

**M.Phil in Economics**  
Paper I  
**Advanced Economic Theory (Revised 2012-13)**

The paper has been designed in a way to enable the student to examine and evaluate how the modern economy works. A good grasp of economic theory is vital for conceptualizing economic phenomena and also to explore the causes and consequences of the same. It is also vital for decision making, understanding the role and also the impact of public policy and suggests new policy measures to improve the performance of the economy.

**1. MODULE I: Introduction (Markets & Prices)**

Themes - Theories & Models—Markets- Basic demand & Supply Analysis – The Basic tools of Analysis – Use of Supply Demand Model – Market Equilibrium ( Changes –Understanding and predicting the effects of changing Market conditions) – Role of Government.

**2. MODULE II: Theory of Demand**

Consumer Behaviour: Preferences, budget constraints and consumer choice – Individual and Market Demand – Determinants and Measurement –Methods of Demand forecasting- Empirical and statistical estimation of demand- choice under uncertainty and describing risk- Decision making – Role of information.

**3. MODULE III : Theory of Production**

Production functions: Technological progress and competitiveness –cost of production: concepts, cost in the short run and long run- Dynamic changes in costs – The Learning curve – Estimating and Predicting costs – cost minimization and competitiveness – Profit maximization and competitive supply.

**4. MODULE IV: Market Structure and Competitive Strategy**

Different Market Situations –Concepts and Determinants – Measuring Market Efficiency- Market Power and Pricing – Game Theory and Competitive Strategy – Nash Equilibrium – Competition Collusion – Strategies and Social costs – Regulation of Markets.

**5. MODULE V: Market Failure and the Role of Government**

Efficiency of competitive Market: Equity, Role of information – Market signaling – Externalities – Market Failure – Ways of correcting Market Failure.

**6. MODULE VI: Fiscal Impact**

Keynesian Approach – Aggregate Demand Management and Macro stability – Implications – Emergence of New Paradigms and the Changing role of the State: Supply Side Economics and New classical Economics – Macroeconomic Policy Debate – Global Recession – An Analysis of Policy Responses.

**7. MODULE VII: Economic Fluctuations**

Short run Long run Fluctuations: Alternative views - Theories and Models – Problems of inflation and Unemployment – Trends, Issues and Policy Imperatives.

**8. MODULE VIII: Open Economy Macro Economics-**

Exchange rates and the international Monetary System- Simultaneous equilibrium – Monetary and Fiscal Policy in the Open Economy.

**M. Phil. Economics      Paper ||    DEVELOPMENT ECONOMICS**  
**(Revised 2012-13)**

Prelude:1      The main focus of the paper is to enable the students to understand numerous subtle and complicated research issues in Development Economics. In the background of their theoretical knowledge , it intends to introduce students the empirical implications as well as the emerging dimensions of development .Ultimately , the purpose is to prepare the students to the most sensitive and delicate dimensions of development. In brief, this paper facilitates the would-be researchers to work for appropriate development strategies , models & policy measures

**Module 1 : Nature of Development Economics**

Development concept –growth and development –development goals – why development?-economic & social indicators of development – measurement of economic development –development Vs displacement .New methods of growth accounting.

**Module 2: New frontiers of development**

Development & environment - Sustainable development & strategies for sustainable development – climate change & global warming – Green accounting-Human development , its measurement & components – Human poverty - human & livelihood security- food & nutritional security– Development ethics -Capability approach to development –Gender sensitised development – Spatial dimensions of development –Synchronised development –Participatory development - Inclusive growth & Social capital

**Module 3 Economic growth & distributive justice**

Growth & income distribution -- Kuznets hypothesis --empirical studies – Measuring income distribution – Measures to ensure economic equality - Poverty concept -Measurement of poverty- measures to alleviate poverty – Multi poverty Index - Development gap ,causes, consequences &Measures to reduce development gap(Both national &international ) Distributive justice under globalisation.

#### **Module 4 New theories of economic growth**

Salient features of new growth theories –Contributions of Romar ,Lucas, Arrow, Dennison ,Becker & T.W. Schultz --Endogenous growth -- Knowledge & information revolution in economic development & in minimising transaction cost-- Emerging challenges of knowledge based society- Knowledge management.

#### **Module 5 Institutions for development**

Market & market failure - State & state failure - Third sector –Civil Society Organisations & development- Neo-liberal state & New Institutional Economics - Governance of development- Crisis Management – Millennium Development Goals – World Bank approach to development. Emerging challenges to Development.

#### **References**

- Thirlwal A.P : Growth and Development
- Todaro M.P& Stephen C Smith : Economic Development in  
The third world
- G.M. Meier and T.E Eanch : Leading issues in Economic Development
- Stuart R. Lynn : Economic Development- theory and  
Practice for a divided world
- Debraj Ray : Development Economics
- Srivastava O.S : Economics of Growth & Development  
Planning
- Mishra R.P : Regional planning & development
- Francois bourguignon &  
Bouris Pleskovic (ed) : Lessons of Development Experience
- Gerald M. Meier & Joseph
- E. Stiglitz : Frontiers of Development
- Partha Dasguptha
- Ismail Serageldin (ed) : Social capital –A Multifaceted  
Perspective
- World Development Reports  
Human Development Reports

# **M Phil Economics**

## **Paper - III**

### **Mathematical and Statistical Tools for Data Analysis**

**(Revised 2012-13)**

#### **Module –I Quantitative Research**

Meaning of quantitative research – process of quantitative research – quantitative data analysis – data processing – steps in data processing – analysis and interpretation.

#### **Module- II Differentiation Integration and Optimisation**

Differentiation – Rules – Partial and total derivatives - Maxima and Minima of a Function - Economic applications - elasticity and nature of commodity, consumer's and producer's optimisation problems - Homogenous functions - Production Function - Euler's rule.

Integration: Indefinite and definite integration of a function with a single variable, method of substitution. Economic applications – consumer's and producer's surplus.

#### **Module –III**

#### **Differential Equations, Linear Programming and Input-output Analysis**

Differential Equations : Variable separable case, homogenous case, standard linear differential equations, Bernoulli's form, exact equations, linear differential equations with constant coefficients.

Linear Programming : Setting up of the problem, various definitions, solution by graphical method and simplex method. Economic application of linear programming.

Input-output Analysis: Closed and Open input –output models – Direct and indirect input requirement – factor intensity in Leontief Model – Introduction to dynamic input –output model.

## **Module –IV Descriptive Statistics**

Role of statistics in data analysis – graphical representation of data – graph of non-metric data –graph of metric data – application of mean and standard deviation in data analysis

## **Module V Probability and Hypothesis Testing**

Role of probability in statistics – probability and uncertainty – conditional probability and its uses in economics – application of ‘Z’ , ‘t’, ‘F’ and chi-square test in hypothesis testing – test of single mean – test of two independent mean – test of means of paired data – Non parametric tests – sign test – Wilcoxon matched paired test – analysis of variance – one way and two way ANOVA – chi-square test for independence and goodness of fit.

## **Module – VI Correlation, Regression and Time Series Analysis**

Application of correlation in economics – Karl spearman’s correlation coefficient – Multiple correlation – hypothesis test for correlation coefficient – Rank correlation.

Regression – simple and multiple regression – OLS –assumptions – estimation and hypothesis testing – violations of assumptions – multicollinearity – heteroscedasticity – autocorrelation (Concepts) – introductions to non-linear regression.

### **Reference:**

- 1.D.Bose (2000) An introduction to mathematical economics, Himalaya publishing house.
- 2.R. Veerachamy(2006) New age international(p) limited, New Delhi
- 3.Taylor Sonia (2001) Business statistics, palgrave, New York.
- 4.Anderson et.al (2006) Statistics for business and economics.

# **M.Phil in Economics**

## **Paper IV**

### **Research Methodology and Computer Application to Economics**

#### **Preamble:**

This paper is introduced to equip the students to understand some basic issues relating to research in economics. The paper is designed in such a way that it will help to enlighten the students relating to the topic to be researched and empower them regarding the selection of the “Careful or critical inquiry or examination in seeking facts or principles; diligent investigating in order to ascertain something”. This emphasizes the fact that research in its broadest sense, a purposive investigation or inquiry. The main purpose of research is to describe, interpret and explain phenomena by relating it to other phenomena, thereby settings within its proper context and by making its meaning or sense explicit through its chain or inter connections. This paper will give a through insight to acquire research skills and capabilities and act as a guiding force behind the interested students to help them to acquire knowledge relating to the research.

#### **MODULE I Foundations of Research:**

Research and theory – Conceptual and theoretical models – Need for research in Economics. Classification of research –Pure and Applied research, exploratory, Descriptive, Diagnostic, Evaluation, Action and Experimental research – Analytical Study- Historical research –Surveys – Steps in research plan - Identification of research problem – Review of literature and its importance

#### **MODULE II Data Sources, Sampling, Data Tools and Analysis**

Meaning and importance of data – Sources of data – Primary and secondary data sources – Methods of data collection – Qualitative and quantitative methods - Data sources for economics – Construction of schedules and questionnaires for studies relating to economics.

Sampling techniques – Sample Design and choice of sampling techniques – Sample size – Sampling and non-sampling errors.

#### **MODULE III Processing, Analysis of Data and Report writing**

Processing of data - Editing - Classification and Coding - Transcription - Tabulation - Graphical Representation.

Analysis of Data - Using models for the analysis of the quantitative data.

Types of reports – Planning report writing – Research report format – Principles of writing report – Documentation: Footnotes and endnotes – Bibliography/references – Writing report- Evaluation of research report.

#### MODULE IV

#### Hypothesis Testing

Probability Distribution – Normal, t,  $X^2$  & F – Hypothesis Testing - Test of Statistical Significance – Testing Correlation and regression coefficients,  $X^2$  test, t test, F test, Anova test.

#### MODULE V

#### Time Series Analysis

Stationary and Non Stationary series - Unit roots - Granger Causality – Co integration - Error Correction Mechanism - Introduction to Vector Auto regression.

#### References:

1. Black, James, A and Dean J. Champion (1976). Methods and Issues in Social Research, Newyork: John Wiley and Sons.
2. Goode, William J and Paul K Hatt (1952) Methods in Social Research. Newyork: Megraw- Hill Books Co.
3. Kerlinger, Fred N. (1965) Foundation of Behavioural Research, New York, Holt, Renshart and Winston
4. Krishnaswamy, O.R. (2002) Research Methodology in Social Sciences. Himalaya Publishing House, Bombay.
5. Kurian, C.T (1984) Research Methodology in Economics Madras Institute of Development Studies, Madras.
6. Sharma B.A.V and other (1981) Research Methods in Social Sciences. New Delhi Sterling Publishers (P) Ltd.
7. Young, Pauline V (1977) Scientific Social Surveys and Research New Delhi; Prentice Hall of India
8. Sonia Taylor (2001) Business Statistics, Palgrave
9. Edward Minieka (2001) Statistics for Business with Computer Application, South-Western College Publishing, United States of America.
10. C.R. Kothari, Research Methodology: Methods and Techniques, Wishwa Prakashan, New Delhi.

