

**SYLLABUS OF RESEARCH
METHODOLOGY INDICATING
RESEARCH ETHICS**

SCHEME & SYLLABUS

Ph.D.



Sant Baba Bhag Singh University
Khiala, Padhiana, Jaladhar, Punjab, India
2018

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Paper-I (Compulsory for all)

Subject Code: RM901

Research Methodology

UNIT-I

Objectives and Types of Research: Motivation and objectives – research methods vs. Methodology. Types of research – Descriptive vs. Analytical, applied vs. Fundamental, Quantitative vs. Qualitative, and Conceptual vs. Empirical.

UNIT-II

Research Formulation: Defining and formulating the research problem - Selecting the problem - Necessity of defining the problem - Importance of literature review in defining a problem – Literature review– Primary and secondary sources – reviews, treatise, monographs-patents – web as a source – searching the web - Critical literature review – Identifying gap areas from literature review - Development of working hypothesis.

UNIT-III

Research Design and Methods: Research design – Basic Principles- Need of research design – Features of good design – Important concepts relating to research design – Observation and Facts. Prediction and Explanation. Developing a research plan. Data Collection and analysis: Execution of the research - observation and Collection of Data Analysis with Statistical Packages - Hypothesis-testing - Generalization and Interpretation.

UNIT-IV

Reporting and Thesis Writing – Structure and components of scientific reports - Types of report – Technical reports and thesis – Significance – Different steps in the preparation – Layout, structure and Language of typical reports – Illustrations and tables - Bibliography, referencing and footnotes – Oral presentation – Planning – Preparation – Practice – Making presentation – Use of visual aids - Importance of effective communication. Application of Results and Ethics - Copy right – royalty - Intellectual property rights and patent law –Plagiarism - Citation and acknowledgement.

Text/Reference Books:

S. No	Name	Author(S)	Publisher
	An introduction to Research Methodology	Garg, B.L., Karadia, R., Agarwal, F. and Agarwal, U.K.	RBSA Publishers
	Research Methodology: Methods and Techniques	Kothari, C.R.,	New Age International
	Research Methodology	Sinha, S.C. and Dhiman, A.K	Ess Ess Publications
	Research Methods: the concise knowledge base	Trochim, W.M.K	Atomic Dog Publishing
	Law relating to patents, trade marks, copyright designs and geographical indications	Wadehra, B.L	Universal Law Publishing