

**Swami Ramanand Teerth  
Marathwada University,  
Nanded**

**M.Phil.**

**ECONOMICS**

**Syllabus**

**With Effect From June 2010**

**M.Phil.**

**Economics**

**Effect from June – 2010**

<b>Paper No.</b>	<b>Paper Title</b>	<b>Marks</b>	
		<b>TH</b>	<b>IE</b>
I	Research Methodology & Quantitative Techniques (Compulsory)	80+	20
II	Advanced Economic theory (Compulsory)	80+	20
III	Indian Economic Policy (Compulsory)	80+	20
<b>Optional Papers</b>			
IV	Agriculture Economics	80+	20
	OR		
	Econometrics	80+	20

Dissertation:

80 Marks for Dissertation

20 Marks for Viva-Voce

**M.Phil.**

**Economics**

**Paper I**

**Research Methodology and Quantitative Techniques (Compulsory)**

**Marks 80**

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**1. Scientific and Social Research**

Meaning, definition of research, characteristics and steps of scientific research, Assumptions and Objectives of Social research.

**2. Formulation of Problem in Social Research**

Meaning, definition of formulation of problems, process of problem formulation in social research.

**3. Hypothesis and Research Design**

Meaning, definition and characteristics of hypothesis and research design; Types of Hypothesis and research design.

**4. The sampling and Data Collection.**

Meaning of sampling and data collection, characteristics of sampling, Types of sampling method, various method of data collection, sources of data.

**5. Presentation of Data**

Tabulation, processing of data, use of statistical tools. Classification of data;

**6. The Research Report**

Definition, object and design of research report, characteristics of a good report, Methods of references and Bibliography.

## **7. Quantitative Techniques**

Meaning, Utility of quantitative techniques in the field of Business, Management and economics.

## **8. Various Quantitative Techniques**

### **i) Correlation coefficient:**

Meaning and kinds of correlation coefficient, Testing for the significance of the correlation coefficient.

### **ii) Regression Analysis**

Meaning and characteristics of Regression, Ordinary Least square method, Test for significance of Regression equations.

### **iii) Testing of Hypothesis**

Chi-square ( $S^2$ ), “T” Test, and “F” Test.

## **BASIC READING LIST**

1. Chaing A.C. (2009) Fundamental Methods of Mathematical Economics – Tata McGraw Hill India.
2. Chaing A.C. (2009) Elements of Dynamic Optimization – McGraw Hill Singapore.
3. Goode W.J. & Hatt P.K., Methods of Social Research – McGraw Hill Singapore.
4. Koutsoyiannis A. – Theory of Econometrics – Macmillan Press Ltd.
5. Pindyck, Robert A & Daniel L. Rubinfeld (2002)-Micro Economics Person Education.
6. Varian H.R. (1992), Micro Economic Analysis W.W.Norton & Co.
7. Perm Kumar Gupta & D.S. Hira – Operation Research S., Chand & Co.

**M.Phil.**  
**Economics**  
**Paper II**  
**Advanced Economic Theory (Compulsory)**

**Marks 80**

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**1. Theory of Production and Costs**

Production function – short period and long period; law of variable proportions and returns to scale; Isoquants – Least cost combination of inputs; Returns to factors; Economics of scale; Multi-product firm; Elasticity of substitution; Euler's theorem; Technical progress and production Function; Cobb-Douglas, CES, VES and Trans – log production functions and their properties; Empirical.

**2. Welfare Economics**

Pigovian welfare economics; Pareto optimal conditions; Value judgment; Social welfare function; Compensation principle; Inability to obtain optimum welfare – Imperfections, market failure, Decreasing costs, uncertainty and non-existent and incomplete markets; Theory of Second Best – Arrow's impossibility theorem; Rawl's theory of justice, equity-efficiency trade off.

**3. General Equilibrium**

Partial and general equilibrium, Walrasian excess demand and input-output approaches to general equilibrium, existence, stability and uniqueness of equilibrium and general equilibrium, coalitions and monopolies; Production without consumption – one sector model, homogeneous functions, income distribution; Production without consumption – two sector model, relationship between relative

commodity and factor prices (Stolper – Samuelson theorem), relationship between output mix and real factor prices effect of changes in factor supply in closed economy (Rybczynski theorem), production and consumption.

#### **4. Economics of Uncertainty**

Individual behaviour towards risk, expected utility and certainty equivalence approaches, risk and risk aversion – sensitivity analysis, gambling and insurance, the economics of insurance, cost and risk, risk pooling and risk spreading, mean-variance analysis and portfolio selection, optimal consumption under uncertainty, competitive firm under uncertainty, factor demand under price uncertainty, the economics of search – different models, the efficient market hypothesis, stochastic models of inventory demand; market with incomplete information, search and transaction costs, the economics of information.

#### **5. Amartya Sen's Views on Economic Inequality**

Measurement of Income Inequality, Lorenz curve, Utilitarianism & Inequality, Inequality of What?..... Income, Needs & Returns to labor approaches.

#### **6. Macroeconomics in an Open Economy**

Mundell-Fleming model – Asset markets, expenctions and exchange rates; Monetary approach to balance of payments.

#### **7. New Classical Macroeconomics**

The new classical critique of micro foundations the new classical approach; Policy implications of new classical approach – empirical evidence.

## **Basic Reading List**

1. Kreps, David M. (1990), *A Course in Microeconomic Theory*, Princeton University Press, Princeton.
2. Koutsoyiannis, A. (1979), *Modern Microeconomics* (2<sup>nd</sup> Edition), Macmillan Press, London.
3. Layard, P.R.G. and A.W. Walters (1978), *Microeconomic Theory*, McGraw Hill, New York.
4. Sen, A. (1999), *Microeconomics: Theory and Applications*, Oxford University Press.
5. Stigler, G. (1996), *Theory of Price*, (4<sup>th</sup> Edition), Prentice Hall of India New Delhi.
6. Varian, H. (2000), *Microeconomic Analysis*, W.W. Norton, New York.
7. Gordon, R. and S.G. Harris (1998), *Macroeconomics*, Addison Wesley, Massachusetts.
8. Mankiw, N.G. and D. Romer (Eds.) (1991), *New Keynesian Economics*, (2 vols.), MIT Press, Cambridge.
9. Taylor, L. (1983), *Structuralist Macroeconomics*, Basic Books, New Longman.
10. Turnovsky, S.J. (1977), *Macroeconomic Analysis and Stabilization Policy*, Cambridge University Press, Cambridge.

**M.Phil.**  
**Economics**  
**Paper III**  
**Indian Economic Policy (Compulsory)**

**Marks 80**

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**1. Economic Development and its Determinants**

Approaches to economic development and its measurement – sustainable development; Role of State, market and other institutions; Indicators of development – PQLI, Human Development. Index (HDI), gender development indices.

**2. Demographic Features Poverty and Inequality**

Broad demographic features of Indian population; Rural-urban migration; Urbanization and civic amenities; Poverty and Inequality.

**3. Resource Base and Infrastructure**

Energy; Social infrastructure – education and health; Environment; Regional imbalance; Issues and policies in financing infrastructure development.

**4. Public Finances**

Fiscal federalism – Centre-state financial relations; Finances of central government; Finances of State governments; Parallel economy; Problems relating to fiscal policy; Fiscal sector reforms in India.

**5. External Sector**

Structure and direction of foreign trade; Balance of payments; Issues in export-import policy and FEMA; Exchange rate policy; Foreign capital and MNCs in India; The progress of trade reforms in India.



## **6. Economic Reforms**

Rationale of internal and external reforms; Globalisation of Indian economy; W.T.O. and its impact on the different sectors of the economy; Need for and issues in good governance; Issues in competition and safety nets in Indian economy.

### **BASIC READING LIST**

1. Ahluwalia, I.J. and I.M.D. Little (Eds.) (1999), *India's Economic Reforms and Development. (Essays in honour of Manmohan Singh)*, Oxford University Press, New Delhi.
2. Bardhan, P.K. (9<sup>th</sup> Edition) (1999), *The Political Economy of Development in India* Oxford University Press, New Delhi.
3. Bawa, R.S. and P.S. Raikhy (Ed.) (1997), *Structural Changes in Indian Economy*, Guru Nanak Dev University Press, Amritsar.
4. Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (2001), *Development Experience in the Indian Economy; Inter-State Perspectives*, Bookwell, Elhi.
5. Chakravarty, S. (1987), *Development Planning: The Indian Experience*, Oxford University Press, New Delhi.
6. Dantwala, M.L. (1996), *Dilemmas of Growth: The Indian Experience*, Sage Publications, New Delhi, Economics 101.
7. Datt, R. (Ed.) (2001), *Second Generation Economic Reforms in India*, Deep & Deep Publications, New Delhi.
8. Government of India, *Economic Survey (Annual)*, Ministry of Finance, New Delhi.
9. Jain, A.K. (1986), *Economic Planning in India*, Ashish Publishing House, New Delhi.
10. Jalan, B. (1992), *The Indian Economy – Problems and Prospects*, Viking, New Delhi.

11. Jalan B. (1996), *India's Economic Policy – Preparing for the Twenty First Century*, Viking, New Delhi.
12. Joshi, V. and I.M.D. Little (1999), *India: Macro Economics and Political Economy, 1964-1991*, Oxford University Press, New Delhi.
13. Parikh, K.S. (1999), *India Development Report – 1999-2000*, Oxford University Press, New Delhi.
14. Reserve Bank of India, *Report on Currency and Finance, (Annual)*.
15. Sandesara, J.C. (1992), *Industrial Policy and Planning, 1947-1991: Tendencies, Interpretations and Issues*, Sage Publications, New Delhi.
16. Sen, R.K. and B. Chatterjee (2001), *Indian Economy: Agenda for 21<sup>st</sup> Century (Essays in honour of Prof. P.R. Brahmananda)*, Deep & Deep Publications, New Delhi.

**M.Phil.**  
**Economics**  
**Paper IV**  
**Agriculture Economics (Optional)**

**Marks 80**

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**1. Agriculture and Economic Development**

Role of agriculture in Economic Development – Importance of Agriculture in Indian Economy – Relationship between Agriculture and Industry – Traditional agriculture and its modernization.

**2. Agricultural Production and Productivity**

Agricultural production – Resource use and efficiency; Production function analysis in agriculture; Factor combination and resource substitution; Cost and supply curves; Size of farm and laws of returns – Theoretical and empirical findings; Farm budgeting and cost concepts; Supply response of individual crops and aggregate supply; labor absorption and gender issues in agricultural services.

**3. Agriculture Growth and new Agriculture Technology**

Growth and Productivity Trends in Agriculture – Components of New Agricultural Technology – Agriculture inputs: fertilizers and Plant Protection, Irrigation and Farm mechanization – Shifts in production Function – Green Revolution.

**4. Agriculture Marketing**

Agricultural Marketing in India – Defects in Marketing of Agricultural Produce and Measures taken by Government – Regulated markets – Co-operative Marketing – Contract forming – Need and objectives of Agricultural Price Policy – Instruments of Agricultural

Price Policy in India; Support, Procurement and issue prices – Food Security and Public Distribution system in India – Terms of Trade and Agriculture.

**5. Agricultural Finance**

Role of Capital in Agriculture – Sources of Capital – Need for Agricultural Credit – Classification of Agricultural Credit – Source of Agricultural Credit – Capital information in Agriculture – Crop Insurance. Characteristics and sources of rural credit – Institutional and non-institutional; Reorganization of rural credit – cooperatives, commercial banks, regional rural banks; Role of NABARD.

**6. WTO and Indian Agriculture**

Regional Disparities in Indian Agriculture – Agricultural labor; Working and living conditions – Minimum Wages – Issues in Rural employment – Sustainable Agriculture – W.T.O. and Indian Agriculture.

**7. Land Reforms and Land Policy**

Principles of land utilization; Land distribution – Structure and trends; Land values and rent; Land tenures and farming systems – Peasant, capitalist, collective and state farming; Tenancy and crop sharing – Forms, incidence and effects; Land reform measures and performance; Women and land reforms; Problems of marginal and small farmers.

**BASIC READING LIST**

1. Memoria C.B. – Agricultural Problems of India, Kitab Mahal, Allahabad.
2. Sadhu and Singh – Fundamentals of Agriculture economics, Himalya Publishing House, Bombay.

3. Bansil, P.C. – Agriculture Problems of India, Vikas publishing House Pvt., Ltd. New Delhi.
4. Earl O.Heady – Economics of Agricultural Production & Resources use, Prentice Hall, New Delhi.
5. Misra and Puri – Indian Economy, Himalaya Publishing House, Bombay.

**M.Phil.**  
**Economics**  
**Paper IV**  
**Econometrics (Optional)**

**Marks 80**

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**1. Basic Econometrics**

Nature, meaning and scope of econometrics; Simple and general linear regression model – Assumptions, Estimation (through OLS approach) and properties of estimators; Gauss-Markov theorem; Concept and derivation of  $R^2$  and adjusted  $R^2$ ; Concept and analysis of variance approach and its application in regression analysis; Estimation of non-linear equations – parabolic, exponential, geometric, hyperbolic, modified exponential; Gompertz and logistic functions.

**2. Regressions with Qualitative Independent Variables**

Dummy variable technique – Testing structural stability of regression models comparing to regressions, interaction effects, seasonal analysis, piecewise linear regression, use of dummy variables, regression with dummy dependent variables; The LPM, Logit, Probit and Tobit models – Applications.

**3. Dynamic Econometric Model**

Autoregressive and distributed lag models – Koyck model, Partial adjustment model, adaptive expectations; Instrumental variables; Problem of auto-correlation – Application; Almon approach to distributed-lag models; Error correlation mechanism, Causality test, Granger test and Sims' test.

#### **4. Simultaneous Equation Models and Time Series Analysis**

Methods of estimating simultaneous equation system; Recursive methods and OLS; Indirect least squares (ILS); 2SLS, 3SLS and ML methods – Applications. Time Series Analysis Stationarity, unit roots, co-integration-spurious regression, Dickey-Fuller test, Engle-Granger test, Random walk model, Forecasting with ARIMA modeling; Box-Jenking methodology; Vector Auto-regression; problems with VAR modeling – Applications; Time varying parameters and Kalman filter.

#### **5. Panel Data Techniques**

Panel data techniques – Random coefficients model; Fix effects model; Random effect model. Economics 155.

#### **6. Multivariate Analysis**

Multivariate probability distribution, marginal and conditional probability distribution, Multi-Variate normal distribution and its properties; Hotelling T-scale; Discriminant analysis.

### **BASIC READING LIST**

1. Amemiya, T. (1985), *Advanced Econometrics*, Harvard University Press, Cambridge, Mass.
2. Baltagi, B.H. (1998), *Econometrics*, Springer, New York.
3. Dongherty, C. (1992), *Introduction to Econometrics*, Oxford University Press, New York.
4. Goldberger, A.S. (1998), *Introductory Econometrics*, Harvard University Press, Cambridge, Mass.
5. Gujarati, D.N. (1995), *Basic Econometrics* (2<sup>nd</sup> Edition), McGraw Hill, New Delhi.
6. Hill R.C., E.G. William and G.G. Judge (1997), *Undergraduate Economics*, Wiley, New York.

7. Kennedy P. (1998), A guide to Econometrics (4<sup>th</sup> Edition), MIT Press, New York.
8. Kmenta, J. (1997), Elements of Econometrics (Reprint Edition), University of Michigan Press, New York.
9. Koutsoyiannis, A. (1997), Elements of Econometrics (Reprint Edition), University of Michigan Press, New York.
10. Krishna, K.L. (Ed.), (1997), Econometric Applications in India, Oxford University press, New Delhi.
11. Meddala G.S. (Ed.) (1993), Econometrics Methods and Application (2 Vols.), Aldershot U.K.
12. Theil, H. (1981), Introduction to Econometrics, Prentice Hall of India, New Delhi Economics 156.