Ph.D. course work in Economics

Paper I (Common Paper)

Research Methodology-I

<u>Unit-I</u>

Research – Issues & Significance; Types of research – Quantitative, Qualitative/Descriptive, Analytical/ Applied, Fundamental/ conceptual, Empirical, etc; Identification & formulation of research problems; Research de4sign; tools to conduct research.

Qualitative research – qualitative data collection techniques- biography, phenomenology, grounded theory, ethnography, case study; Quantitative research- interpretation.

<u>Unit-II</u>

Data sources & data collection – Sources for Collection of data, Methods of data collection, - observation method, interview method, questionnaires, case study method, etc; Classification, Tabulation, representations of data; Validation of data- averages, dispersion, cross tabulation, etc

Unit-III

Concept of population & samples: Types of sampling ; sampling & sampling distribution ; sampling from a population ; sampling error and non sampling error; Selection of a Random sample; Sampling of variables –small and large samples; Sampling of Attributes; Sampling Design- Defining the target population, representative sample, potential consequences of unrepresentative sampling, Over representative subgroups/weighting; sampling methods ,etc,. Population point Estimation and population interval Estimation; some other continuous Probability distribution

Unit-IV

Computer applications- computer & internet in research. computer system (s) Threats & challenges to research work, application of computer –Spreadsheet, Presentation, Outlook, Google applications –drive, cloud, etc.

Selected References:

- 1. Gupta, S.C "Fundamental of Statistics". Himalaya Publishing House
- 2. Kothari, C.R , "Research Methodology : Methods & Techniques" , New Age International, New Delhi

Paper II (Common Paper)

Research methodology-II

<u>Unit-I</u>

Review of literature – Review concepts; Literature Review, Published, Unpublished papers, books other sources of information: Research Ethics – Plagiarism, etc; citation Methods &rules; Indexing – rule and different producers

<u>Unit-II</u>

Data Analysis & Interpretation – Processing & interpreting qualitative & quantitative data, tools for data analysis; Statistics in research – Descriptive statistics summarizing & describing a collection of data; Univariate & bivariate analysis. Identifying randomness & uncertainty in data – missing data, inferential statistics; Methods of data analysis-quantitative & qualitative; Interpretation of results.

Unit-III

Hypothesis Testing – Concept & errors of hypothesis, formulation and testing of hypothesis, test of significance approach, parametric and non- parametric test of difference.

Regression analysis – functional forms of regression models; steps in regression analysis; regression Diagnostics; the problem of estimation; the of inference: Dummy variable regression models.

Unit-IV

Application of social science software – demonstration & interpretation through SPSS, STATA, R& other available softwares.

Selected References:

1. Gujrati, D.N; Dawn c Porter & Sangeeta Gunasekar "Basic econometrics, McGraw Hill.

2. Bhaumik, S. K. "Principles of Econometrics" Oxford

3. Chatterjee, Sand Ali S Hadi,"Regression analysis by example", Willey

Paper – III (Department)

Quantitative Techniques in Economics

- 1. Single Equation Estimation & Problem of Single Equation Estimation
- 2. Dummy Variable Regression & LIMDEP models
- 3. Distributive Log Models
- 4. Simultaneous Equation Model & Estimation

Paper – IV (Department)

Contemporary Research Issues in Economics & Assignment

Group A: Existing Research ON Selected Topics Mentioned in the following list may be discussed

Poverty & Inequality, Growth & development, Gender Economics, Social Sector, Agricultural Economics, North East Economy

Group B: A scholar has to work on any one of the following topic:

Book review Or Review of Literature Or Methodology of the Research