

# Research Methodology

MEM 115

**Semester: First**

**Credit Hours: 3**

## General Objectives:

General objectives are to:

- make students able to comprehend the fundamentals of research;
- facilitates student to carry out their research activities independently; and
- to familiarize the students with the techniques of Research Methodology .

## Specific objectives:

Specific objectives of this unit are to:

- facilitate students to write their dissertation with appropriate research methodology;
- familiarize students regarding the importance of research methodology to carry out any kind of research; and
- enable students to acquire knowledge on different dimensions of research methodology.

## Course Contents

### Unit 1: Introduction to research

**3 hrs.**

Meaning and importance of research; Classification of research; The Research Process; Qualities of good research; Ethical Issues Governing Research Function; Inductive and deductive reasoning; Qualitative Vs Quantitative Research.

### Unit 2: Literature Review

**3 hrs.**

Need; Procedure- Search for existing literature, Review the literature selected, Develop a theoretical and conceptual framework, Writing up the review.

### Unit 3: Research Design

**4.5 hrs.**

Meaning, purpose, principles and Importance of Research Design; Types of research design; Features of a good research design; Exploratory research design; Descriptive research design; Experimental research design; Qualitative research design; Quantitative research design; Variables; Hypothesis; Errors Affecting Research Design; Issues Governing Research Design; Formulating research problems and objectives; Formulating research questions; Hypothesis setting-null hypothesis and alternative hypothesis; Hypothesis testing-logic and importance; Research Modeling: Types of Models, Model building and stages, Heuristic and Simulation modeling.

### Unit 4: Development of Research Proposal

**3 hrs.**

Meaning and Importance of research proposal ; the Development of Research Issues Governing Proposal; Writing a research report- Developing an outline; Key elements of research proposal- Objective, Introduction, Design or Rationale of work, Experimental Methods, Procedures, Measurements, Results, Discussion, Conclusion, Referencing and

various formats for reference writing of books and research papers; Publications in Research journals

**Unit 5: Sampling Designs**

**4.5 hrs.**

Concepts of statistical population; Sampling Vs. Census; Sampling Frame; Advantage of sampling; Sampling error; Characteristics of a good sample; Sampling Techniques; Issues Governing Sampling Decisions; Determination of sample size; Sampling method (probability sampling and non-probability sampling); Characteristics of good sample; Probability Sample – Simple Random Sample, Systematic Sample, Stratified Random Sample & Multi-stage sampling. Non Probability Sample – Judgment, Convenience, Quota & Snowballing methods.

**Unit 6: Attitude Scaling Techniques**

**3 hrs.**

Concept of Scale – Rating Scales viz. Likert Scales, Semantic Differential Scales, Constant Sum Scales, Graphic Rating Scales; Ranking Scales – Paired Comparison & Forced Ranking.

**Unit 7: Data management**

**3 hrs.**

Meaning, Importance, and Types of Data; Secondary and primary data- definition, sources, characteristics, advantages and disadvantage; Advantages and disadvantages of primary data over secondary data; Methods of Data Collection-Questionnaire Construction, Pre-testing of questionnaire, Personal Interviews, Telephonic Interview, Mail Survey, Email/Internet survey; Steps of Data processing and Presentation.

**Unit 8: Data Reduction and Analysis**

**3 hrs.**

Meaning and Importance of Data Reduction; Data Reduction Process; Selected Techniques of Data Analysis ; Tabulation, analysis and interpretation of data; Editing, decoding and classification of data; Preparation of tables; Scaling techniques; Graphic and diagrammatic representation of data; Univariate analysis (frequency tables, bar charts, pie charts, percentages), Bivariate analysis – Cross tabulations and Chi-square test including testing hypothesis of association.

**Unit 9: Formatting the report**

**1.5 hrs.**

Formatting a Report; Developing the Final Draft; Preparing for Citation and Referencing; Making an Oral Presentation of a Report

**Unit 10: Socio-Ethical issues in Research**

**1.5 hrs.**

Issues governing Research Function; Incorporating Socio-Ethical Issues in Research; Impact of Social Issues in Research.

**Suggested Readings**

1. Cooper & Schindler (2004). Business Research Methods. New Delhi: Tata McGraw-Hill Publishing Co
2. Kothari, C.R. (2008). Research Methodology-Methods and Techniques, New Age International Publishers, New Delhi.
3. Donald Cooper & Pamela Schindler (2006). Business Research Methods (9<sup>th</sup> edition), TMGH.
4. Alan Bryman & Emma Bell (2007). Business Research Methods, Oxford University Press.