

Course Code: 510119	Marks: 100	3 Credits	Class Hours: 45
Course Title:	Business Statistics-I		

- 1. Concepts of Statistics :** Introduction- Statistics Defined- Statistical Data- Statistical Methods- Statistics: Science or Art- Functions of Statistics- Scope of Statistics- Statistics and the Computer- Limitations of Statistics- Distrust of Statistics- Problems.
- 2. Collection of Data, Data Classification, Tabulation and Presentation:** Sources of Data, **Primary and Secondary Data** Sources- Internal Data- Classification of Data- Formation of a Frequency Distribution-Classification according to Class Intervals- Principles of Classification- Tabulation of Data- Review of the Table- Types of Tables- Parts of a Table- Charting Data- General Rules for Constructing Diagrams- Types of Diagrams- One-Dimensional or Bar Diagrams- Two- Dimensional Diagrams- Pictograms and Cartograms- Choice of a Suitable Diagram- Graphs- Graphs of Time Series or Line Graphs- Graphs of Frequency Distributions- Limitations of Charts- Problems.
- 3. Measures of Central Tendency:** Objectives of averaging, Requisites of a measure of central Tendency, Measures of Central tendency, Mathematical averages, Geometric mean, Harmonic mean, Averages of position, partition values, Mode, Relationship between mean, median, and mode-comparison between measures of central tendency.
- 4. Measures of Dispersion:** Significance of Measuring Dispersion; Properties of A Good Average Dispersion; Range-Inter-Quartile Range and quartile Deviation; Mean Deviation; Standard Deviation; Co-efficient of, Variations and Their Application.
- 5. Moments, Skewness and Kurtosis:** Concepts; Moments from Arbitrary Value; Moments from Mean; Relation between Moments; Measures of Skewness and its Uses, Measures of Kurtosis and Its Application.
- 6. Sampling and Sampling distributions:** Reasons of Sample Survey-Population parameters and sample statistics-Sampling Methods-Sampling distributions-Sampling distribution of Sample mean-Sampling distribution of sample proportion.
- 7. Probability and probability distributions:** Concepts of probability-definition of probability-combinations of permutations-Rules for probability and algebra of events-Bayes' Theorem- Probability distributions-expected value and variance of a random variable-Discrete Probability distributions-continuous probability distribution.

Recommended Books:

1. Bruce L, Bowerman, Richard T.O. Connel, Michael L, Hand (2002).Business Statistics Practice,International Edition, McGraw Hill Higher Education.
2. Islam, Md. Rafiqul,(2017). Business Statistics, 4th Edition, CBO Publications, Dhaka