

## Ph D. Course work

The overall aim of this course work shall be to inculcate Research Aptitude and Inquisitiveness together with writing and reading abilities required for undertaking an Independent Research Work.

There shall be **Four Papers** of 100 marks each. **Paper 1** will be **Research Methods** in Economics; **Paper 2** will be **Quantitative Techniques**. **Paper 3** will consist of Reviews of Three Research Papers Published in any **internationally** known Journal and Review of one **Internationally Celebrated book**. **Fourth**, that is the **last Paper** will be **viva voce and Presentation** of the approved topic of Ph.D. Thesis.

### Paper 1: Research Methods in Economics

Nature of Economic Reality and Epistemology

Approaches to Research: Positivism and Post- Positivism, Interpretivism and Critical Theory Approaches.

Applied vs Fundamental Research, Quantitative vs Qualitative Research, Types of Data and Analytical Techniques.

Steps in Research Process: Formulation of Problem, Literature Survey, Aim and Objectives, Research Questions and Hypotheses, Analytical Design.

Data and Data Collection; Primary and Secondary Data.

Methods of Primary Data: Observation, Interview and Questionnaire/ Schedule; Structured vs Unstructured and Participatory vs. Non Participatory. The Pilot Survey, Reliability and Validity. Secondary Data Sources.

Sampling Design: Purposive and Non-Purposive. Questions of Sample size and Sampling procedure.

Qualitative Data: Role of Researcher as Primary tool for Data, Multiple Sources of Influence and Data; Forms and Analytics; Action and Innovative Research. Participatory and Cooperative Enquiry.

Report Writing



अध्यक्ष

अर्थशास्त्र विभाग  
महात्मा गांधी काशी विद्यापीठ  
वाराणसी-2

## Paper 2: Quantitative Techniques

Review of Statistical Tools and Techniques. Measures of Central Tendency, Dispersion, Correlation and Regression. Testing of Hypothesis.

Linear Econometric Models: Specification and Estimation; Errors and Assumptions, Cases of Violation of Assumptions, OLS, ML, GLS.

Multi-Equation Models: Questions of Simultaneity and Errors of Simultaneity, Identification, Methods of Simultaneous Equation Model.

Limited Dependent Variable Models: Logit, Probit, Tobit.

Introduction to Time Series: Stationary Time Series, Error Correction and Co-Integration Models Panel Data: Fixed and Random Effects Introduction to Multivariate Analysis: Factor and Discriminant Analysis.

## Paper 3

This paper comprises of three Research Papers published in any internationally known journals and Review of one internationally celebrated book pertaining to Economics Issues. Two Research Paper from PhD. Thesis must be published in UGC approved journals and Presentation of one of the two published research papers.

## Paper 4

Viva Voce and Presentation of the approved topic of the Ph D. Thesis.

