



## Paper I

Total Marks: 100

### Research Methodology (Common for All)

Unit	Content
1	<b>Basics of Research:</b> Research: Meaning, Objective, Characteristics, Steps of research, Methods of research, Types of research – Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical.
2	<b>Research Problem and Research Design:</b> Introduction to Research Problem, Necessity of Defining the Problem, Selecting the Problem, Techniques Involved in Defining a Problem, Meaning and Types of Research Design, Important Concepts Relating to Research Design
3	<b>Sampling Design:</b> Census and sample survey, Implications of a Sample Design, Steps in sampling Design, Criteria of Selecting a Sampling Procedure, Characteristics of a Good Sample Design, Different Types of sample Designs, How to Select a Random Sample?, Random Sample from an Infinite Universe, Complex Random Sampling Designs
4	<b>Data Collection and Analysis:</b> Methods of Data Collection- Observation, Interview, Questionnaires, Schedules, Survey and Experimental. Selection of Appropriate Method for Data Collection, Different Techniques of Sampling such as Probability and Non-Probability, Basic Statistical Methods of Data Analysis such as Frequency distribution, Measures of central tendency, Measures of Dispersion, Coefficient of variation, correlation and regression.
5	<b>Research Ethics and Morals:</b> Environmental impacts and Ethical issues, Commercialization, Copy right, Royalty, Intellectual property rights and Patent law, Plagiarism, Citation, Referencing style and acknowledgement.