Unit I:


Unit II:

Problem Formulation, Understanding Modelling and Simulation, Conducting Literature Review, Referencing (including hands-on training on End-Note/ Mandalay); Case studies (SEMINAR ON: Information Sources, Information Retrieval, Role of libraries in Information Retrieval, Tools for identifying literatures, Indexing and abstracting services, Citation indexes)

Unit III:

Experimental Research: Cause effect relationship, Development of Hypothesis, Measurement Systems Analysis, Error Propogation, Validity of experiments, Statistical Design of Experiments, Field Experiments, Data/ Variable Types and classification, Data Collection, Numerical and Graphical Data Analysis: Sampling, Observation, Surveys, Inferential Statistics and Interpretation of Results; Hands-on training on R-software for statistical analysis.

Unit IV:

Preparation of Thesis and Research Papers, Tables and illustrations, Guidelines for writing the abstract, introduction, methodology, results and discussion, conclusion sections of a manuscript. References, Citation and listing system of documents (SEMINARS ON: Intellectual property rights (IPR) - patents-copyrights-Trademarks-Industrial design-geographical indication. Ethics of Research- Scientific Misconduct- Forms of Scientific Misconduct. Plagiarism, Unscientific practices in thesis work, Ethics in science)

REFERENCES:


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