

UNIT I**Introduction**

Introduction to Statistics, its meaning and definitions, Methods of data collection, Frequency distribution, Methods of frequency distribution – Inclusive and exclusive methods.

UNIT II**Measures of Central Tendency**

Measures of central tendency; meaning, Arithmetic mean- Harmonic mean- weighted mean.

UNIT III**Dispersion**

Measures of dispersion: meaning, standard deviation, standard error of mean, variance and coefficient of variation.

UNIT IV**Probability Distributions**

Theoretical distributions – Binomial, Poisson and Normal distributions (without proof) – properties and applications of the above distributions

UNIT V**Sampling theory**

Definition and concept of Sampling: Different sampling schemes/plans simple random sampling, stratified random sampling cluster sampling, multi-stage sampling.

Practical

1. Overview of SPSS.
2. Preparation of frequency distribution (Inclusive and exclusive methods of classification).
3. Problems on measures of central tendency - I.
4. Problems on measures of central tendency - II.
5. Problems on measures of dispersion - I.
6. Problems on measures of dispersion - II.

Reference Books

1. Basic Statistics – by B L Agarwal (Wiley Eastern Ltd., New Delhi).
2. Fundamentals of Mathematical Statistics – by Gupta and Kapoor (Sultan Chand Pub., New Delhi).