Ph. D Entrance Test

Syllabus Part-A (Common to Biotechnology, CSE, Computer Applications, Chemistry, ECE, Mathematics and Physics and Material Science Engineering)

Research: Meaning, Characteristics and Types; Steps of Research, Methods of Research, Ethics and Plagiarism, Awareness of Research Paper, Articles, Workshop, Seminar, Conference and Symposium, Report Writing: Its characteristics and format, Understanding the Structure of Argument, Evaluating and distinguishing Deductive and Inductive Reasoning, Analytical Reasoning, Verbal Analogies; Logical Diagrams. **(15 MCQs)**

Basic statistics: Sources and type of data: quantitative and qualitative data; diagrammatic and graphical representation of data. Mean, median, mode, geometric mean, harmonic mean and other measures of central tendency, measure of dispersion, mean deviation, quartile deviation, standard deviation, variance, coefficient of variation, skewness, kurtosis, moments, correlation and regression, elementary probability theory, Baye's theorem, random variables (one dimensional), Poisson, Normal and Binomial distributions; Random sampling, testing of hypothesis. Venn Diagram; Networks and Flow Diagram. **(10 MCQs)**

Part-B Syllabi of respective discipline **(25 MCQs)**