

M.A. – III Semester

Paper –I (Research Methodology)

Course Title	Research Methodology
Course Type	Core
Credit Value	05
Max. Marks	100
Course Learning Outcomes CLO)	On successful completion of this course, the students will be able to: CLO 1 – Understand ancient and historical method of research by way of Shruti, Smriti, Anveshan and logical debates (Shastrarth). CLO 2 – Develop a structured and systematic approach for conducting research. Planning, organizing, and executing research studies and be able to draw meaningful conclusions. CLO 3 –Student will be able to understand different methodologies of sampling techniques and data collection. CLO 4 – Help students to replicate the study, verifying the results through hypothesis testing, and building upon existing knowledge. CLO 5 –Students will be able to Learn skills of computer use for collection and analysis of data by implying different softwares .

Unit	Topics
Unit I Introduction, Types & Process of Research	<u>Introduction to Research:</u> Concept, Definition and Features of good research study, Research Philosophy – Ontology & epistemology of research. Research methods used by ancient thinkers – perusing interdisciplinary approach and exploratory methods. Application of Research in Economics. <u>Types of Research:</u> Pure or fundamental research, Exploratory Research and Applied research: Descriptive, Casual, Analytical, and Experimental Research, Qualitative and Quantitative Research, Action research, Case Study, Ethnographic Methods. <u>Process of Research:</u> Different Sources of Research Problem, Problem Identification & Formulation of Research problem, Characteristics of good Research problem. Importance & Organizing of Review of Literature, Identification of GAP from review of literature, Designing of objectives for research. Formulation of Research Hypothesis, its need and importance.

	Activities – Find a Research Problem. Frame on the basis of current fact. Discuss its historical context, used by ancient thinkers – exploratory and comparative research methods. Think: Which type of research is suitable to solve this problem & why? Discuss its relevance in current & ancient context.
Unit II Research Design & Sampling Techniques	<u>Research Design:</u> Nature & Types of research design – Exploratory, Descriptive, Experimental Research Design, Field Surveys and Case Study Design, Action Research Design, Formulation of Research Design. Features of good Research Design. <u>Sampling Technique:</u> Concept of sampling (Census Vs Sample), Characteristics of good sample, Small Vs Large samples, Sampling frame, Sampling Errors, Sample Determination and Sample Selection Procedure. <u>Probability Sampling Methods:</u> Simple random sampling, Multi-stage sampling, Stratified Sampling, Cluster Sampling etc. <u>Non-Probability Sampling Methods:</u> Purposive Sampling, Convenience Sampling, Snowball Sampling & Judgmental Sampling etc.
	Activities – Select an area and determine the size of sample. Decide which method of sampling will you use and why? The Indian Knowledge System is deeply rooted in diverse traditions such as Vedic texts, Ayurveda, Yoga, classical arts, philosophy, and indigenous agricultural practices – try to analyse it by reading.
Unit III Attitude Measurement & Scales, Data Collection, Classification & Processing, Hypothesis Testing	<u>Types of Measurement Scales:</u> Nominal, Ordinal, Ratio, & Interval Scale. Attitudes & its components – Cognitive, Affective, & Action. <u>Scaling Technique – Likert Scale.</u> <u>Types and Sources of Data:</u> Primary Vs Secondary sources of data collection, Methods of data collection, Designing of Questionnaire / Interview Schedule. Classification and tabulation of data Graphical representation of data Graphs and charts etc. <u>Hypothesis Testing:</u> Need of hypothesis Types of hypothesis (Null & Alternative hypothesis) Types of Error

	Parametric & Non-Parametric Tests of Hypothesis for small and large samples: Z Test, t-Test, Chi-Square Test & ANOVA Activity: Frame 5 questions each using Nominal, Ordinal, Ratio, & Interval Scale. Take a data set from a website and construct Graphs & Charts. Take a data set from the Web of any two variables/attributes, frame a hypothesis & calculate using Tests.
Unit IV Report Writing & Referencing Style	<u>Research Report Writing:</u> Structure of Abstract and keywords, Layout of the Research Report Writing: Different formats of Thesis, Dissertation, Reports, Proof Correction, Finalization of Report/ Thesis. <u>Referencing styles:</u> Citation and bibliography: Footnotes, End notes, Basic knowledge of indexing of Journals- h-index - i10-index - Impact Factor. Ethics in Research - Understanding Plagiarism - Definition, different forms & Consequences. Activities – Collect 10 research papers from the internet, understand different patterns of referencing. Assignment - Visit different research web sites like google scholar, PubMed, Research Gate, Scopus, Web of Science, JSTOR, and Semantic Scholar and explain similarities and dissimilarity.
Unit V Use of Computer for Research	<u>ICT Tools for Research-</u> Use of Computer MS-Word, MS- Excel & Spread Sheets - Word Processor Packages, Computer Software in Research: SPSS, N-Vivo. Use of Tabulation and Graphical Presentation of research data. Maintenance of data using software: Referencing Style, Reference Manager, and Endnote. Activity: 1. Documenting these oral traditions—stories, practices, rituals, medicinal knowledge, etc. of any rural heritage or tribal area. Collect Data from any site and use SPSS or NVivo - analyse data and make interpretation.

Suggested Readings:

1. Research Methodology: Concepts And Cases: Concepts & Cases. Deepak Chawla & Neena Sondhi, Vikaas Publishing Private limited, New Delhi.
2. Kothari C. R - Research Methodology,
3. Gupta Mukul & Gupta Deepa, "Research Methodology" PHI learning PVT. Ltd., Print Book ISBN: 9788120343818, Binding : Paperback

4. Donald Cooper and PS Schindler (2009) Business Research Methods, 9th edition, Tata McGraw Hill.
 5. Uma Sekaran (2010) Research Methods for Business, 4th edition, Wiley Publication
 6. Ranjit Kumar (2009) Research Methodology, 2nd edition, Pearson Education
 7. Naresh Malhotra and S Dash (2009) Marketing Research, 5th edition, Pearson Prentice Hall.
 8. Michael V. P Research Methodology.
 9. S.P. Gupta: Theory and Practice of Statistics
- Recommended Reading on application of research in Indian knowledge System.

1. <https://link.springer.com/series/15723> - Palgrave studies in ancient economics
2. Handbook of Research Methods and Applications in Heterodox Economics"
3. "Ancient Economies in Comparative Perspective"- This book examines the economic organization of ancient societies from a comparative perspective, exploring economic thought, institutions, and systems. (2022) <https://link.springer.com/book/10.1007/978-3-031-08763-9>
4. Research in the History of Economic Thought and Methodology: A Research Annual: 30, Part A (Research in the History of Economic Thought and Methodology, 30, Part A), 17 July 2012. Amazon Books.<https://www.amazon.in/Research-History-Economic-Thought-Methodology/dp/1780528248>

Suggested Readings

1. For Data Collection & Analysis Computer tools:
 - (a) SPSS: A statistical package widely used for quantitative data analysis.
 - (b) NVivo: A qualitative data analysis software for analyzing text and other qualitative data.
 - (c) ATLAS.ti: Another qualitative data analysis software specializing in coding and analysis.
 - (d) R Studio: A powerful programming language and software environment for statistical computing and data analysis.
