

# Course I Research Methodology 100 Marks (4 credits)

#### UNIT- I

**Research problem** : meaning of research problems, sources of research problems, criteria / characteristics of a good research problem, errors in selecting a research problem.

### UNIT-II

**Hypothesis** : Meaning, types of hypothesis. **Research Report** : Format of the research report, style of writing the report, references and bibliography. Review writing: Format of review writing ,writing review on books and research article presentation

# UNIT-III

**Information technology and library resources** : The Internet and World Wide Web, internet resources for chemistry, using spreadsheets, word processors, databases and other packages, finding and citing information.

## UNIT-IV.

Intellectual Property Rights: Introduction to the notion of "Property" and Intellectual Property Different forms of intellectual property rights and the aspects of protection, Introduction to, Patent Fundamentals and Patent procedure.

## **References:**

1. Practical Research Methods by Catherine Dawson, How To Books Ltd 2002.

2. Developing Effective Research Proposals by Keith Punch, Sage Publication Ltd 2000 3. Developing Research Proposals by Pam Denicolo, Lucinda Becker, Sage Publication

3. Developing Research Proposals by Pam Denicolo, Lucinda Becker, Sage Publication Ltd 2012

4. Research Methodology: Methods and Techniques, C. R. Kothari, New Age International 2005

5. Tests, Measurements and Research Methods in Behavioral Sciences: A. K.Singh, BhartiBhawan Publisher And Distributor 2012.

Research Methodology by Ranjit Kumar, Second Edition, Sage Publication Ltd 2005
The Good Research Guide, MartynDenscombe, McGraw-Hill International, 01-May-2007.