

**COURSES OF STUDIES**  
**FOR**  
**Pre-Ph.D. EXAMINATION**  
**(With effective from 2019-2020)**

**ECONOMICS**  
**(Semester System)**



**DEPARTMENT OF ECONOMICS**  
North Orissa University  
Sriram Chandra Vihar  
Takatpur, Baripada-757003

## **Pre-Ph.D**

### **Economics Programme outcomes**

#### **ECO-801**

#### **RESEARCH METHODOLOGY-1**

##### **Credits: 05**

**Outcomes:** This is a course for studying various methods for conducting social science research. It deals with various approaches, methods, tools and techniques. Further, it deals with basic knowledge on computer, data, and estimation of statistical tools by using software and analyzing the results of economic relationships, testing economic hypotheses and forecasting.

By the end of the course, the student should be able:

- To become familiar with basic knowledge research methodology and sampling techniques.
- To become familiar with basic knowledge on computer, with statistical software, to draw distributive tables, graphs, trend lines.
- To estimate the parameters of regressions with the help of software and interpret

#### **Module - 1**

Introduction to social science research: Scientific and Social Science Research- nature, objectives and limitations; Meaning of research in Economics: Different types of research. Research Methodology. Preparation of a research proposal and the formulation of research design, Methods and techniques of research. Differences among them, the logical framework of investigation, analysis of historical records.

#### **Module - 2**

Review of literature-Need for reviewing literature, sources of literature; research Design, Identification and conceptualization of a research problem, setting up objectives and hypotheses.

#### **Module - 3**

Data Collection and Processing: Meaning and importance of data; Methods of collecting primary and Secondary data; Sampling techniques-sample size, Sampling error and problems in Sampling; tools of data collection. Scheduled and questionnaires; Nature of field work, pilot study, sampling frame and sample selection, Database of the Indian Economy.

#### **Module - 4**

Preparation for Analysis, Editing, Coding, Classification & Transcription of Data, Tabulation, construction of Frequency Table, Graphs/Charts/Diagrams.

#### **Module - 5**

Statistical Analysis of Data: Descriptive statistics. Measures of Central Tendency, Dispersion, Relationship, Correlation and Regression.

### **Reading List**

Cochran, W.G. (1963) Sampling Techniques, John Wiley & Sons, New York

Goode, William J and Hatt, Paul K (1952) Methods in Social Research, McGraw- Hill, New York

Goon, A. M. Gupta M. K, B. Das Gupta (1991): Fundamentals of Statistics, Vol-I & II, World Press Kolkata.

Wilkinson, S. and Bhandarkar, P.L.(1977) Methodology and Techniques in Soc Research, Himalaya Publishing House, Bombay.

## **ECO-802**

### **RESEARCH METHODOLOGY-1I**

#### **Credits: 05**

**Outcomes:** This is a course for studying inferential statistics and multivariate analysis for conducting social science research. Further, it deals with basic knowledge on computer, data, and estimation of statistical tools by using software, like SPSS and analyzing the results of economic relationships, testing economic hypotheses and forecasting.

By the end of the course, the student would be able to have basic knowledge on research methodology, sampling techniques and use statistical software like SPSS, E-views to draw tables, graphs, trend lines.

#### **Module - 1**

Inferential statistics: Techniques of Testing of Hypotheses (parametric and non parametric), Null and Alternative Hypothesis, Type-I and Type-II errors

#### **Module - 2**

Multivariate Analysis: Regression analysis-CLRM (Simple and multiple problems in regression- multicollinearity, heteroscedasticity, autocorrelation errors in variables and specification

#### **Module - 3**

Report writing: Types of reports; Steps in report writing; Format of the research report; Principles of writing; Documentation; foot notes; use of tables and citations and references; do's and don'ts of research writing

#### **Module - 4**

Data Management: Creating the data file, defining the variables, entering the data, opening an existing file, inserting variables, inserting cases, sorting cases, splitting files, selecting cases, listing cases; Data Transformation: computing new variables, Recording variables, Ranking cases

## **Module - 5**

Data Presentation and Analysis-1: descriptive statistics, Correlation analysis;

### **Reading List**

Cochran, W.G. (1963) Sampling Techniques, John Wiley & Sons

Durtson & Poole, Thesis and Assignment Writing

Gujarati D.N. Basic Econometrics

Koutsoyiannis A (1997) Theory of Econometrics

Krishnaswamy, O.R. & Ranganathan M (2005) Methodology of Research in Social Science

Sadhu. A.N & Singh, Amarjit (1983) Research Methodology in Social Sciences

## **ECO-803**

### **SEMINAR & REVIEW WORK**

**Credits: 05**

**Outcomes:** The purpose of this course is to gain and understanding the existing research and debates relevant to a particular topic and area of study. It helps the students learn the way to present that knowledge in the form of a report. Conduction of a literature review helps them built their knowledge in their respective field of work. The course provides foundation of knowledge on topic and identifies areas of interest. It also helps in preventing duplication of work and giving credit to other researchers.

The course also engages the learners in a formal debate. It promotes involvement of students in group and team work and encourages them to carry out case studies to address different socio economic issues.