

SECTION-I (Common for All Branches)

Research Methodology

Syllabus for PhD Admission Test

- 1. Introduction to Research Methodology:** Meaning, objectives, Types and Approaches of Research, Research Methods v/s Methodology, Research Process, Criteria of Good Research, Research Problem, Selecting the Problem, Necessity of and Techniques in defining the problem
- 2. Research design:** Basic research process, Meaning and necessity of research design, Features of good research design, Different research designs.
- 3. Sample Design:** Sample survey, Steps in sampling design, important sampling distributions, Criteria of selecting a sampling procedure, Characteristic of a good sample design, Different types of samples design
- 4. Methods of Data Collection and Presentation:** Various methods of Primary and secondary data collection, Case Study Method, questionnaire, interviewing. Survey v/s experiment, Methods of Data presentation,
- 5. Processing and analysis of data:** Frequency distributions, Mean, Mode, Median, Range, Standard deviation , Coefficient of variation, Variance, Estimation of population means, Sample size and its determination.