

Course Title: Research Methodology

Course Code: 506

UNIT – I

Introduction: Definition of Research, Qualities of Researcher, Components of Research Problem, Various Steps in Scientific Research, Types of Research; Hypotheses Research Purposes - Research Design - Survey Research - Case Study Research. **(12 Hours)**

UNIT-II

Data Collection: - Sources of Data: Primary Data, Secondary Data; Procedure Questionnaire - Sampling Merits and Demerits - Experiments - Kinds - Procedure; Control Observation - Merits - Demerits - Kinds - Procedure - Sampling Errors - Type-I Error - Type-II Error. **(12 Hours)**

UNIT-III

Statistical Analysis: Hypothesis Tests, One Sample Test - Two Sample Tests / Chi-Square Test, Association of Attributes - t-Test - Standard deviation - Co-efficient of variations - Index Number, Time Series Analysis, Decision Tree. **(10 Hours)**

UNIT -IV

Statistical Applications: Correlation and Regression Analysis - Analysis of Variance, Completely Randomized Design, Randomized Complete Block Design, Latin Square Design - Partial and Multiple Correlation - Discriminate Analysis - Cluster Analysis - Factor Analysis and Conjoint Analysis - Multifactor Evaluation, Two-factor Evaluation Approaches. **(18 Hours)**

UNIT - V

Research Report: Structure and Components of Research Report, Types of Report, Good Research Report, Pictures and Graphs. **(8 Hours)**

Recommended books

Wilkinson & Bhandarkar: Methodology and Techniques for Social Research.

Pauline Vyoung: Scientific Social Survey and Research

Panneerselvam, R. Research Methodology, Prentice Hall of India, New Delhi, 2004.

Kothari.C.R, Research Methodology.

Festinger. L & D. Katz: Research Methods in Behavioral Science.
Sellitz, et al: Research methods in Social Relations