

UNIVERSITY OF MADRAS  
M.Com. (GENERAL) DEGREE PROGRAMME  
SYLLABUS WITH EFFECT FROM 2023-2024

Second Year

Core – VIII

Semester III

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
513C3B	RESEARCH METHODOLOGY		6	-	-	-	5	6	25	75	100

**Learning Objectives**

1	To understand the fundamentals of research
2	To construct theoretical design and formulate hypotheses
3	To evaluate the data collection techniques
4	To perform parametric and non-parametric tests
5	To enhance report writing skills and develop ethical conduct in research

**Course Units**

**UNIT I**

**(18 hrs)**

**Introduction to Research Methodology**

Research: Definition – Objectives – Motivations for research – Types of research – Maintaining objectivity in research – Criteria of good research – Applications of research in business - Formulating a research problem – Literature Review – Reasons for review – Reference management tools - Identification of research gap – Framing of objectives.

**UNIT II**

**(18 hrs)**

**Hypothesis Testing and Research Design**

Hypothesis – Formulation of hypothesis – Testing of hypothesis – Type I and Type II errors – Research design – Types of research design - Methods of data collection: Census, Sample survey, Case study – Sampling: Steps in sampling design, Methods of sampling – Testing of

UNIVERSITY OF MADRAS  
M.Com. (GENERAL) DEGREE PROGRAMME  
SYLLABUS WITH EFFECT FROM 2023-2024

reliability and validity – Sampling errors.	
<b>UNIT III</b>	<b>(18 hrs)</b>
<b>Data Collection</b>	
Variable: Meaning and types - Techniques of data collection – Primary data: Meaning, Advantages and limitations – Techniques: Interview, Schedule, Questionnaire, Observation – Secondary Data: Meaning and sources.	
<b>UNIT IV</b>	<b>(18 hrs)</b>
<b>Data Analysis</b>	
Data Analysis – Uni-variate Analysis: Percentile, Mean, Median, Mode, Standard deviation, Range, Minimum, Maximum, Independent sample t-test – Bi-variate analysis: Simple correlation, Simple Regression, Chi-square, Paired samples t-test, ANOVA, Man-Whitney test – Wilcoxon signed rank test – Kruskal Wallis test (Simple problems)	
Multi Variate Analysis: Multiple Correlation, Multiple Regression, Factor Analysis, Friedman’s test, Cluster analysis, Confirmatory Factor Analysis (CFA), Structural Equation Modelling (SEM), Multiple Discriminant Analysis.	
<b>UNIT V</b>	<b>(18 hrs)</b>
<b>Preparation of Research Report</b>	
Report preparation – Guidelines and precautions for interpretation – Steps in Report writing - Style of research reports (APA, MLA, Anderson, Harvard) – Mechanics of report writing – Ethics in Research – Avoiding plagiarism – Plagiarism checker tools – Funding agencies for business research.	

**Theory: 80%; Problems: 20%**

**UNIVERSITY OF MADRAS**  
M.Com. (GENERAL) DEGREE PROGRAMME  
SYLLABUS WITH EFFECT FROM 2023-2024

**Course Outcomes**

Students will be able to:

CO No.	CO Statement	Knowledge level
CO 1	Recall the research concepts and recognise the research problem	K1
CO 2	Construct research hypothesis and determine the sample size	K3
CO 3	Select appropriate method for data collection	K3
CO 4	Interpret the results of statistical tests	K2
CO 5	Construct research report avoiding plagiarism	K3

**Books for study:**

1. Tripathi, (2014) "Research Methodology in Management and Social Sciences". SultanChand & Sons, New Delhi.
2. Kothari C.R and Gaurav Garg, (2020) "Research Methodology" – Methods and Techniques. New Age International (P) Limited, New Delhi.
3. Krishnaswami and Ranganathan, (2011) "Methodology of Research in Social Sciences", Himalaya Publishing House, Mumbai.

**Books for reference:**

1. Donald R. Cooper, Pamela S. Schindler and J.K.Sharma, "Business Research Methodology", 12<sup>th</sup> Edition, Tata Mcgraw Hill, Noida (UP).
2. Sashi K.Guptha and ParneetRangi,(2018) "Research Methodology" , Kalyani Publisher, Ludhiana.
3. SharmaR D and Hardeep Chahal, (2004) "Research Methodology In Commerce andManagement", Anmol Publications, New Delhi

**Web references:**

1. [https://www.cartercenter.org/resources/pdfs/health/ephti/library/lecture\\_notes/health\\_science\\_students/ln\\_research\\_method\\_final.pdf](https://www.cartercenter.org/resources/pdfs/health/ephti/library/lecture_notes/health_science_students/ln_research_method_final.pdf)
2. <https://ccsuniversity.ac.in/bridge-library/pdf/MPhil%20Stats%20Research%20Methodology-Part1.pdf>
3. [https://prog.lmu.edu.ng/colleges\\_CMS/document/books/EIE%20510%20LECTURE%20NOTES%20first.pdf](https://prog.lmu.edu.ng/colleges_CMS/document/books/EIE%20510%20LECTURE%20NOTES%20first.pdf)
4. <https://www.statisticssolutions.com/academic-research-consulting/data-analysis-plan/>

Note: Latest edition of the books may be used

UNIVERSITY OF MADRAS  
M.Com. (GENERAL) DEGREE PROGRAMME  
SYLLABUS WITH EFFECT FROM 2023-2024

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	3	3	3	2	2	3	2	3	3
<b>CO2</b>	3	3	3	2	2	3	2	3	3
<b>CO3</b>	3	3	3	2	2	3	2	3	3
<b>CO4</b>	3	3	3	2	2	3	2	3	3
<b>CO5</b>	3	3	3	2	2	3	2	3	3

High – 3

Medium – 2

Low – 1