems based on measures of central tendency.
3. Problems based on measures of dispersion.
4. Problems based on combined mean and variance and coefficient of variation.
5. Problems based on moments, skewness and kurtosis.
6. Fitting of polynomials, exponential curves.
7. Karl Pearson's correlation coefficient.
8. Correlation coefficient for a bivariate frequency distribution.
9. Fitting of lines of regression
10. Spearman rank correlation with and without ties.
11. Fitting of binomial distributions
12. Fitting of Poisson distribution.
13. Fitting of negative binomial distribution.

14. Fitting of suitable distribution.
15. Applications of Normal distribution.
16. Fitting of Normal distribution.