BBA HONOURS 1st SEMESTER
DISCIPLINE SPECIFIC COURSE – II (CORE-2)
BBA120C2: BUSINESS STATISTICS

CREDITS: THEORY: 04; TUTORIAL: 02
MAX. MARKS: THEORY: 60; TUTORIAL: 30
MIN. MARKS: THEORY: 60; TUTORIAL: 30

COURSE OBJECTIVE: *To familiarize the students with various Statistical Data Analysis tools that can be used for effective decision making. Emphasis will be on the application of the concepts learnt.*

A. COURSE CONTENTS (THEORY) (4 CREDITS) (60 marks)

UNIT I:

Measures of Central Value: Measures of Central Tendency - mean, median, mode, geometric mean. Measures of Dispersion: Meaning and Significance. Absolute and Relative measures of dispersion - Range, Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of Variation, Moments, Skewness, Kurtosis.

UNIT II:

Correlation Analysis: Meaning and significance. Correlation and Causation, Types of correlation. Methods of studying simple correlation - Scatter diagram, Karl Pearson's coefficient of correlation, Spearman's Rank correlation coefficient, Regression Analysis: Meaning and significance, Regression vs. Correlation. Linear Regression, Regression lines (X on Y, Y on X) and Standard error of estimate.

UNIT III:

Analysis of Time Series: Meaning and significance. Utility, Components of time series, Models (Additive and Multiplicative), Measurement of trend: Method of least squares, Parabolic trend and logarithmic trend; Index Numbers: Meaning and significance, problems in construction of index numbers, methods of constructing index numbers-weighted and unweighted, Test of adequacy of index numbers, chain index numbers, base shifting, splicing and deflating index number.

UNIT IV:

Probability: Meaning and need. Theorems of addition and multiplication. Conditional probability. Bayes' theorem, Random Variable- discrete and continuous. Probability Distribution: Meaning, characteristics (Expectation and variance) of Binomial, Poisson, and Normal distribution. Central limit theorem;

B. COURSE CONTENTS - TUTORIAL (2 CREDITS) (30 marks)

- **Case Study: At least one case situation to be discussed from each unit.**
- **Seminar/Presentation/Practical/Project Work/ Assignment based on case component/Theory component (Hard Copies to be submitted as well).**

SUGGESTED READINGS:

1. S.P. Gupta (S.P.): Statistical Methods, Sultan Chand & Sons, 34th Edition.
2. Richard Levin & David Rubin: Statistics for management, Prentice Hall.
3. Anderson, Sweeny & Williams: Statistics for Business and Economics, South Western.