

Objective: To understand the basics of Statistics which would help in analysis and interpretations of results in research.

### Unit – 1

Introduction- meaning and scope of statistics – collection of data – primary and secondary methods of data collection – classification of data – presentation of data by diagrams- bar diagrams – simple bar diagram- multiple bar diagram- sub-divided bar diagram - percentage bar diagram – deviation bar diagram and pie diagram

### Unit – 2

Measures of central tendency– arithmetic mean – median – mode – measures of dispersion - quartile deviation – standard deviation and co-efficient of variation

### Unit – 3

Correlation – scatter diagram - Pearson's correlation co-efficient – Rank correlation – Regression – co-efficient and equations

### Unit – 4

Time Series - Components of Time series – secular trend – seasonal variation – cyclical variation – irregular variation – measurement of trend value for the future – graphic method – semi-average method, Introduction to SPSS

### Unit – 5

Population and sample – meaning and definition – sampling theory – errors in sampling- methods of sampling – random sampling – non-random sampling - construction of hypothesis – null hypothesis and alternate hypothesis – sampling distributions (problems on Z- test, t – test, F-test and chi-square test).

### TEXT BOOKS/ REFERENCES:

1. Quantitative Techniques for Managers - J.K.Sharma
2. Comprehensive Statistical Methods - P.N. Arora, Sumith Arora, S Arora
3. An Introduction to statistical Methods - C.B.Gupta, Vijya Gupta
4. Business Mathematic - V.K.Kapoor