

**SEMESTER-IV**  
**UCBIJ20- RESEARCH METHODOLOGY**

<b>Year:</b> <b>SEM:</b> <b>IV</b>	<b>Course Code:</b> UCBIJ20	<b>Title of The Course:</b> Research Methodology	<b>Course Type:</b> Theory	<b>Course Category:</b> Elective IIA	<b>H/W</b> 5	<b>Credits</b> 4	<b>Marks</b> 40+60
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**Course Objectives**

- a) To understand research and its process.
- b) To identify research problem and appropriate tools to analyse it.
- c) To impart knowledge on various sampling methods in research.
- d) To make familiarize with data collection methods suitable for various type of research.
- e) To enhance the knowledge for preparation of project report.

**Course Outcomes (CO):**

The Learners will be able to

- ☐ Understands research and its procedures.
- ☐ Identifies problem and use SPSS to analyse it.
- ☐ Identifies appropriate sample size and sampling methods for research
- ☐ Apply a suitable data collection method to extract reliable information
- ☐ Prepares project report with appropriate suggestions contributing to the society

CO/PO	PO					
	1	2	3	4	5	6
CO1	H	H	H	M	H	M
CO2	H	H	H	M	H	H
CO3	H	H	H	M	H	H
CO4	H	H	H	M	H	H
CO5	H	H	H	M	H	H

**H- HIGH M-MEDIUM L-LOW**

CO/PSO	PSO					
	1	2	3	4	5	6
CO1	H	H	H	M	H	M
CO2	H	H	H	M	H	H
CO3	H	H	H	M	H	H
CO4	H	H	H	M	H	H
CO5	H	H	H	M	H	H

## **Course Syllabus**

### **Unit I: Introduction of Research and Research Process (15 Hours)**

- 1.1 Definition of Research – Meaning (K1)
- 1.2 Objectives (K1, K2)
- 1.3 Types of Research (K1, K2)
- 1.4 Research Process (K1, K2, K3)
- 1.5 Qualities of a Researcher – Criteria of Good research (K1, K2)
- 1.6 Problems Encountered in research (K1, K2, K3)

### **Unit II: Research Design (15 Hours)**

- 2.1 Defining Research Problem (K1)
- 2.2 Research Design – Features of Good Research Design (K1, k2)
- 2.3 Types of Research Design – Factors Affecting Research Design (K1, k2)
- 2.4 Hypothesis – Meaning – Definition (K1, k2)
- 2.5 Need for Hypothesis – Formulation of Hypothesis – Types of Hypothesis (K1, k2)
- 2.6 Test of Hypothesis – Type I and Type II Error. (K1, k2, k3)

### **Unit III: Sampling (15 Hours)**

- 3.1 Sampling – meaning (K1)
- 3.2 Techniques (K1, K2)
- 3.3 Types (K1, K2, K3)
- 3.4 Steps (K1, K2, K3)
- 3.5 Merits (K1, K2)
- 1.6 Demerits. (K1, K2)

### **Unit IV: Primary and Secondary Data (15 Hours)**

- 4.1 Collection of Primary and Secondary Data (K1, K2)
- 4.2 Sources of Secondary Data (K1, K2, K3)
- 4.3 Interview Techniques - Survey and Interview Method (K1, K2)
- 4.4 Interview Techniques - Merits and Demerits (K1, K2)
- 4.5 Questionnaire – Pre-Requisites of Using Questionnaire (K1, K2)
- 4.6 Structure and Unstructured Questionnaire (K1, K2, K3)

### **Unit V: Report Writing and SPSS Application (15 Hours)**

- 5.1 Measurement and Scaling Techniques (K1, K2)
- 5.2 Analysis (K1, K2)
- 5.3 Interpretation (K1, K2)
- 5.4 Report Writing (K1, K2, k3)
- 5.5 Application of SPSS (K1, k2, K3, K4)
- 5.6 Advantages of SPSS (K1, k2)

**Textbook:**

1. P. Ravilochanan – Research Methodology – Margham Publication, Chennai, Latest Edition.

**Books for Reference:**

1. B.N. Ghosh – Scientific Methods and Social Research – Sterling Publishers Pvt. Ltd., Delhi (Latest Ed.)
2. Dipakkumar Bhattacharya – Research Methodology – Excel Books, 2<sup>nd</sup> Edition 2010.
3. C.R. Kothari – Research Methodology Methods and Techniques – New Age International Publishers, Latest Edition.
4. Suresh Chandra and Mohit Kr. Sharma – Research Methodology, Narosa Publishing House – New Delhi – Second Edition

**WEB RESOURCE**

1. [www.researchgate.net](http://www.researchgate.net)
2. [www.research-methodology.net](http://www.research-methodology.net)
3. [www.academia.edu](http://www.academia.edu)
4. Indian Academic researcher's association (IARA)