

## **Section – A: Research Methodology Syllabus for PhD Entrance Examination**

**Research Aptitude:** Research: Meaning, Characteristics and types; Steps / Methods of Research; Research Ethics; Research and Scientific Methods; Deductive Vs Inductive Research; Defining and formulating the research problem; Important concepts related to Research design; Computing skills for scientific research

**Reading Comprehension and Communication:** Unseen passage based on a research article; Nature of Scientific Communication; Barriers of Communication

**Reasoning:** Number series; Letter series; Alphabetical codes; Structure of Arguments; Analytical Reasoning

**Data Interpretation:** Measures of Central Tendency, Standard Deviation & Error; Basic probability; Graphical Representation and Mapping of Data; Quantitative and Qualitative Data Analysis

**Information and Communication Technology (ICT):** ICT: Meaning, advantages, disadvantages and usage General abbreviations and terminologies; Basics of internet and emailing