

CC: 204: Business Statistics: I (Core Course)

Theory: Credit: 4 (100%)

Total Marks: 100

Unit	Topics Covered under unit	Wt.
I	Introduction of Statistics : Meaning and Definitions of Statistics, the Nature of a Statistical Study, Importance of Statistics in Business, Limitations of Statistics, Types of data collection methods, Types of classification data , Types of frequency distribution, Types of class intervals, Types of diagrams and their importance.	20%
II	Measures of Central Tendency and Dispersion Introduction; Types of measure of central tendency: Mean, Median and Mode; Harmonic mean; Geometric mean, Their merits and demerits, Practical problems. Types of measures of dispersion: Range, Coefficient of range, Quartile deviations, Standard deviation, Variance.	20%
III	Correlation Definition of Correlation, Types of Correlation, Scatter Diagram Method, Karl Person's Correlation Coefficients, Rank Correlation Coefficients, Correlation Coefficients for Bivariate frequency distribution, Probable error for Correlation Coefficients. Regression Definition of Regression, Regression lines, Regression Coefficients, Properties of regression Coefficients, Fitting of regression lines and estimation for Bi-variate frequency distribution.	20%
IV	Multiple Regression and Correlation Analysis Introduction, Multiple Regression, Standard Error of Estimate, Partial and Multiple Correlation, Multiple Correlation, Advantages and Limitations on Multiple Correlation Analysis.	20%

	<p>Index Numbers</p> <p>Introduction and meaning of index number, Their usages, Fixed base and chain base method, Methods of construction index number: Laspayer's, Paashe's, Fisher's, Bowley, Marshall, Edgeworth Index number, Time reversal and factor reversal teats.</p>	
V	<p>Time Series Analysis and Forecasting Methods</p> <p>Time Series analysis components of time series & methods of estimation of trend seasonal components by moving averages, Linear Trend, Non-Linear Trend, Measurement of Seasonal Variation, and Forecasting.</p> <p>Linear Trend, Non-Linear Trend, Measurement of Seasonal Variation, and Forecasting.</p>	20%

Reference Books:

1. Practical Business Statistics Frederick F. Croxton & Dudley Asia publishing House, Ps. 20.
2. Modern Business Statistics John B. Freund & Frank, J. Williams, Modern Asia Edition (Prentice Hall Inc. Charles E. Tuttlles)
3. Statistics : Methods & Analysis, Lincol L. Chao, McGraw-Hill Book Co. (international Student Edition) S. 5.20.
4. Statistics Analysis for business Decision, William A. Supurr & Charles P. Bonini Richard D. Triwin Inc. Home wood, illunoise S..9.95.
5. Wheldon's Business statistics and Statistics Method G.L. Thrikettle Macdonald & Evansm Ltd.
6. Statistics for Economic and Business, Donald W. Paden E.F. Lindquist, McGraw-Hill Book Co, India. S. 2-15.
7. Executive Decisions thought O.R. Wagner T.M.