

Research Methodology	
Total Credits: 00	Subject Code: BTCT706T
Teaching Scheme: Lectures: 2 Hours/Week Tutorials: 0 Hours/Week Practical: 0 Hours/Week	Examination Scheme: College Assessment: Grade

Course Objectives:

1. To impart knowledge and skills required for research methodology.
2. Problem formulation, analysis and solution.
3. Technical paper writing.

Course Outcomes:

After completing the course, students will be able to

1. Understand the basics of research methodology.
2. Formulate research problem.
3. Collect, analyze data.
4. Write and publish technical paper.
5. Follow research ethics.

Unit I

(08 Hrs)

Foundations of Research: Objectives, Motivation, Utility. Concept of theory, empiricism, deductive and inductive theory. Characteristics of scientific method - Understanding the language of Research - Concept, Construct, Definition, Variable. Research Process.

Problem Identification & Formulation - Research Question - Investigation Question - Measurement Issues - Hypothesis - Qualities of a good Hypothesis - Null Hypothesis & Alternative Hypothesis. Hypothesis Testing - Logic & Importance.

Unit II

(06 Hrs)

Qualitative and Quantitative Research: Qualitative research , Quantitative research , Literature Survey - importance of literature Survey, sources of information, assessment of quality of journals and articles, effective approaches of literature studies.

Unit III

(04Hrs)

Data Analysis: Data Preparation - Univariate analysis (frequency tables, bar charts, pie charts, percentages), Bivariate analysis- Cross tabulations and Chisquare test including testing hypothesis of association.

Unit IV

(06 Hrs)

Paper Writing- Layout of a Research Paper, Impact factor of Journals, When and where to publish ? Ethical issues related to publishing, Plagiarism and Self-Plagiarism. Use of tools / techniques for Research, Reference Management Softwares, Software for paper formatting like LaTeX/ MS Office, Software for detection of Plagiarism.

Text Books:

1. Donald Cooper & Pamela Schindler, "Business Research Methods", 9th editions Tata Macgraw Hill.
2. Alan Bryman & Emma Bell, " Business Research Methods ", Oxford University Press.
3. C. R. Kothari, " Research Methodology".