

Pre Ph.D. Course work for Biochemistry

Paper II: Research Methodology

Maximum Marks: 100

Unit I

Basic Concept: Meaning, Objective, Motivation, Types of research, Research approaches, Significance of Research, Research processes, Criteria for good research, Outcomes of research.

Research Problem: Definition, Selection of problems, Necessity of defining the problems, Techniques involved in defining a research problems.

Unit II

Research design: Meaning and need of research design, Development of research plan and Research Methodology, hypothesis and its authentication.

Unit III

Review of literature: Literature search methods, preparation of reports, research proposals and review articles, writing of references / bibliography and effective presentation.

Unit IV

Hazardous Laboratory material / Chemicals and Biosafety measures

Statistics: Sampling and sampling methods, sampling designs, Collection and classification of data, Graphical representation of data, Probability, Measure of central tendency, Measure of dispersion, Test of significance, Variation.

Unit V

Intellectual property right: Issues and role in R&D

Financial Assistance: Roles of funding agencies like UGC, CSIR, ICMR, DST, ICAR, ISRO, DRDO, DBT, CST in research and development.

2/2
21/4/13
21/4/2013
Shing