Course Code: 11BB12C2 **Course Title: BUSINESS STATISTICS & QUANTITATIVE METHODS**

Objective: To familiarize the students with the fundamental statistical tools for business decisions.

Unit I: Background and Basic Concepts: Introduction – Statistics defined – Functions – Scope – Limitations – Elements of Probability and Random Variables.

Unit II: Collection of data: Data: meaning - methods of collection- Classification and Tabulation of data- Diagrammatic and Graphic Representation.

Unit III: Descriptive Statistics: Measures of Central Tendency – Arithmetic Mean (Simple and Weighted) – Median – Mode. Measures of Dispersion –Range – Quartile Deviation – The Mean deviation and the Standard deviation – Coefficient of Variation, Skewness.

Unit IV: Correlation and Regression: Meaning- concept of Correlation, positive & negative Correlation, Karl Pearson's Coefficient of Correlation, – Rank correlation– Meaning of Regression- Two Regression equations- Regression Coefficients and properties.

Unit V: Time Series Analysis and Index Numbers: Time Series-Meaning and Components, Classification – Construction of Index numbers – Methods of constructing index numbers: Simple Aggregative Method –Relative Method – Weighted Index Method – Laspear's method – Paasche's method – Fischer's method.

Recommended Text Book(s):

1. S.C. Gupta – Fundamentals of Statistics - Sultan Chand & Sons, Delhi.
2. D.N. Elhance – Fundamentals of Statistics – Kitab Mahal, Allahabad.

Recommended Reference Books:

1. S.P. Gupta, Statistical Methods. Sultan Chand & Sons, New Delhi.
2. G.C.Beri, Business Statistics, McGraw Hill, New Delhi, 2009.
3. Yamane.T, Statistics: An Introductory Analysis, Harper&Row (1973).

Levin & Rubin, Statistics for Management, Prentice Hall, New Delhi (1999).