

M. Sc. Syllabus

❖ COMPULSORY PAPERS: PAPER I – PAPER X

Paper I: Microeconomic Theory (50 marks)

A. Individual Decision Making

- a. Consumer Theory: Preference to choice; Theory of consumer demand – duality approach; Aggregate demand and introducing the problem of social choice.
- b. Theory of the Firm: Parallel to theory of demand.

B. Markets and Welfare

- a. Competitive markets - First and Second Welfare Theorems – Concept of Social Optimum – Equity-efficiency trade-off.
- b. Market Failure
 - i. Market imperfection – Monopoly – Non-linear pricing.
 - ii. Externalities and Public Goods – Coase Theorem.

C. Introduction to Game Theory

- a. Noncooperative games; Normal form – pure vs. mixed strategies; Solution concepts – iterated deletion of dominated strategies, Nash equilibrium.
- b. Sequential games – concept of subgame perfection.
- c. Applications: Oligopoly Models

Text:

- 1. Mas-collé, Whinston and Green (1995): Micro-economic Theory, OUP
- 2. Layard and Walters (1987): Microeconomic Theory, McGraw-Hill
- 3. Gibbons(1992): Game Theory for Applied Economists, Princeton University Press
- 4. Varian (1992): Micro-economic Analysis, W.W. Norton & Co. NY

Mathematical Guide:

MWG – Mathematical Appendices

Paper II: Macroeconomic Theory (50 marks)

A: Open Economy Macroeconomics

Balance of payments, Exchange rate systems, Mundell Fleming model, Asset markets, expectations and exchange rates, Monetary approach to BoP.

B: Aggregate demand and Aggregate supply

Models of aggregate supply, Phillips curve, Adaptive and rational expectations, Policy evaluation and the Lucas critique, New classical analysis, Real business cycles, Test of rational expectations, New Keynesian approach, Coordination failure.

C: Consumption behaviour

Permanent Income and Life cycle theories, Random walk hypothesis.

D: Investment behaviour

Neoclassical theory, Tobin's q , Imperfect information and investment

E: Macroeconomics of developing countries**F: The Overlapping Generations model****References**

- Blanchard and Fischer (1989): Lectures on Macroeconomics
- Dornbusch, Fischer and Startz: Macroeconomics (Latest Edition)
- Montiel (2003): Macroeconomics in Emerging Markets
- Romer (1996): Advanced Macroeconomics

Paper III: Mathematical Methods of Economics (50 marks)

- A. **Static Optimisation:** Review of Classical Constrained Programming and Nonlinear Programming, Comparative Statics, Envelope Theorem, Saddle Point Theorem, Concave and Convex Programming.
- B. **Elements of point-set topology and real analysis:** Metric Spaces, Continuity, Convergence, Weierstrass' Theorem, Fixed-Point theorems.
- C. **Dynamic Optimisation:** Optimal Control Theory and Hamiltonian, Dynamic Programming.
- D. **Choice under uncertainty:** Risk and portfolio analysis.
- E. **Linear Models,** matrix algebra and vector analysis.
- F. **Differential Equations and Stability Issues:** Differential Equations, Stability Theory, Phase Diagrams.

References:

- Dixit (1976): Optimization in Economic Theory, OUP

- Beavis & Dobbs (1990): Optimization and Stability Theory for Economic Analysis, CUP
- Intrilligator (1971); Mathematical Optimization and Economic Theory, Prentice Hall
- Hadley (1960): Linear Algebra, Addison-Wesley, Massachusetts
- Chiang (1992): Dynamic Optimization, McGraw Hill Inc.
- Kamien & Schwartz (1981): Dynamic Optimization, North Holland

Paper IV: Econometric Methods (50 marks)

A: The Scope and Methodology of Econometrics

- What is Econometrics?
- Steps in Econometric Analysis
- Specification of Econometric Model and Assumptions
- Basic Concepts of Estimation and Desirable Properties of Estimators
- Data for Econometric Analysis

B: The Simple Linear Regression Model (SLRM)

- Definition of SLRM
- Ordinary Least-squares (OLS) Estimation of SLRM
- Properties of Linear Regression Line
- Properties of OLS Estimators
- Statistical Inference in SLRM
- Measuring Goodness of Fit
- Analysis of Variance on OLS Regression
- Regression Slope and Correlation Coefficient
- Alternative Functional Forms for Regression Equation
- Interpretation of Regression Results

C: The Multiple Linear Regression Model (MLRM)

- Definition and Model Specification
- OLS Estimation of MLRM
- Properties of Multiple Regression Coefficients
- Measuring Goodness of Fit – R^2 and \bar{R}^2
- Various Problems of Inference in MLRM
 - Testing Significance of Individual Regression Coefficient
 - Testing Overall Significance of Regression
 - Testing Relevance of an Additional Explanatory Variable
 - Testing Equivalence of Two Parameters
 - Testing Linear Equality Restrictions
- Interpretation of Regression Results

D: Heteroscedasticity

- Definition of Heteroscedasticity

- Consequences of Heteroscedasticity
- Detection of Heteroscedasticity
- Remedial Measures
- Illustrative Examples

E: Autocorrelation

- Definition of Autocorrelation
- Specification of Autocorrelation Relationship
- Consequences of Autocorrelation
- Various Tests for Autocorrelation
- Remedial Measures
- Illustrative Examples

F: Multicollinearity

- Definition of Multicollinearity
- Consequences of Multicollinearity
- Tests for Multicollinearity
- Remedial Measures
- Illustrative Examples

G: Dummy Variables

- Definition and Usefulness
- Simple Regression Model with Dummy Variable
- Interaction Dummy
- Comparing Two Regressions: Dummy Variable Approach vis-à-vis the Chow Test

H: Simultaneous Equations System

- Definition
- Structural and Reduced Form Equations
- Identification Problem – Rank and Order Conditions
- Estimation – Indirect Least Squares, Instrumental Variables Method and Two Stage Least Squares
- Illustrative Examples

References

- William H Green (2003), *Econometric Analysis*, Pearson Education, Delhi, 5th Edition.
- G S Maddala (2003), *Introduction to Econometrics*, John-Wiley, 3rd Edition.
- Jan Kmenta (1986), *Elements of Econometrics*, Macmillan, 2nd Edition.
- Robert S Pindyck and Daniel L Rubinfeld (1998), *Econometric Models and Economic Forecasts*, McGraw Hill, 4th Edition.

- Johnston and J. Dinardo, *Econometric Methods* (4/ed.), McGraw-Hill International (1997).
- D Gujarati (2003), *Basic Econometrics*, McGraw Hill, 4th Edition.

Paper V: Indian Economic Analysis (50 marks)

A: The Colonial Formation of the Indian Economy

B: Centralized Planning in Post-Colonial India and the Transition of Indian Economy

C: The Crisis of Centralized Planning in India

D: Globalization and the New Economic Policy

E: Sectoral Reforms and the Transition of the Indian Economy

References

- Chakravarty, S. 1987. Development Planning: The Indian Experience. New Delhi: Oxford University Press:
- Bhagwati, J. 1993. India in Transition: Freeing the Economy. Oxford: Clarendon Press.
- Ahluwalia, I.J. and I.M.D. Little.ed. 1998. India's Economic Reforms and Development: Essays for Manmohan Singh. Oxford University Press: New Delhi.
- Sachs, J D., Varshney, A. and Bajpai, N.ed. 1999. India in the Era of Economic Reforms. Oxford University Press: New Delhi.
- Patnaik, U. ed. 1990. Agrarian Relations and Accumulation: The 'Mode of Production' Debate in India. Sameeksha Trust, Bombay: Oxford University Press.
- Chakrabarti, A. and Cullenberg, S. 2003. Transition and Development in India. Routledge: New York.

Paper VI: Development Economics (50 marks)

Group A- Sustainable Human Development

A: Human Development and it's Limitations.

B: Civil Rights and Political Rights.

C: Current Human Well-being.

D: Inter-temporal Human Well-being.

E: Sustainable Development.

References:

- Dasgupta Partha (2002): Human Well-being and the Natural Environment; OUP, New Delhi; ch. 1,3,5,6,8,9 & appendices; (selected portions).
- McMahon, Walter W. (1999): Education and Development; Measuring the Social Benefits; OUP, Oxford; ch. 7; pp. 92-94 and 101-102.

Group B- Open Economy Development Models

- A. Two sector general equilibrium model and extensions** – relationship between structure of endowments and product mix and between commodity prices and factor prices, specific factor model, asymmetric adjustment costs; extensions of the two-sector model; measurement of social welfare.
- B. Labour market distortion, problem of unemployment and development policies** – Harris-Todaro (1970) migration mechanism and urban unemployment, wage efficiency and fair wage hypotheses and unemployment, conventional development policies and unemployment problem.
- C. Globalization and unemployment** – consequences of investment and tariff reforms on unemployment, informal sector, international migration of labour and unemployment of unskilled labour.
- D. Welfare consequences of international factor movements, tariff and labour market reforms in a developing economy** – effects of foreign capital inflow in a full-employment model and in a model with urban unemployment, the immiserizing and gainful effects of foreign capital inflow, effects of emigration of skilled labour on national welfare, tariff and labour market reforms and welfare, economic liberalization and ‘jobless growth’.
- E. Trade Liberalization and skilled-unskilled wage inequality**

References:

- Caves, R. E., Frankel, J.A. and Jones, R.W: *World Trade and Payments- An Introduction (5th edition)*, supplements to chapters 6, 7 and 11.
- Batra, R. N. (1973): *Studies in the Pure Theory of International Trade*, Macmillan.
- Basu, Kausik (1997): *Analytical Development Economics*, Oxford University Press, Chapter 10.
- Marjit, S. and Acharyya, R. (2003): *International Trade, Wage Inequality and the Developing Economy: A General Equilibrium Approach*, Physica-Verlag.
- Krueger, A. O. (2002): ‘Priorities for further reforms’, in A. O. Krueger (ed.), *Economic Policy Reforms and the Indian Economy*, Oxford University Press, New Delhi.
- Stiglitz, J.E. (2002): *Globalization and its Discontents*, Penguin Books.

- Rodrik, D. (1995): 'Trade and Industrial Policy Reform', in J. Behrman and T.N. Srinivasan (eds.), *Handbook of Development Economics*, Volume 3B, North-Holland.
- Sikdar, S. (2003): *Contemporary Issues in Globalization: An Introduction to Theory and Policy in India*, Oxford University Press, New Delhi.
- UNCTAD (2000): *The Least Developed Countries 2000 Report: Overview by the Secretary-General of UNCTAD*, Geneva: UNCTAD.

Paper VII: Globalization and Development (50 marks)

A: The Paradigm of Development

Decolonization of Asia and Africa and the emergence of the development paradigm- Capital accumulation through planned industrialization in a traditional agrarian economy- The role of the developmental state- The role of international organizations: the IMF, the World Bank and the ILO- Alternative strategies for industrialization: import substitution and export promotion- Critique of per capita income as an index of development and the human development index of the UNDP- Women and development: the question of gender- Environment and development: the question of sustainability

B: Globalization

Is globalization an unprecedented phenomenon?- Integration of the developing economies into the global order: the structural adjustment program (SAP)- Trade liberalization: WTO- Capital flows and financial integration- Communication technology and the death of distance: off-shoring and outsourcing- The global regime of property rights- The global economy and the developmental state.

C: Globalization and the developing world

Globalization and inequality- Globalization and employment- Trade liberalization, dispersion of production and the international division of labor- WTO and the nation state- Trade liberalization, capital flows and environment- Globalization and agriculture- Development and Democracy.

D: The Evolution of Measures of Development

- Per Capita income- Physical Quality of Life Index- Human Development Index- Gender Development Index- Gender Empowerment Measures.
- Poverty, Inequality and Development- Measuring Inequality and Poverty- Income Poverty Index and Human Poverty Index.

E: Concept of Work and the Emergence of Informal Sector

- Organized/ unorganized work vis-à-vis formal/ informal work- SNA/ non-SNA activity classification- The time budget survey method- Distinction between labourer and worker- the phenomenon of Child Labour.

F: Social Sector and Economic Development

- Education and Health in Economic Development- Mortality and Morbidity- assessment of health status in terms of Disability-Adjusted-Life-Years (DALY)- Analysis of Disease Burden & Epidemiological Transition theory of Development.
- The Environment and Development- Sustainable Development and Environmental Accounting- Gender, Environment and Poverty: the GEP-Index of Vulnerability.

G: Food (in)Security, Decentralized Development and NGO

- Famine: Supply failure vis-à-vis entitlement failure- Self-help-groups and poverty management- NGO and the provision of merit goods.

References:

- J. Stiglitz (2002): Globalization and Its Discontents, Penguin Books
- J Bhagwati (2003): In Defence of Globalization, OUP
- J. Sachs (2005): The End of Poverty, The Penguin Press
- Meier & Rauch (2000): Leading Issues in Economic Development, OUP
- Fukkuda-Par & Shiv Kumar (2002): Readings in Human Development, The World Bank.
- Human Development Reports- 1991, 1996, 1997, OUP.
- World Development Reports- 1992, 1993, 1994, 2001. OUP.
- Homepages of the World Bank (WB), International Labour Organization (ILO), United Nations Development Program (UNDP), World Health Organization (WHO), Food and Agricultural Organization (FAO), etc.

Paper VIII: Computer Applications (50 marks)

A.: Data Presentation

- Graphical Techniques
- Numerical Techniques

B.: Data Analysis

- Statistical Analysis
- Econometric Analysis

C.: *Programming and Optimization*

- Allocation Problem
- Distribution Problem

D.: *Project Related Techniques*

- Report Writing
- Report Presentation

Paper IX: Frontiers of Economic Theory (50 marks)

At least two of the following subjects will be offered.

Games and Information, Public Choice, Cost Benefit Analysis, Advanced Growth Theory, Development Macroeconomics, Value and Distribution, Welfare Economics.

References

- MasCollel, Whinston, Green (1995): Microeconomic Theory, OUP
- Gibbons (1992): Game Theory for Applied Economists, Princeton University Press
- Macho-Stadler and Perez-Castrillo (1997): Introduction to the Economics of Information, OUP
- Mueller (2002): Public Choice, CUP
- Cullis and Jones (1998): Public Finance and Public Choice, OUP
- Brent (1998): Cost Benefit Analysis for Developing Countries, Edward-Elger
- Aghion and Howitt (1998): Endogenous Growth Theory, MIT Press
- Dasgupta, Dipankar (2005): Growth Theory, OUP
- Agenor and Montiel (1996): Development Macroeconomics, Princeton University Press
- Resnick and Wolff (1987): Knowledge and Class : A Marxist Critique of Political Economy, University of Chicago Press.
- Boadway and Bruce (1984): Welfare Economics, Basil-Blackwell

Paper X: History of Economic Ideas (50 marks)

- A. Classical theories of value and distribution: Physiocrats, Mercantilism, Theories of Adam Smith, Ricardo, Marx and others.
- B. Evolution of neoclassical paradigm: General Equilibrium Theory, Keynesian economics, etc.

- C. Evolution of critical economic theories: Theories of Kalecki, Sraffa, Post-Keynesian and Marxian theories.
- D. Approach of Economic Methodology: Positivism vs. Normatism, Causality Questions, Modernism vs. Postmodernism.

References:

- Schumpeter (1954): History of Economic Analysis, Harvard University Press
- Screpanti & Zamagni (2005): An Outline of the History of Economic Thought, OUP
- Blaug (1983): Economic Theory in Retrospect (3/e), Vikas Publishing, New Delhi
- Meek (1962): Economics of Physiocracy, George Allen & Urwin

❖ SPECIAL FIELDS: PAPER XI – PAPER XIV

Paper XI(A) - Paper XIV(A): Economics of Industry and Labour (Special Field)

Paper XI (A): Industrial Economics (50 marks)

- The SCP framework, Concentration, efficiency, profitability and growth, Theories of oligopoly, Collusion and merger, Product differentiation, pricing and sales promotion.
- R & D and innovations
- Theory of regulation
- Multinational Corporations
- Corporate finance and governance
- Location Theory

Paper XII(A)- Industry in India (50 marks)

- Evolution of Indian industry, Growth and productivity,
- Industrial policy,
- Globalisation and reforms,
- MNCs and technology transfer,
- Regional growth,
- Industrial finance,
- Industrial labour,
- Corporate governance,
- The small scale sector.
- Study of selected industries: jute, iron and steel, pharmaceuticals, textiles, engineering goods, the IT industry.

Paper XIII(A)- Labour economics (50 marks)

- Employment and unemployment,
- Operation of the labour market under different market structures,
- Union behaviour.
- Investment in human capital and skill formation,
- Wage dispersion,
- Segmented labour markets,
- Women's participation in the labour force,
- Discrimination.
- Labour migration,
- Child labour.
- Globalisation and the labour market.
- Economic Insecurity

Paper XIV(A)- Labour in India (50 marks)

- Characteristics of the Indian labour force,
- Wages and employment in agriculture,
- Industry and services,
- Importance of the informal sector,
- Employment and labour welfare policy.
- Trade unions,
- Women in the labour force.
- Rural urban migration.
- Investment in human capital.
- Globalisation and labour market reforms.
- Wage inequality,
- Child labour.

References

- Hay and Morris (1991): Industrial Economics, OUP
- Cable (ed) [1994]: Current Issues in Industrial Economics, McMillan
- Shy (1996): Industrial Organisation, MIT Press
- Cherunilam: Industrial Economics- Indian Perspective
- Rees(1973): Economics of Work and Pay, Harper & Row
- A.K. Sen(1999): Employment, Technology and Development, OUP
- Kundu & A. Sharma (ed) [2001]: Informal Sector in India, Manohar Books
- S. Houseman (1991): Industrial Restructuring with Job Security, Harvard University Press
- R. Solow (1990): The Labour Market as an Institution, Blackwell Publisher.

- Gokarn, Sen & Vaidya (2003): The Structure of Indian Industry, OUP

Papers XI(B) – XIV(B): Econometric Methods and Applications (Special Field)

Papers XV(E) – XVI(E): Applied Econometrics (Optional Area)

Paper XI(B): Statistical Inference and Econometric Methods (50 marks)

Group A: Statistical Inference

- Estimation (Point & Interval)
- Hypothesis Testing
- Analysis of Variance.

Group B: Econometric Methods

- Maximum Likelihood Estimation of the K-Variable Model
- Some Tests of the K-variable Model for Specification Error
- Generalized Method of Moments.

Paper XII(B)/ XV(E): Advanced Topics on Econometrics with Software Applications (50 marks)

- Distributed Lag Models- Stochastic Regressors- Instrumental Variables
- Limited Dependent Variables and Qualitative Regressors
- Analysis of Panel Data
- Analysis of Time Series Data
- Non-parametric Regressions
- Software Applications

Paper XIII(B)/ XVI(E): Econometrics and Data Analysis (50 marks)

- Exploratory Data Analysis
- Regression Diagnostics
- Analysis of Cross-section Data
- Analysis of Time-series Data
- Estimation and Biases in the Simultaneous Equation Models
- Analysis of Indian Official Data

Paper XIV(B): Multivariate Techniques in Social Science Research (50 marks)

- Simultaneous Multi-equation Models
- Multivariate Analysis and Indexing
- Two-group Discriminant Analysis

- Factor Analysis
- Partial Correlation and Path Analysis
- Canonical Correlation Analysis.

References:

- Johnston and J. Dinardo, *Econometric Methods* (4/ed.), McGraw-Hill International (1997).
- Russell Davidson and J.G.Mackinnon: *Econometric Theory and Methods*. OUP 2004.
- G S Maddala (2003), *Introduction to Econometrics*, Macmillan, 3rd Edition.
- Robert S Pindyck and Daniel L Rubinfeld (1998), *Econometric Models and Economic Forecasts*, McGraw Hill, 4th Edition.
- Edward W Frees (2004), *Longitudinal and Panel Data: Analysis and Applications in Social Sciences*, Cambridge University Press.
- Philip Hans Franses (1998), *Time Series Models for Business and Economic Forecasting*, Cambridge University Press.
- Francis F Diebold (1998), *Elements of Forecasting*, South-Western College Publishing.
- Nicolas Carnot, Vincent Koen and Bruno Tissot (2005), *Economic Forecasting*, Palgrave Macmillan, New York.
- Walter Enders (2004), *Applied Econometric Time Series*, John Wiley & Sons, 2nd Edition.
- William H Green (2003), *Econometric Analysis*, Pearson Education, Delhi, 5th Edition.
- D Gujarati (2003), *Basic Econometrics*, McGraw Hill, 4th Edition.
- Jan Kmenta (1986), *Elements of Econometrics*, Macmillan, 2nd Edition.
- Wooldridge, J: *Introductory Econometrics- Modern Approach*, South-Western College Publishing, 1999.
- Mukherjee, C, H. White & M. Wuyts: *Econometrics and Data Analysis for Developing Countries*, Routledge, 1998.
- Tacq, J: *Multivariate Analysis Techniques in Social Science Research*, Sage International, 1997.
- Griffiths, D., W., Douglas and K. Laurence Weldon (1998): *Understanding Data: Principles & Practice of Statistics*, John Wiley and Sons.
- Hamilton, L.C. (2004): *Statistics with STATA8*, Pacific Grove: Duxbury Press.

Paper XI(C) – XIV(C): International Economics (Special Field)

Paper XI(C): Open Economy Macroeconomics (50 marks)

A. Basic Accounting:

- Balance of Payments Accounts
- National Income Accounting in Open Economy
- Money Accounting

B. Internal and External Balance:

- Role of Devaluation & Commercial Policies in a Simple Keynesian Model
- Extension to intermediate Goods & Non-traded Goods
- The Dependent Economy Model

C. Monetary approach to Balance of Payments:

- The Basic Model with One Good & Money
- Adjustment Process & Devaluation
- Money, Home Goods & Traded Goods
- Money, Credit and the World Quantity theory
- A General model with Continuum of Traded Goods, Money & Non-traded Goods

D. Capital Mobility

- Stabilization policies under Fixed Exchange Rate
- Stabilization Policies under Flexible Exchange Rates
- Expectations & Exchange Rate Dynamics

E. Non-Walrasian Macro Model for Open Economies

- Stabilization Policies under Fixed Exchange Rates
- Stabilization Policies under Flexible Exchange Rates
- Non-traded Sector & Rationing

F. Inter-temporal trade & the Current Account Balance

- A Small Two-period Endowment Economy
- A Two-region World Economy
- Taxation of Foreign Borrowing & Lending
- International Labour Movements

Paper XII(C): Trade Theory & Policy under Perfect Competition (50 marks)

A. Arbitrage, gains from trade and the concept of comparative advantage.

B. Fixed endowments: the exchange model

- The offer curve and the exchange equilibrium
- The terms of trade and real income,

- Stability of the exchange equilibrium.
- Comparative statics: (a) inter-country transfer (b) import substitution (c) export led growth and the possibility of immiserization.

C. Labor productivity and comparative advantage: the Ricardian model

- Absolute and comparative advantage, pattern of trade and specialization.
- Double factorial terms of trade.
- Specialization and country size.
- Specialization with a continuum of commodities.
- International labor mobility in the Ricardian model
- Ricardo and the “Missing Link”

D. Immobile factor and International trade: the short-run specific-factor model

- Immobile factors and income distribution,
- The pattern of trade,
- International factor mobility and the equalization of factor prices

E. Structure of endowments and the pattern of comparative advantage: the long run Heckscher-Ohlin-Samuelson model.

- Two sector general equilibrium model, the Rybczynski theorem, endowment and the pattern of trade: the Heckscher-Ohlin theorem
- Commodity prices and factor prices, factor price equalization and the Stolper-Samuelson theorem.
- The Leontief-paradox
- Inter-sectoral factor mobility and the relationship between the short-run and long run transformation schedule

F. The theory of tariff

- Tariff in a partial equilibrium framework: tariff and protection; revenue effect of tariff; deadweight loss from tariff
- Terms of trade, country-size and welfare
- Tariff in a general equilibrium framework: tariff and welfare, optimal tariff, maximum-revenue tariff, Metzler’s paradox, equivalence between export and import tax.
- Tariff and income distribution: short run and long run effects of a tariff, the political economy of protection.
- Retaliation and tariff battle: high-tariff Nash equilibrium.
- Tariff and traded inputs: the effective rate of protection (ERP), calculation of the ERP, the content protection scheme

G. Trade policy with domestic distortions

- Non-optimality of free trade, optimal trade policy and the theory of the second best
- The infant industry argument

H. International Political Economy: WTO and the non-tariff barriers.

- Trade and environment
- Trade, labor standards and human rights

Paper XIII(C): Strategic Trade Theory & Policy (50 marks)

- A. Introduction: Rethinking International Trade
- B. International Trade with Increasing Returns to Scale
- IRS and Perfect Competition- Snowball Effect
 - IRS and Monopolistic Competition- Intra-industry Trade
 - Horizontal Product Differentiation
 - Vertical Product Differentiation
 - Differentiated Producers goods
 - IIT in identical products
- C. Oligopolistic competition and Strategic Trade Theory
- The Game Theoretic Structure of Strategic Trade Policy
 - Profit-shifting Export Subsidy in a Third Market Model
 - Strategic Trade Policy in a Reciprocal Market Model

Paper XIV(C): Trade and Development (50 marks)

- A. **Background:** The Mercantilist obsession with trade surpluses – Brief views of Smith, Ricardo, Mill, Marx – Rosenstein-Rodan, Nurkse, Hirschmann, Myrdal – Trade as a vent for Surplus – The core periphery interpretation of trade and development and the drain theory – The infant industry argument – The Prebisch Singer argument – Unequal exchange theories -Summing up.
- B. **The open dual economy: Extensions of the Lewis model to trade situations.**
- C. **Terms of trade and development:** The relationship between terms of trade and gains from trade in the static model – Growth maximization and internal and external terms of trade.
- D. **Immiserizing growth** – Bhagwati – Johnson – Brecher and Alejandro.
- E. **Trade on growth, growth on trade:** Effect of international trade on the Solow growth model – trade in the endogenous growth model - pro trade growth vs anti trade growth in the neoclassical model – effect of economic growth on intra-industry trade.

- F. **Technology and trade:** external economies, trade and growth – invention, innovation and temporary monopoly - the Vernonian product cycle – the contagion approach - technology gap models.
- G. **In search of empirical support for trade and development:** An introduction to empirical trade theory – estimating the Heckscher-Ohlin model – wage inequality and trade – trade and economic development in the Newly Industrialized Countries.
- H. **GATT, WTO and the less developed countries:** Background of GATT – from GATT to WTO – the negotiation process in the WTO - non-tariff barriers – less developed countries and the WTO.

References:

- Rogoff & Obstfeld (1998): Foundations of International Macroeconomics, MIT Press
- Dornbusch (1980): Open Economy Macroeconomics, Norton
- Benassy (1984): Macroeconomics, Academic Press
- R. Jones, R. Caves and J. Frenkel (CJF), World Trade and Payments, 4th edition, Little Brown
- R. Jones, International Trade: Essays in Theory, North Holland, 1979.
- Ronald Findlay, International Trade and Development Theory, Columbia University Press, 1973.
- Paul Krugman, Rethinking International Trade, 1994, MIT press.
- Jagdish N. Bhagwati, T. N. Srinivasan and Arvind Panagariya, Lectures on International Trade, MIT Press, 1998.
- Helpman & Krugman (1989): Trade Policy & Market Structure, MIT Press
- Kierzkowski (ed.): Monopolistic Competition and International Trade, 1984, OUP

Paper XI(D) – XIV(D): Economics of Money and Finance (Special Field)

Paper XV(F) – XVI(F): Economics of Finance (Optional Area)

Paper XI(D): Economics of Money (50 Marks)

- Money in General Equilibrium: The Walras-Hicks-Patinkin Tradition: Integrating Money into Value Theory- Critique of the Tradition
- Money in Dynamic Systems: Money, Inflation and Growth – The Origins of Money and Growth Literature – The Tobin Effect – Money in the Utility and Production Functions: The Sirdauski Model – The Tobin Effect and the Fisher Relation

- Overlapping Generations Model with Money: Intertemporal Allocation of Resources and Money- Existence of Monetary Equilibrium – Intertemporal Allocation of Resources and Growth in Money Supply – Existence of Monetary Equilibrium in the Presence of Storage – Explaining the Use of Money: the Clower Constraint – A General Equilibrium Baumol-Tobin Model – Multiple Equilibria, Sunspots and Cycles
- Money, Other Assets and Economic Activity: Consumption and Investment - How does money affect output: Money View and Credit View – Macroeconomics of Government Finance

Paper XII(D): Theory of Monetary Policy (50 Marks)

- Dynamic extensions of the IS-LM model under perfect foresight: Stock market valuation and effective demand- Cagan model with sluggish wage- Exchange rate dynamics
- Rational expectation and political economy of monetary policy: Solving a rational expectation model with money and policy irrelevance- Problem of time inconsistency and rule versus discretion: basic issue- Reputation of policy makers and time inconsistency
- Financial Repression: Characteristics of financial repression- New-structuralist approach and critique of financial liberalization- Financial repression and growth: An AK model of endogenous growth
- Currency Crisis: First generation approach and Latin American currency crisis- Second generation approach and EMU crisis- Third generation approach and Asian crisis

References:

- Blanchard and Fischer(1989): Lectures on Macroeconomics, MIT Press.
- Friedman & Hahn (1990): Handbook of Monetary Economics, Vols. 1 and 2
- Patinkin (1965): Money, Interest and Prices, Harper-Row, NY.
- Mankiw, Romer, Ball (1991): New Keynesian Economics, Vol.II, MIT Press
- Turnovsky (1995): Methods of Macroeconomic Dynamics, MIT Press
- Heijdra and Ploeg (2002): Foundation of Modern Macroeconomics, OUP.
- Lewis and Mizen (2000): Monetary Economics, OUP.
- Walsh (1998): Monetary Theory and Policy, MIT Press
- Montiel (2003): Macroeconomics in Emerging Markets, CUP
- Agenor and Montiel (1999): Development Macroeconomics, Princeton University Press.
- Sarno and Taylor (2002): Economics of Exchange Rates, CUP

- Helpman and Sadka (2003): Economic Policy in the International Economy, CUP

Paper XIII(D)/ XV(F): Corporate Finance (50 Marks)

- Corporate Structure and Governance: Shareholders, Board of Directors and Management
- Value and Capital Budgeting: Balance Sheet, Financial Accounting and Value of Money, Asset, Bonds, Stocks and Leverage.
- Risk and Return
- Risk Management
- Capital Structure and Dividend Policy
- Long Term Financing.

Paper XIV(D)/ XVI(F): International Finance (50 Marks)

- The World of International Finance
- The Markets for Foreign Exchange – Spot, Forward, Futures and Options
- Determination of Exchange Rate
- The Fundamental International Parity Conditions
- Managing Foreign Exchange Risk and Exposure
- International Investment and Financing
- Institutional Structure of International Finance

References:

- Ross, S.A, Westerfield, R. W and Jaffe, J.F. 1999. Fifth Ed., McGraw Hill International Edition, Finance Series.
- Brearly, R and Myers, S. 1996. Principles of Corporate Finance. McGraw Hill, New York.
- Shapiro, A.C. 1992. Multinational Financial Management. Prentice Hall: New Delhi.
- Levi, M. D. 1996. International Finance. McGraw Hill Inc.

Paper XI(E)- XIV(E): Rural Economics (Special Field)

Paper XI(E): Agricultural Economics (50 marks)

- Agricultural Production.
- Marketing, Distributions and Consumers.

- Agriculture, Natural Resources and Environment.
- Agriculture in the Macroeconomy.
- Agriculture and Food Policy

Paper XII(E): Agriculture in India (50 marks)

- Land Reforms and Recent Debates
- Farm-Non-farm Linkages and Diversification of Rural Economic Activities
- Sustainable Rural Livelihoods
- Economics of Farm Size: Future of Small Farms
- Agricultural Diversification

Paper XIII(E): Rural Economics (50 marks)

- Poverty: Sectoral and Locational Characteristics- demography, labour, nutrition and income.
- Resource Base of Rural Production, Ecosystem and Classification of Resources.
- Risk, Credit and Insurance- efficient risk sharing- formal and informal credit- formal and informal insurance
- Rural Health and Education
- Collective Actions and Co-operations- market failure, government failure and economic theory of cooperation

Paper XIV(E): Rural Development in Practice

- Decentralized Planning for Rural Development
- Institutions of Micro-credit
- Government Interventions for Rural Development
- NGOs and Rural Development
- Migration and Rural Economy: Forced Migration, Seasonal Migration and Remittance

References:

- Peter Hazell & Steven Haggblade et al (1993), “Farm-Nonfarm Growth and Welfare of the Poor”, in Michael Lipton & Jacques van Der Gaag (eds.), *Including the Poor*, The World Bank, Washington, D.C.
- John Harriss (1991), “Agriculture/Non-agriculture Linkages and the Diversification of Rural Economic Activity: A South Indian Case Study”, in Jan Breman & Sudipto Mundle (eds.), *Rural Transformation in Asia*, Oxford University Press, New Delhi.

- Benjamin Devis et al. (2002), *Promoting Farm/Non-farm Linkages for Rural Development*, Food & Agriculture Organisation, Rome
- Caroline Ashley and Diana Carney (1999), *Sustainable Livelihoods: Lessons from Early Experience*, DFID, London
- Diana Carney (2002), *Sustainable Livelihoods Approaches: Progress and Possibilities for Change*, DFID, London.
- Frank Ellis (1993), *Peasant Economics*, Cambridge University Press, Cambridge, 2nd Edition, Robert Eastwood, Michael Lipton & Andrew Newell (2004), “Farm Size”, *Paper prepared for Volume III of the Handbook of Agricultural Economics*.
- Michael Lipton (2005), *The Family Farm in a Globalizing World: The Role of Crop Science in Alleviating Poverty*, 2020 Discussion Paper # 40, IFPRI, Washington, D.C. [Available at www.ifpri.org].
- P Parthasarathy Rao et al. (2004), *Agricultural Diversification In India and Role of Urbanization*, MTID Discussion Paper # 77, IFPRI, Washington, D.C. [Available at www.ifpri.org].
- Chenery, H. and T.N.Srinivasan (Eds.) (1986): *Handbook of Development Economics*; Elsevier Science Publishing, Amsterdam;
- Arjaan de Haan: *Unsettled settlers and Industrial Capitalism*.
- Rogali Ben: *Agrarian Change and Seasonal Migration in Bengal*.
- Jan Breman: *Footloose Labour*.
- Singh M. and Iyer K.G. “*Migrant Labourers in Rural Punjab*”.
- Joshi V.: *Migrant Labour and Related Issues*.
- Connell et al. *Migration from Rural areas: Evidence from Village studies*
- Debraj Ray (1998): *Development Economics*, OUP
- M.S. Sriram: *Microfinance and the State*
- Malcom Harper : *Beyond Microcredit*
- Gardner, B.L. and G.C.Rausser (Eds) (2002): *Handbook of Agricultural Economics*;

Paper XI(F)- XIV(F): Advanced Mathematical methods for Applied Economics

Paper XI(F): Complex Systems and Chaotic Dynamics (50 Marks)

- Chaos and economics: Equilibrium and Disequilibrium Dynamics, Business Cycles, Chaos Theory and Statistical Inference.
- Mathematical Concepts: Revision of sets, vectors, and stability, dynamical equivalence of systems, probability space, absolute continuity and observability.
- Characterisation of chaotic dynamics: Poincare maps, Lyapunov characteristic exponents, transition to chaos, analysis of experimental signals.

- Economic Applications: Overlapping Generations model, Inventory Business Cycles, Capital Accumulation models etc.

Paper XII(F): Optimization in Operations Research (50 Marks)

- Deterministic models: Linear Programming models, Duality and Sensitivity Models, Integer Programming, Multiobjective Optimisation and Goal Programming.
- Shortest path and Discrete Dynamic Programming: Dynamic Programming Approach to shortest paths, CPM, PERT, Discrete Dynamic Programming models.
- Network Analysis: Optimal network flows, Transportation and Assignment Models, Optimal network flows.
- Queuing Theory: Queuing Systems, Probability Distribution, Queuing Process
- Nonlinear Programming: Reduced Gradient Algorithm, Quadratic Programming, Separable Programming Methods.

Paper XIII(F): Techniques of Applied Economics (50 Marks)

- Statistical Decision Theory: Decision making under different environment, methods of decision making under uncertainty.
- Stochastic Control Theory and its applications.
- Simulation: Monte-Carlo Method, Pseudo-Random Numbers, Application to economic problems.
- Inventory Analysis: Deterministic models with/ without production, Probabilistic Models.
- Fuzzy Set theory and its Applications: Fuzzy Logic, Decision making in Fuzzy Environment, Fuzzy Set models in Operations Research.

Paper XIV(F): Computer Applications in Applied Economics (Practical) – 50 Marks

- Computer Applications of Operations Research Problems using TORA, MICROSOFT PROJECT etc.
- Computer Applications of Economic Data Analysis using SPSS etc.
- Project Work on Computer Applications

References:

- W.A. Brock and A.G. Malliaris (1989): Differential Equations, Stability and Chaos in Dynamic Economics, North Holland.
- Medio: Chaotic Dynamics(1992), CUP

- R. Rardin: Optimisation in Operations Research (1998) Pearson Education India
- Taha (1995): Operations Research (5/e), Prentice Hall
- J.K. Sengupta: Applied Mathematics for Economics, D. Reidel Publishing Company
- Fuente (2000): Mathematical Methods and Models for Economists, CUP
- Beavis & Dobb (1990): Optimization and Stability Theory for Economic Analysis, CUP

❖ **OPTIONAL AREA: PAPER XV – PAPER XVI**

Paper XV(A)- XVI(A): *Equilibrium and Games (Optional Area)*

Paper XV(A): Equilibrium Theory (50 marks)

- Competitive equilibrium; existence and stability
- Fundamental theorems of Welfare Economics
- Theory of second best
- Core of an economy – The Limit Theorem
- Dynamic models of capital accumulation – Asset market equilibrium.

Paper XVI(A): Games and Information (50 marks)

- Static and dynamic games under complete information
- Repeated games – Bargaining
- Games of incomplete information – Auctions, Reputation
- Asymmetric information – Adverse selection and moral hazard

References:

- Arrow and Hahn (1971): General Competitive Analysis, Holden-day
- Mukherjee: Walrasian and Non-Walrasian General Equilibrium, OUP
- Mas-collé, Whinston and Green (1995): Micro-economic Theory, OUP
- Osborne (2003): An Introduction to Game Theory, OUP
- Laffont and Tirole (1993): A Theory of Incentives in Procurement and Regulation, MIT Press

Paper XV(B)- XVI(B): Advanced Macroeconomics (Optional Area)

Paper XV(B): Techniques of Modern Macroeconomics (50 Marks)

- Linear Static Models
- Lag operators and Stochastic Processes
- The Optimal Control Approach
- The Overlapping Generations Approach
- Dynamic programming

Paper XVI(B): Macroeconomic Theory (50 Marks)

- Phillips Curve, Monetary Policy and Lucas Critique
- Market Clearing and Market Failure Approaches
- Business Cycles and Aggregate Fluctuations
- Endogenous Models and Multiple Equilibria
- Inequality and Growth
- Political Economy of Macroeconomics

References

- Sargeant, T. 1987. *Dynamic Macroeconomic Theory*. Cambridge, Mass.: Harvard University Press.
- Stockey, N and Lucas, R. with Prescott, E. 1989. *Recursive Methods in Economic Dynamics*. Cambridge, Mass.: Harvard University Press.
- Lars Ljungqvist and Thomas Sargeant. 2000. *Recursive Macroeconomic Theory*. MIT Press: Massachusetts.
- David Romer. 1996. *Advanced Macroeconomic Theory*. McGraw Hill: Singapore.

Paper XV(C)- XVI(C): Urban Economics (Optional Area)

Paper XV(C): Urban Theory and Planning

I: Urban Economics – Theoretical Issues

- Urban and regional growth theories: macroeconomic approach and cumulative causation theories.
- The urban centre within the region: urban hierarchy, urban size distribution and optimum city size debate.
- Locational aspects of various urban functions: Weberian Location Theory
- Urban Land Use and Land Market, gradient analysis.

II: Urban Problems and Urban Planning

- Urban Planning: Institutions and Policies
- Urban Concentration: policies for dispersal and decentralisation
- Urban Transport: Intra-city and intercity problems. Issues relating to port.
- Urban Environment: Problems of pollutions and its management.

Paper XVI(C): Urban Development and Governance (50 marks)

I: Urbanization and Urban Development

- Concepts and definitions of *urban*
- Evolution of urban settlements - a historical perspective
- Trends and patterns of urbanization, structure of urban economy, rural urban relation in India and West Bengal
- Urban labour market - rural-urban migration - urban informal sector - slums and poverty

II: Urban Infrastructure and Governance

- Urban Infrastructure and Services - Demand and Supply, management, finance and pricing
- Urban infrastructure and services- specific sectors: Housing, Water supply and drainage, waste management and sanitation
- Urban local government and finance - the issue of decentralization.

III: Urban research Methodology and Database

- Urban databases – sources, problems and limitations
- Urban research methodology

References:

- Evans, A.W., 1984, Urban Economics, Basil Blackwell, London.
- O'Sullivan, A, 1996, Urban Economics (3rd edn.), IRWIN, London.
- Hallet, Graham, 1979, Urban Land Economics: Principles and Policy, Macmillan, London.
- Lewis, J. Parry, 1980, Urban Economics: A Set Approach, Arnold Heineman, New Delhi.
- Richardson, H.W., 1978, Regional and Urban Economics, Penguin, Middlesex.
- Richardson, H.W., 1978, Urban Economics, Dryden Press, Hinsdale.
- O'Sullivan, A, 1996, Urban Economics (3rd edn.), IRWIN, London.(Chapters 1-4)
- Mills, Edwin and Charles Baker, 1988, *India's Urban Development*, Oxford University Press: New York.

- Joseph Guglar, ed., *The Urban Transformation of the Developing World*, Oxford University Press: New York, 1996.
- HABITAT, 1996, *An Urbanizing World – Global Report on Human Settlements 1996*, Oxford University Press (for the United Nations Centre For Human Settlement, HABITAT): New York
- Lewis-Beck, Michael S., 1994, *Research Practice*, Sage Publication: London.
- H.W Richardson, 1988, *New Urban Economics*, Dryden Press, Hinsdale.

Paper XV(D)- XVI(D): Economics of Marx (Optional Area)

Paper XV(D): Capital and Class (50 Marks)

Group A: Reading Capital

- Hegelian
- Overdeterministic
- Derridean
- Lacanian

Group B: Class Focused Marxist Theory

- Class and Overdetermination
- Performance and Appropriation of Surplus Labour
- Distribution and Receipt of Surplus labour

Paper XVI(D): Value, Development and Globalization (50 Marks)

- Value Theory and Transformation Problem
- Value Flows in the Financial System
- Marxian Theory Of Rent
- Development Economics and Third World Marxism
- Dialogue with Classical Political Economics and Neo-Classical Economics
- Globalization and Capital

References

- Chaudhury, 1992. A. *Equality Beyond Equality*. Anustup: Kolkata.
- Chaudhury, A., Das, D. and Chakrabarti, A. 2000. *Margin of Margin: Profile of an Unrepentant Postcolonial Collaborator*. Kolkata.
- Chakrabarti, A. and Cullenberg, S. 2003. *Transition and Development in India*. Routledge: New York.

- Resnick, S. A. and Wolff, R. D. 1987. *Knowledge and Class: A Marxist Critique of Political Economy*. Chicago and London: University of Chicago Press.
- Resnick, S. and R. Wolff. 2002. *Class Theory and History: Capitalism and Communism in the USSR*. New York: Routledge.
- Resnick, S. and R. Wolff. 2006. *New Departures in Marxian Theory*. New York: Routledge.
- Marx, K. Capital. Volumes 1, 2 and 3. Progress Publishers: Moscow.

Paper XV(G)- XVI(G): Public Economics (Optional Area)

Paper XV(G): Theory of Public Economics (50 marks)

- Role of the government in the economy, Public, private and merit goods, Market failure and government failure.
- Provision of public goods, demand revealing mechanisms.
- Fiscal policy, role in stabilization, growth and distribution, Keynesian and New classical approaches, Structure and growth of public expenditure.
- Problem of social choice, contributions of Arrow and Sen.
- Theory of regulation, Economic theory of democracy.
- Disinvestment and privatization.
- Models of bureaucracy, rent seeking activities.
- Theory of optimal taxation and tax reform, Impact of taxation on price, output, work effort, saving, investment and risk taking.
- Analysis of public debt.
- Fiscal federalism

Paper XVI(G): Indian Public Economics (50 marks)

- Changing role of the government in the Indian economy, Revenues and expenditure of Union, States and local bodies – composition and growth. Major taxes in India.
- Evaluation of fiscal policy in respect of stabilization , growth and distribution.
- Government intervention to promote infrastructure, reduce poverty and inequality and correct regional imbalance.
- Public sector reform in India. Disinvestment in PSEs, Reform of direct and indirect taxes.
- Regulating the private sector in the liberalized economy.
- Public debt-growth and burden.
- Fiscal federalism -Centre- state financial relations in India, Transfer of resources from Union and states to local bodies.

References

- A. Atkinson and J. Stiglitz (1980) : Lectures on Public Economics, McGraw-Hill
- Mueller (1989): Public Choice, CUP
- R. Jha (1997): Modern Public Economics, Routledge
- Spulber (2006): Redefining the State, CUP
- S. Mundle (ed) [2000]: Public Finance: Policy Issues for India, OUP
- A . Bagchi(ed) [2005]: Readings in Public Finance, OUP
- Srivastava(ed) Fiscal Federalism in India

Paper XV(H)- XVI(H): Health Economics (Optional Area)

Paper XV(H): Economic Development and Health (50 Marks)

- Overview of Health Economics, State and Scope of Health Economics, Equity and efficiency of Health Economics, Difference between health and health care
- Epidemiology and Morbidity Transition, Mortality and Morbidity, Burden of Diseases, Concepts of DALY and QALY.
- Gender and Health: Women's Health: A life cycle perspective- Early years, Reproductive years, Old age- Women's mental health.
- Provision of public health: Political economy of state intervention in health- Preventive and curative care in public health.
- Private provision in health and the globalization- Experience in different countries
- India's experience in health status- Public expenditure in health

Paper XVI(H): Market for Medical Care (50 Marks)

- Demand for health care: Health care as an input of health- Peculiarities of health care demand- Notion of 'need'- Induced demand Theory.
- Providers of medical care- physicians: Payment Schedules, Group practice.
- Providers of medical care: Hospitals
- Providers of medical care: Pharmaceutical producers- R&D, pricing.
- Providers of medical care: Insurance- uncertainty and moral hazard, private insurance, Social insurance.
- Indian health market: Utilization and efficiency in Indian health care facilities- Expenditure on private care- Alternative Systems of medicine

References:

- Cuyler A J and J P Newhouse (ed) (2000): "Handbook of Health Economics", Elsevier. Several articles.

- Das Gupta Monica, Lincon Chen and TN Srinivasan (1995): “Women’s Health in India: Risk and Vulnerability”. OUP.
- Das Gupta Monica, Lincon Chen and TN Srinivasan (1996): “Health, Poverty and Development in India”. OUP.
- Berman and Khan ME (1993): “Paying for India’s Health Care”. Sage. New Delhi.
- Mc Kinley (1984): “ Issues in Political Economy of Health”. Tavistock. London.
- Qadeer Imrana et al (2001): “ Public Health and the Poverty of Reforms.”. Sage.
- Weisbrod Burton (1991): “The Health Care Quadrilemma: An Essay on Technical Change, Insurance, Quality of care and Cost Containment”. Journal of Economic Literature

Paper XV(J)- XVI(J): Resource and Environmental Economics (Optional Area)

Paper XV(J): Resource Economics (50 Marks)

Group- A/ Resource Economics

- Environmental Economics & the Economics of Environment- Taxonomy of Natural Resources- Economics of Exhaustible Resources: a simple Framework
- Elements of dynamic Optimization and optimal Control
- Economics of Exhaustible Resources Revisited- Dynamic Framework with Optimal Control- Competitive & Monopolistic Mining- Depletion & Discovery
- Economics of Renewable Resources: Fishery under Alternative Management Objectives- Open Access Fishery Economics of Renewable Resources: Forestry
- Economics of Water Resources
- Economics of Common Property Resources
- Irreversibility, Uncertainty and Economic Development

Group-B/ Sustainable Development

- Environment-Development debate
- Economic growth and Environmental Degradation - The Environmental Kuznets Curve - Empirical Evidence (CO₂, sulphur, Other Indicators) - Technique, Scale and Composition Effects - Criticism - Implications.
- Sustainable Development: Weak and Strong Sustainability - Sustainability Indicators - Uncertainty, Precautionary Principle and Safe Minimum Standard- Ecological Economics & Sustainable Development- Holling’s Resilience- Biodiversity Measures.

Paper XVI(J): Environmental Economics (50 marks)

- Economics, Ethics and the Environment
- Present State of India’s Environment
- Environmental Pollution as a Public Bad: Externality (Pigou) – Property Rights (Coase) – Optimal Pollution

- Pollution Control: Alternative Market Based Instruments – pure policies (Emission Fees, Standard setting, Tradable Pollution Permits), Hybrid instruments (two-part tariff), Double Dividend Hypothesis, Illicit Dumping
- Environmental valuation and Cost-benefit analysis – Revealed preference Approach (Household Production Function, Travel cost, Hedonic Price, Statistical value of life) – Stated Preference Approach (Contingent Valuation Method)
- Global Issues and the Environment – Trade, Development and Environment – The Pollution Haven Hypothesis – International/ Interregional Cooperation – The Issue of Trans-boundary pollution

References:

- Bhattacharyya, R.N. (2001): *Environmental Economics: Indian Perspective*, OUP.
- Fisher, A (1981): *Resource & Environmental Economics*, CUP.
- Chiang, A (1992): *Elements of Dynamic Optimization*, McGraw-Hill.
- Conard & Clark (1987): *Natural Resource Economics: Notes & Problems*, CUP.
- Broomley (ed.) (1995): *Handbook of Environmental Economics*, Blackwell.
- Hanley, Shogren & White (1997): *Environmental Economics*, McMillan.
- Hartwick & Olewiller (1998): *The Economics of Natural Resource Use*, Addison-Wesley.
- Bardhan & Udry (1999): *Development Microeconomics*, OUP.
- Dasgupta (1982): *The Control of Resources*, HUP.
- Todaro & Smith (2003): *Economic Development*, 8th Ed., Pearson-Education.
- Meier & Rauch (2000): *Leading Issues in Economic Development*, 7th Ed., OUP.
- Ramprasad Sengupta (2000) *Ecological Economics*. Oxford University Press, New Delhi.
- Costanza, et.al. (1998): *An Introduction to Ecological Economics*,
- Pearce & Turner (1991): *Economics of Natural Resources and the Environment*, Harvester-Wheatsheaf.
- Baumol & Oates (1988): *Theory of Environmental Policy* (2/e), CUP.
- Kolstad (2000): *Environmental Economics*, OUP.
- James & Murty (1999): *Economics of Water Pollution: The Indian Experience*. OUP.
- Kadekodi (2004): *Environmental Economics in Practice: Case Studies from India*, OUP.
- Markandya & Murty (2001): *Cleaning up the Ganges: a Cost-benefit Analysis of the Ganga Action Plan*, OUP.

Paper XV(K)- XVI(K): Political Economy of Development (Optional Area)

Paper XV(K): Alternative Theories of Development (50 Marks)

Group A. Non-Class Approaches to Development

- Mode of Production
- Dependency
- Post-Development
- Capability and Human Development
- Neo-Liberal Approach and Global Institutions

Group B: Class and the Development Space

- Class and Overdetermination
- Transition and Development
- Theoretical Issues of Production, Distribution and Need
- Marginality and Class Focused Justice

PaperXVI(K) – Development Issues and Policy with Reference to India (50 Marks)

Group A. Class Focused Formulations of Development Categories and their Applications in India

- Agriculture
- Informal Sector
- Industry
- Financial Markets
- State
- Poverty

Group B. Class Focused Policy Analysis and Transition of the Indian Economy

- Overdetermination and Policy
- New Economic Policy
- Policies of Compensation and Resettlement
- New Agricultural Policy
- New Labor Policy
- Policy of Employment Generation
- Policy on Competition and Global Capitalism

References

- Chakrabarti, A. and Cullenberg, S. 2003. *Transition and Development in India*. Routledge: New York.

- Jomo, K.S. and Fine, B. 2006. *The New Development Economics: After the Washington Consensus*. Tulika Books (Originally Zed Books): New Delhi.
- Pieterse, J.N. 2001. *Development Theory*. Vistaar Publications (Originally Sage Publications): New Delhi.
- Resnick, S. A. and Wolff, R. D. 1987. *Knowledge and Class: A Marxist Critique of Political Economy*. Chicago and London: University of Chicago Press.
- Resnick, S. and R. Wolff. 2006. *New Departures in Marxian Theory*. New York: Routledge.

Paper XV(L)- XVI(L): Indian Economic Analysis (Optional Area)

Paper XV(L): Managing the Domestic Economy (50 Marks)

- Political and Legal Institutions and Regulation
- Political Economy of federalism
- Regional Development
- The Economy of West Bengal.

Paper XVI(L): India in Global Economy (50 Marks)

- In-depth treatment of contemporary issues.

Paper XV(M)- XVI(M): Development Management (Optional Area)

Paper XV(M): Human Development Approach (50 Marks)

A. Concept and Index of Development:

- (a) HDI and other Indices
- (b) Factors Behind Underdevelopment:
Characteristics and distortions relating to
 - (i) distribution of productive assets (land, capital and human capital, such as education and health);
 - (ii) markets for land, labour, capital, credit and outputs; and
 - (iii) functioning of development organisations (International organizations, National and State governments, participatory Local Governments, Cooperatives and NGOs).
- (c) Concepts of development management as a form of social intervention to lessen the distortions in each of the spheres (i), (ii) and (iii), for purposes of sustainable development. Intervention through markets and non-market organisations

B. Agriculture & Allied Sectors:

- a) Characteristics and distortions in terms of (i), (ii) and (iii) in agriculture, animal husbandry, fishery and forests: Inequality in ownership of land, labour, credit, capital and outputs
- b) Development management in terms of social intervention through market and non-market organisations for a sustainable growth with employment generation and food security in agriculture and allied sectors: Land reforms; lessening of market imperfections; widening the access to appropriate technology involving improved seeds, irrigation facility, fertilisers and insecticides (including bio-inputs), credit and marketing facilities, a balanced approach to cropping pattern; imports and exports and environmental issues
- c) Different forms of development management – combination of market based interventions towards more competition and non-market interventions in terms of the National and State Governments, Local Governments, participatory management and beneficiary groups, Cooperatives and NGOs. Role of international agencies, such as WTO, IMF, World Bank, etc. Experience in India and other LDCs.

D. Industrial Sector:

Characteristics and distortions in terms of (i), (ii) and (iii) in organised and unorganised industrial sectors: imperfections of labour, capital and credit markets and access to appropriate technology. Development management in each of these spheres through market and non-market interventions. Role of corporate industrial sector, medium and small-scale sector including informal sector for purposes of sustainable industrial growth with employment generation and environmental balance. Role of International organisations, National, State and Local Governments, Cooperatives and NGOs. Experience of India and other LDCs.

Paper XVI(M): Development and Opportunities (50 Marks)**A. Social Sectors including Education, Health and Gender Related Issues:**

- (a) Education—access to literacy, primary education, secondary, higher and technical education
- (b) Access to preventive and institutional health care- Family welfare and population policy
- (c) Gender inequality
- (d) Scope of different forms of development management
- (e) Experience of India and other LDCs

B. Issues Relating to Financial Sector:

Characteristics and distortions in the functioning of financial institutions: Share/capital markets, Banks and Non-banking Financial Institutions, Cooperatives, Micro-credit etc. Development management in each of these spheres to ensure a wider access with social accountability and stability- Experience of India and other LDCs

C. Issues Relating to Functioning of the National, State and Local Governments:

- (a) Organisational issues- participation and accountability. Problems of finances of the National, State and Local Governments, Scope of Development management.
- (b) Experience of India and other LDCs.

References:

- Anand, Sudhir and Amartya Sen, (1994): *Human Development Index*
- Bardhan, Pranab and Christopher Udry (1999): *Development Microeconomics*, OUP
- Mukherjee, D. and Debraj Ray (2003): *Readings in Theory of Economic Development*
- Ray, Debraj, (1998): *Development Economics*, OUP
- Sen, Amartya, (2000): *Development as Freedom*, OUP
- Stiglitz, Joseph, (1998): “Towards a New Paradigm for Development”, 1998 Prebisch lecture at UNCTAD
- Bardhan, Pranab (1984): *Land, Labour and Rural Poverty*, OUP.
- Bardhan, Pranab (1989): *The Economic Theory of Agricultural Institutions*.
- Ramchandran, V.K. and M. Swaminathan (Eds.) (2002): *Essays of Agrarian Relations in Less Developed Countries*.
- Bagchi, Amiya K (1982): *Political Economy Of Underdevelopment*.
- Bagchi, Amiya K. (2002): *Small and Medium Enterprises and Prospects of Development in India*.
- Best, M.H., (1950): *The New Competition*.
- Planning Commission, Govt. Of India *Report of the Study Group on Development of Small Scale Enterprises*.
- Stiglitz, Joseph, (2002), *Globalization and its Discontents*.
- Dreze, Jean and Amartya Sen, (1989), *Hunger and Public Action*
- Dreze, Jean and Amartya Sen (1995): *India: Economic Development and Social Opportunities*.
- Sen, Amartya, (1985), *Commodities and Capabilities*.
- Sen, Amartya, (2001), *Many Faces of Gender Inequality*.
- Dasgupta, Asim K. (1998) Participatory Decentralization in Development Efforts, Paper in Conference on Decentralization, Calcutta 1998.
- World Development Reports 1997 to 2001.
- Reserve Bank of India Reports on Central and State Finances
- Beim, D. and C. Calomovis, (2001), *Emerging Financial Markets*.
- World Bank (1999) Conference on Capital Flows, Financial Crises and Policies.

