

GUJARAT UNIVERSITY
K. S. SCHOOL OF BUSINESS MANAGEMENT
M.Sc. IN COMPUTER APPLICATIONS AND INFORMATION TECHNOLOGY
[Five Years' (Full-time) Integrated Degree Course]

Sixth Semester M.Sc. (CA & IT)
KS_C_FC -362 Research Methodology

2 credit course

Objective:

To gain insights into how scientific research is conducted, to learn and understand the basic statistics involved in data presentation, to identify the influencing factor or determinants of research parameters, to test significance, validity and reliability of the research results, to help in documentation of research results

UNIT I: **(20%)**

- **Fundamentals of Research:-** Meaning, Objectives and significance
- **Types of Research:** - Basic research, applied, Descriptive, Historical, Exploratory, Experimental, Ex-post-factor and Case Study Approach.
- **Approaches to Research:-** Quantitative Approach & Qualitative Approach
- Importance of research in management decisions
- Various areas of research in business

UNIT II: **(20%)**

- **Sampling:** Meaning, Sample and Sampling, Essentials of good sample, Sample Size,
- **Methods of Sampling:**
 1. **Probability Sampling:** simple Random Sampling, Stratified Random Sampling, Cluster Sampling, Multi Stage Sampling.
 2. **Non Probability Sampling:** Purposive Sampling, Quota Sampling, Convenience Sampling.
- **Sources and Methods of Data Collection:**
 1. **Primary Sources:** Observation, Interview, Questionnaire, Interview Schedules
 2. **Secondary Sources:** Data Processing, Tabulation, Data analysis and Interpretation.

UNIT III: **(20%)**

- **Research Process:** - Selecting the topic, defining the research problem, objectives of research, literature survey, sample design, data collection, execution of project.

UNIT IV: **(20%)**

- Analysis of data and hypothesis testing
- generalization and interpretation
- Preparation of research project.

UNIT V: (20%)

- **Case Study:** F – Test, ANOVA, t – test, Chi – Square Test

Recommended Lecture Scheme: Approximately 30 to 35 hours

Recommended Practical Scheme: Not Applicable

Assignment: One assignment every month.

Text Books:

1. Research Methodology Methods and Techniques
By C. R. Kothari, Vishwa Prakashan
2. Research Methods in Business
By Sunita Pawar, Sheth Publishers Pvt. Ltd

Reference Books:

1. David Rubin, Statistics for Management
By Richard Levin, Pearson Education
2. Pamela Schindler, Business Research Methods
By Donald Cooper, Tata McGraw- Hill Co. Ltd
3. Introduction to Research Methodology
By Dr Prashant Sarangi
4. Research Methodology Concepts & Cases
By Dr Neena Sondhi & Dr Deepak Chawla, Vikas Publishing