MIO 106-P RESEARCH METHODOLOGY [P]

Course Credit: 1 Contact Hours: 30

- 1. Literature survey on a given research area.
- 2. Defining a research problem.
- 3. Designing an experiment with respect to a given objective.
- 4. Experimental work.
- 5. Presentation of data.
- 6. Technical writing.

Reference Books (Composite list for theory and practicals)

- 1. Kothari C. R., Research Methodology Methods and Techniques, New Age International.
- 2. Kumar, R. C., Research Methodology. APH Publ Corporation, New Delhi.
- 3. Good C. V., Scates, D. E., Methods of Research, Appleton-Century-Crofts.
- 4. Day R.A. How to write and publish a scientific paper, Part 274, Volume 994, Oryx Press.
- 5. Alley, M., The Craft of Scientific Writing, Springer Science and Business Media.
- 6. Cooray P.G. Guide to Scientific and Technical Writing.

MIO 106-T RESEARCH METHODOLOGY [T] Theory Course Credit: 1 Contact Hours: 15

- 1. Biosafety in the laboratory
- 2. Ethics in research
- 3. Defining the problem
- 4. Literature survey
- 5. Defining the Aims and Objectives
- 6. Work Plan Time-bound Frame
- 7. Research design
- 8. Experimental protocol
- 9. Presentation of data
- 10. Analysis and Conclusions
- 11. Presentations
- 12. Research manuscript writing
- 13. Thesis Writing
- 14. Viva Voce

Reference Books (Composite list for theory and practicals)

- 1. Kothari C. R., Research Methodology Methods and Techniques, New Age International.
- 2. Kumar, R. C., Research Methodology. APH Publ Corporation, New Delhi.
- 3. Good C. V., Scates, D. E., Methods of Research, Appleton-Century-Crofts.
- 4. Day R.A. How to write and publish a scientific paper, Part 274, Volume 994, Oryx Press.
- 5. Alley, M., The Craft of Scientific Writing, Springer Science and Business Media.
- 6. Cooray P.G. Guide to Scientific and Technical Writing.