B.N. Mandal University, Laloo Nagar, Madhepura-852113 (Bihar) Ph.D. Course Work

Paper-I

(Compulsory Paper)

Paper Code: PCWO1

Full Marks: 100 Time: 3 Hours

Credit: 04

Unit - I: Introduction to Research:

Science and the scientific approach–Science and Common Sense, Methods of Knowing Science and its functions. The aim of Science, Scientific explanation and theory, Scientific research–Definition and scientific approach.

Unit - II: Problems, Hypotheses and review of literature:

Problem-Definition and its identification, importance of problem. Hypothesis-Definition and its value, Test of Hypothesis. Test of Statistics-Relation between problem and hypothesis. Research designing-Meanings, Characteristics, Purpose and Types. Review and Literature-Concerning research topic/subject. Research Ethics. Plagiarism.

Unit - III: Methodology:

Techniques of data collection-Survey, Observation, Questionnaire and Schedule, Interview, Case Study and Experimental Study. Rating scale.

Unit - IV: Parametric Statistics and Non- Parametric Statistics:

Basic approach, determination and purpose of statistics, Concept of the patterns of distribution, Sampling methods and techniques. Variable and types of variables, measurement of variables.

Unit -V: Computer and its application in research:

Basic concepts of Computer-Hardware and Software, Microsoft office-M.S. Word, Excel, Power Point. Statistical Package for Social Sciences (SPSS). Various uses of Computer and its application in the field of research.