

M.A/M. Sc. Syllabus (Economics)

❖ Semester I

Paper I: Microeconomic Theory (50 marks)

- Individual Decision Making
 - Consumer Theory: Preference to choice; Theory of consumer demand – duality approach; Aggregate demand and introducing the problem of social choice.
- Theory of the Firm:
 - Parallel to theory of demand.
- Markets and Welfare
 - Competitive markets - First and Second Welfare Theorems – Concept of Social Optimum – Equity-efficiency trade-off.
 - Market Failure
 - Market imperfection – Monopoly – Non-linear pricing.
 - Externalities and Public Goods – Coase Theorem.
- Introduction to Game Theory
 - Noncooperative games; Normal form – pure vs. mixed strategies; Solution concepts – iterated deletion of dominated strategies, Nash equilibrium.
 - Sequential games – concept of subgame perfection.
 - Applications: Oligopoly Models

References:

- Mas-collel, Whinston and Green (1995): Micro-economic Theory, OUP
- Layard and Walters (1987): Microeconomic Theory, McGraw-Hill
- Gibbons(1992): Game Theory for Applied Economists, Princeton University Press
- Varian (1992): Micro-economic Analysis, W.W. Norton & Co. NY
- Osborne (2006): An Introduction to Game Theory, OUP

Paper II: 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, Weirstrass' 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 III: Globalization and Development I (50 marks)

- Economic development: an overview
 - o Income and growth, international comparison of income, measurement problem and the PPP method, income distribution within developing countries
- Structure of Underdevelopment
 - o Low level trap, coordination failure, O-ring theory
- Economic Growth
 - o Solow model, technological progress and endogenous growth
- Transition from a traditional to a modern economy
 - o Surplus labor and the Lewis process, urban unemployment and the informal sector
- Critique of the per capita income as an index of development
 - o Human development, Entitlement and capability
- Inequality and development

- The Washington Consensus and Globalization
- The structural Adjustment Program and Employment
- Global Dispersion of Production and Outsourcing

References

- Amartya Sen . 1983. Development: Which Way Now? The Economic Journal. 93(372): 745-762.
- Stiglitz, J. 2002. Globalization and its Discontents
- Ray, D. 1998. Development Economics (Selected Chapters)
- Basu, Kaushik. 2003. Analytical Development Economics: The Less Developed Economy Revisited

Paper IV: 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

Paper V – Internal Assessment I

❖ Semester II

Paper VI: Macroeconomic Theory (50 marks)

- 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.

- Consumption Behavior
 - Permanent Income and Life cycle theories, Random walk hypothesis.
- The Overlapping Generations model
- Open Economy Macroeconomics
 - Balance of payments, Exchange rate systems, Mundell Fleming model, Asset markets, expectations and exchange rates, Monetary approach to BoP.
- Investment behaviour
 - Neoclassical theory, Tobin's q, Imperfect information and investment
- Macroeconomics of developing countries

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 VII: 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 VIII: Globalization and Development II (50 marks)

Group A- Development Indicators

- Poverty and its Estimates: Income Poverty Approach -- Head Count Ratio, Poverty Gap, Gini Coefficient, Foster Greer Thorbecke Index; Material Approach; Capability Approach; Multidimensional Approach – Human Development Approach
- More on Multidimensional Approach: Conglomerative and Deprivational indices: Human Poverty Index, Gender Development Index, Gender Empowerment Measure
- Some specific indicators of Health and Education

References:

- Sakiko Fukuda-Parr and A K Shiv Kumar (ed) (2003): ‘Readings in Human Development’. OUP
- NFHS 3 Report & DISE report
- Human Development Report for various years.

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
- F. How and How Far to Liberalize a Developing Economy

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.
- Chaudhuri, Sarbajit and Mukhopadhyay, Ujjaini (2009): *Revisiting the Informal Sector: A General Equilibrium Approach*, Springer, New York, USA.
- 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.
- Stiglitz, J.E. (2002): *Globalization and its Discontents*, Penguin Books.

Paper IX: Indian Economic Issues and Quantitative Studies (Project) (50 marks)

- A. Indian Economic Analysis
- B. *Project Related Techniques*
 - Report Writing
 - Report Presentation

Paper X: Internal Assessment II (50 marks)

❖ Semester III

Paper XI: 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

- MasCollé, 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 XII – Special Area (Group A) (50 marks)

Paper XIII – Special Area (Group B) (50 marks)

Paper XIV – Special Area (Group C) (50 marks)

Paper XV – Internal Assessment III (50 marks)

❖ Semester IV

Paper XVI: 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

Paper XVII – Special Area (Group A) (50 marks)

Paper XVIII – Special Area (Group B) (50 marks)

Paper XIX – Special Area (Group C) (50 marks)

Paper XX – Internal Assessment IV (50 marks)

Special Areas (Group A)

A. Advanced Macroeconomics

XII (AA): Macroeconomic Theory (50 marks)

- Equilibrium and Disequilibrium Dynamics, Business Cycles Models, Capital Accumulation Theories
- Overlapping Generations Approach
- Growth, Inequality and Poverty
- Macroeconomics of Developing Economies with emphasis on Indian economy

XVII (AA): Techniques of Modern Macroeconomics (50 marks)

- Optimal Control Approach to Macroeconomic Problems
- Characterization of Chaotic Dynamics, Liapunov Characteristic exponents, Transition to Chaos
- Lag Operators and Stochastic Processes
- Dynamic Programming

References:

- Brock, W. A and Malliaris, A.G(1989): Differential Equations, Stability and Chaos in Dynamic Economics, North Holland
- Medio, C. (1992): Chaotic Dynamics (OUP)
- Romer, D (1996): Advanced Macroeconomic Theory, McGraw Hill, Singapore
- Ljungqvist, L and Sargeant, T (2000): Recursive Macroeconomic Theory, MIT Press, Massachusetts
- Rakhshit, M (2007): Macroeconomic of Post Reform India, OUP.

B. Equilibrium and Games

Paper XII (AB): 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 XVII (AB): 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-collel, 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

C. International Economics

Paper XII(AC): 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 Rybczinski 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

I. Basic Accounting:

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

J. 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

K. Capital Mobility

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

Paper XVII(AC): Trade, Imperfect Competition and Development (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

D. Trade and Development - 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.

E. The open dual economy

- Extensions of the Lewis model to trade situations.

F. 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.

G. Immiserizing growth

- Bhagwati – Johnson – Brecher and Alejandro.

H. 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.
- I. Technology and trade
- External economies, trade and growth
 - Invention, innovation and temporary monopoly
 - The Vernonian product cycle
 - The contagion approach
 - Technology gap models
- J. 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.
- K. 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

D. Monetary Economics

Paper XII (AD): Theory of Monetary Economics (50 marks)

- Usefulness of money: Search theoretic models of money – Overlapping generation models of money.
- Different approaches to modeling money: Money in the utility function – Cash-in-advance models – shopping time models.
- Money and public finance: Budget accounting – Equilibrium seigniorage – Friedman's rule – optimal taxation and seigniorage- Fiscal theory of price determination.
- Discretionary policy and time inconsistency: inflation under discretionary policy – solutions to inflation bias – importance of central banking.
- New Keynesian monetary economics: Taylor rules and other developments.
- Monetary approach to balance of payments: Basic model with one good and money – Adjustment process and devaluation – Money, home goods and traded goods – Money, credit and the world quantity theory – A general model with continuum of traded goods, money and non-traded goods.
- Non-Walrasian open macro framework: Stabilization policies under fixed exchange rates – Stabilization policies under flexible exchange rates – non-traded sector and rationing.
- Current account balance in inter-temporal framework: A two-region two-period endowment economy – taxation of foreign borrowing and lending.

Paper XVII (AD): 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.

E. Urban Economics

Paper XII (AE): Urbanization and Urban Development (50 marks)

- Urban system - urban hierarchy, urban size distribution and optimum city size
- Location theory
- Urban land market and land use
- Urbanisation & Urban Development - Concepts and definitions of *urban*
- Evolution of urban settlements - a historical perspective
- Urbanisation in developing countries: Issues and Problems
- Trends and patterns of urbanization in India and West Bengal- urban concentration, structure of urban economy, rural-urban relation.

References:

1. Evans, A.W., 1984, Urban Economics, Basil Blackwell, London.
2. Hallet, Graham, 1979, Urban Land Economics: Principles and Policy, Macmillan, London.
3. Lewis, J. Parry, 1980, Urban Economics: A Set Approach, Arnold Heineman, New Delhi.
4. Richardson, H.W., 1978, Urban Economics, Dryden Press, Hinsdale.
5. O'Sullivan, A, 2003, Urban Economics (3rd edn.), IRWIN, London.

Paper XVII (AE): Urban Growth and Urban Management (50 marks)

- Urban and regional growth theories
- Urban labour market - rural-urban migration

- Urban poverty - slum and informal sector
- Urban environment -sustainable urban development
- Urban infrastructure development - Housing, Water supply and drainage, waste management and sanitation
- Urban local government and finance.

References:

1. O'Sullivan, A, 2003, *Urban Economics* (3rd edn.), IRWIN, London. (Chapters 1-4)
2. HABITAT, 1996, *An Urbanizing World – Global Report on Human Settlements 1996*, Oxford University Press: New York
3. H.W Richardson, 1988, *New Urban Economics*, Dryden Press, Hinsdale
4. Richardson, H.W., 1978, *Regional and Urban Economics*, Penguin, Middlesex.

F. Public Economics

Paper XII (AF): 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 XVII (AF): 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

G. Economics of Industry

Paper XII (AG): 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 XVII (AG)- 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.

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

Special Areas (Group B)

A. Advanced Econometric Theory

Paper XIII (BA): Econometrics and Data Analysis (50 marks)

- Exploratory Data Analysis
- Regression Diagnostics
- Analysis of Cross-section Data
- Analysis of Time-series Data
- Analysis of Panel Data
- Analysis of Indian Official Data

Paper XVIII (BA): Multivariate Techniques in Social Science Research (50 marks)

- Simultaneous Multi-equation Models
- Estimation and Biases in the Simultaneous 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 and Kajal Lahiri (2009), *Introduction to Econometrics*, Macmillan, 4th 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.
- 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.
- Wooldridge, J: *Introductory Econometrics- Modern Approach*, South-Western College Publishing, 2008, 4th edition..

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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.

B. Applied Econometrics with Computer Applications

Paper XIII (BB): Applied Econometrics I (50 marks)

Group A: Econometric Methods

- Maximum likelihood estimation of the k-variable model
- Tests of the k-variable model for specification error
- Generalized method of moments

Group B: Advanced Topics on Applied Econometrics

- Limited dependent variable models: LPM, Logit, Probit and Tobit.
- Panel data regression methods: Fixed-effects and Random-effects models; The Hausman test.
- Dynamic econometric models: Distributed lag models and autoregressive models.
- Non-parametric regression.

Paper XVIII (BB): Applied Econometrics II (50 marks)

Group A: Time Series Econometrics

- Non-stationarity and unit-root tests
- Cointegration and error-correction models
- Vector autoregression models and causality tests
- ARIMA models and Box-Jenkins methodology
- ARCH-GARCH for modeling the variance

Group B: Computer Applications

- Analysis of cross-section, time-series and panel data sets using suitable econometrics software packages.

References

- Wooldridge, J (2009): *Introductory Econometrics A Modern Approach*, South-Western College Publishing, 4th edition.
- Johnston and J. Dinardo (1997): *Econometric Methods*, 4th edition, McGraw-Hill International.
- G S Maddala and Kajal Lahiri (2009): *Introduction to Econometrics*, Macmillan, 4th Edition.
- Robert S Pindyck and Daniel L Rubinfeld (1998): *Econometric Models and Economic Forecasts*, McGraw Hill, 4th Edition.
- Baltagi, Badi H (2008): *Econometrics*, Springer-Verlag, 4th edition.
- Edward W Frees (2004): *Longitudinal and Panel Data: Analysis and Applications in Social Sciences*, Cambridge University Press.
- Walter Enders (2004): *Applied Econometric Time Series*, John Wiley & Sons, 2nd Edition.
- William H Green (2003): *Econometric Analysis*, Pearson Education, Delhi, 5th Edition.
- Mukherjee, C, H. White & M. Wuyts (1998): *Econometrics and Data Analysis for Developing Countries*, Routledge.

C. Operations Research

Paper XIII (BC): Techniques of Operations Research I (Deterministic Models) (50 marks)

Group A (25 marks)

Deterministic models of Optimisation: Linear Programming, Transportation and Assignment models, Duality and Sensitivity Models, Integer Programming, Multiobjective Optimisation.

Shortest Path and Discrete Dynamic Programming: Dynamic Programming Approach to Shortest Paths, CPM, PERT, Discrete Dynamic Programming models.

Nonlinear Programming: Reduced Gradient Algorithm, Quadratic Programming, Separable Programming Methods

Network Analysis: Optimal network flows

Applications of Game Theory

Group B: 25 marks

Practical Applications of the Topics 1-5 in Group A based on software.

Paper XVIII (BC): Techniques of Operations Research II (Probabilistic Models) (50 marks)

Group A: 25 marks

- Decision Analysis: Decision making under different environment, Methods of Decision making under uncertainty
- Markov Chains: Stochastic Processes, Long Run Properties of Markov Chains, Continuous Time Markov Chains
- Queuing Theory: Queuing Systems, Probability Distributions, Queuing Process
- Inventory Theory: Deterministic and Probabilistic Models
- Simulation: Monte Carlo Method, Pseudo-Random Numbers and its application to economic problems

Group B: 25 marks

- Practical Applications of the Topics 1-5 in Group A based on software.

References:

- Hillier, F and Liberman, G(2006): Operations Research, McGraw Hill, India
- Taha, H(2000): Operations Research, Pearson Publication, India
- Rardin, R (1998): Optimisation in Operations Research, Pearson Publication, India

D. Economics of Finance

Paper XIII (BD): 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 XVIII (BD): 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.

E. Indian Economic Analysis

Paper XIII (BE): Managing the Domestic Economy (50 marks)

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

Paper XVIII (BE): India in Global Economy (50 marks)

- In-depth treatment of contemporary issues.

References:

- Dasgupta, Biplab, GLOBALISATION: India's Adjustment Experience, SAGE Publication, New Delhi, 2005
- Ahluwalia I.J. and I.M.D. Little,(ed), India's Economic Reforms and Development: Essays for Manmohan Singh, OUP, Delhi, 1998
- Vaidyanathan, A., India's Economic Reforms and Development, Academic Foundations, New Delhi, 2003
- Chakroborty, Sukhomoy, Development Planning: The Indian Experience, OUP, Delhi, 1988
- Arora A. and A. Gambardella (ed), From Underdogs to Tigers; The Rise and Growth of Software Industry in Brazil, China, India, Ireland and Israel, OUP, Oxford, 2006
- Mattoo, A and R.M. Stern, (ed), India and the WTO, The World Bank, Rawat publications, Jaipur and New Delhi, 2005
- Sensarma Manisha, Public Sector Reforms in India, "Advanced Seminar on Leading Strategic Change in Public Sector" organized by the GIDD

Commonwealth Fund for Technical Co-operation and NZAID, Wellington, NZ, March, 2005

- Bhole, I.M., Disinvestment of India's Public Sector Units, Dept of Humanities and Social Sciences, IIT, Bombay, www.ircc.iit.ac.in, Aug,2003
- Pramit Chaudhuri: The Indian Economy, Poverty and Development, Vikas Publishing House.
- Pramit Chaudhuri: Readings in Indian Agricultural Development, George Allen and Unwin Ltd.
- Bhagwati and Desai: India Planning for Industrialization, OUP.
- Bhagwati and Chakraborty: Contribution to India Economic Analysis.
- Bimal Jalan (Ed):The Indian Economy, OUP
- Bimal Jalan: India's Economic Crisis – The Way Ahead, OUP
- Robert E.B. Lucas and Gustav F. Papanek: The Indian Economy: Recent Development and Future Prospects, OUP.
- Sukhomoy Chakraborty: Development Planning – The Indian Experience, OUP
- M.S.Ahluwalia and I.M.D Little (Ed):India's Economic Reforms and Development - Essays in Honour of
- Man Mohan Singh, OUP
- Jagdish Bhagwati: India in Transition – Freeing the Economy, OUP
- V.Joshi and I.M.D Little: India Macroeconomics and Political Economy, 1964-1991, OUP.
- V.Joshi and I.M.D Little: India's Economic Reforms 1991-2001,OUP
- I.J.Ahluwalia: Industrial Growth In India – Stagnation since the Mid-Sixties, OUP
- Raja J. Chelliah: Towards Sustainable Development – Essays in Fiscal and Financial Sector Reforms in India, OUP
- Rangarajan: Indian economy – Essays on Money and Finance, UBS Publishers' Distributors Ltd
- T.N. Srinivasan: Eight Lectures on India's Economic Reforms, OUP
- Uma Kapila Ed: Indian Economy since Independence, different volumes, Academic Foundation.
- Soo, Kwok Tong, From Licence Raj to Market Forces: The Determinants of Industrial Structure in India after Reform, *Economica*, Vol 75, May, 2008, No.298
- Tandon, B.B. and A.K. Vashist (ed), Financial Sector Reforms- An Unfinished Agenda for Economic Development, Deep and Deep Publications, New Delhi, 2002
- Roy, Abhijit, article on Financial Reform, in *The Hindu*, Online edition of India's national newspaper, July, 05, 2001
- Felix Raj, J., Economic Ideas, Development and Financial Reforms: Essays in Honour of Prof Raj Kumar Sen: A Tribute from Research Scholars, Deep and Deep Publications, New Delhi, 2008
- Economic Survey, different volumes.
- Economic and Political Weekly, relevant articles.
- India Infrastructure Report, Different Volumes

F. Development Management

Paper XIII (BF): 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 organizations (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 organizations.

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 organizations 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, fertilizers 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.

C. Industrial Sector:

- a) 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 XVIII (BF): 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*.
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- 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.

G. Agricultural Economics

Paper XIII (BG): Agricultural Economics (50 marks)

- Agricultural Production.
- Marketing, Distributions and Consumers.
- Agriculture, Natural Resources and Environment.
- Agriculture in the Macroeconomy.
- Agriculture and Food Policy

Paper XVIII (BG): 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

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;
- Gardner, B.L. and G.C.Rausser (Eds) (2002): *Handbook of Agricultural Economics*;

Special Areas (Group C)

A. Labour Economics

Paper XIV (CA): Labor Demand and Supply (50 marks)

- Human Capital, Individual Wage Determination, Schooling, Experience, and Earnings
- Unions and Collective Bargaining
- Labor Migration
- Economics of the Informal Sector
- Globalization and Labour
- Economics of Child Labour

Paper XIX (CA): 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:

- Cahuc, Pierre, and Andre Zylberberg. *Labor Economics*. Cambridge, Mass. and London: MIT Press, 2004.
- Ashenfelter, Orley, and Richard Layard. *The Handbook of Labor Economics*. Vol. 1 and 2. New York: North-Holland, 1986; Vol. 3A, 3B, and 3C, 1999.
- Chaudhuri, Sarbajit and Mukhopadhyay, Ujjaini (2009): *Revisiting the Informal Sector: A General Equilibrium Approach*, Springer, New York, USA.
- Basu, Kausik (1997): *Analytical Development Economics*, Oxford University Press, Delhi.

- Marjit, S. and Acharyya, R. (2003): *International Trade, Wage Inequality and the Developing Economy: A General Equilibrium Approach*, Physica-Verlag.
- Basu, K. (1999): 'Child labour: cause, consequence, and cure, with remarks on international labour standards', *Journal of Economic Literature* 37 (September), 1083-1119.
- R. Solow (1990): *The Labour Market as an Institution*, Blackwell Publisher.

B. Rural Economics

Paper XIV (CB): 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 XIX (CB): 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:

- 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;

C. Urban Planning

Paper XIV (CC): Urban Planning: Theories and Experiences (50 Marks)

- Approaches to Urban Planning - Decentralised and participatory planning
- Urban Planning-Issues and policies
- Socio-economic Planning & Participatory Planning
- Urban Development Planning - Land Use and Physical Planning
- Decision-making techniques (cost-benefit analysis, multi-criteria decision making)
- Valuation and pricing of real estate and infrastructure services
- Information systems and urban planning

References:

- J M Levy, 1988, Contemporary Urban Planning, Prentice Hall: New York.
- Jeffry Stabbs and Cailies Clark, 1976, Megacity Management in the Asian and Pacific Region: Policy Issues and Innovative Approaches, ADB: Manila
- J G Kesar, 1998, The Basics of Town Planning, All India Institute of Local Self Government, Mumbai.
- Sylvie Faucheux & Martin O'Connor, 1998, Valuation for Sustainable Development: Methods and Policy Implications
- Robert Laurini, 2001, Information Systems for Urban Planning, Taylor and Francis: New York
- D Isaac and T Steley, 2000, Property valuation Techniques, Macmillan: London

Paper XIX (CC): Urban Planning Techniques (50 Marks)

- Urban Transport Problems and Planning
- Urban Environment Planning
- Urban Planning: Institutions and regulations
 - Impact assessment techniques
 - Financial planning
 - Urban databases and research methods

References:

- Stuart Cole, 1987, Applied Transport Economics: Policy, Management and Decision Making, Kogan Page: London.
- Harry T Dimitriou, 1992, Urban Transport Planning - A Developmental Approach, Routledge: London

- Rodney R White, 1998, Urban Environmental Management, John Wiley: New York
- C J Barrow, 1996, Environment and Social Impact Assessment -An introduction, Arnold: New York
- Kulwant Singh, 2000, Financing and Pricing of Urban Infrastructure, New Age: New Delhi.
- Valverde Nelson, 1978, The City Study: The Available data
- Lewis-Beck, Michael S., 1994, Research Practice, Sage Publication: London

D. Health Economics

Paper XIV (CD): Health, Development and Related Issues (50 marks)

Module 1: Economic Development and Health: State and Scope of Health Economics, Equity and Efficiency; Difference between health and health care.

Module 2: Epidemiology and Morbidity Transition; Measurements of Health status – Morbidity and Mortality; Burden of Diseases; Concepts of DALY and QALY

Module 3: Preventive and Curative Health care: Public Health and political economy. State of curative health care in India.

Module 4: Health Care Finance: Public and private finance and provision. Public Private Partnership; Impact of Globalisation.

* Some additional classes will be arranged to equip the students to handle the technicalities of the Module 4 in Semester IV.

Paper XIX (CD): Health Care Market & Project (50 marks)

Module 1: Demand for health care: Health care as an input in health. Notion of 'need'; Induced demand

Module 2: Market and Market Failure: Information asymmetry; Theories of Private Insurance

Module 3: Providers of health care: Hospitals, pharmaceutical Industry, Alternative Medicine

Module 4: Group Project

References:

- Cuyler A and J Newhouse (ed) (2000): 'Handbook of Health Economics'. Elsevier.
- Das Gupta Monica, Lincon Chen and T Srinivasan (1996): 'Health, Poverty and Development in India'. OUP
- Santerre R and s Neun (2007): 'Health Economics: Theories, Insights and Industry Studies'. Thompson.
- World Health Organisation (2000): 'Report of Commission on Macroeconomics and Health'.
- Zweifel P (1997): 'Health Economics'.

E: Resource and Environmental Economics

Paper XIV (CE): Resource and Environmental Economics I (50 marks)

Module I: *Conceptual Framework*

Economics, Ethics and the Environment;
Ecological Economics and the Material Balance Approach;
Environmental Economics and the Economics of Environment;
Taxonomy of Natural Resources;

Module II: *Methodological tools*

- Extension of the method of Lagrange multipliers to dynamic allocation problems;
- Discrete and continuous time points;
- The concept of Hamiltonian;
- Use of Control Theory;

Module III: *Economics of Exhaustible Resources*

- A simple 2-period framework and the concept of Backstop;
- Extension to Dynamic Model of Mining with modified Hotelling's Rule;
- Depletion & Discovery under alternative market structures;

Module IV: *Economics of Renewable Resources*

- Forestry: Single versus Multiple use Forest- Optimal Rotation and Faustman's Rule;
- Fishery: The concept of Maximum Sustainable Yield (MSY), Optimization under alternative fishery management regimes-open access solutions, Fishery and fish biodiversity, Mangrove-fishery linkages, Basic ideas of the theory of aquaculture shrimp farming;

Module V: *Environmental Regulation*

- 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, and Tradable Pollution Permits), Hybrid instruments (two-part tariff), Double Dividend Hypothesis, and Illicit Dumping;
- Case Studies;

Selected 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 (1995): *Handbook of Environmental Economics*, Blackwell.
- Hanley, Shogren & White (1997): *Environmental Economics*, McMillan.
- Dasgupta (1982): *The Control of Resources*, HUP
- Perman, R., Ma, Y., McGilvary, J and Common, M(1999) : *Natural Resources and Environmental Economics*, 2nd Edition, Prentice Hall.
- Pearce, D.W. and Turner. R.K.(1991) : *Economics of Natural Resource and Environment*, Harvester-Wheatsheaf.
- Baumol & Oates (1988): *Theory of Environmental Policy (2/e)*, CUP
- Kolstad (2000): *Environmental Economics*, OUP,
- James & Murty (1999): Water Pollution Abatement: A Taxes-Standard approach for Indian Industries in James & Murty (eds.) *Economics of Water Pollution: the Indian Experience*. OUP.

Paper XIX (CE): Resource and Environmental Economics II (50 marks)

Module I: *Common Property Resources*

- Poverty and Environmental Degradation;
- Community Management of Common Property Resources;
- Coordination Failure- Increasing Returns, Free-riding Problem (Assurance Game and Prisoner's Dilemma)
- Community Institutions: Case Studies;

Module II: *Environment and Sustainable Development*

- Environmental Kuznets Curve;
- Irreversibility, Uncertainty and Economic Development;
- Concept of Sustainability and constraints;
- Option Price, Option Value and Quasi-option Value;
- Safe Minimum Standard;

Module III: *Economics of Green Accounting and Sustainable Resource Management*

- Environmental Accounting: Basic Theory;
- A Dynamic Optimization Model on National Income;
- Hartwick's rule and sustainable income; Concepts of Genuine Wealth and Genuine Savings;

- Environmentally adjusted national product;

Module IV: *Environmental Valuation and Cost-benefit Analysis*

- Total Economic Value of the Environment
- Revealed preference Approach:
 - Household Production Function
 - Travel Cost
 - Hedonic Price Theory
 - Statistical Value of Life;
- Stated Preference Approach:
 - Hypothetical Market and Contingent Valuation Method
 - Experimental Market;

Module V: *Global Issues and the Environment*

- Trade, Development and Environment;
- The Pollution Haven Hypothesis;
- International/ Interregional Cooperation;
- The Problem Managing Trans-national Commons;

Selected References:

- Baland & Platteau (2003): Economics of Common Property Management Regimes in Mäler & Vincent (eds.) *Handbook of Environmental Economics*, Vol 1, North-Holland.
- Baland, J.M. and J.P. Platteau (1996): Halting Degradation of Natural Resources: *Is there a role for rural communities?* FAO and OUP
- Ghate, R., Narpat Jodha and Pranab Mukhopadhyay (2008): Promise, Trust and Evolution: Managing the Commons of South Asia, OUP
- Kolstad (2000): *Environmental Economics*, OUP.
- Kadekodi (2004) *Environmental Economics in Practice: Case Studies from India*, OUP.
- Bhattacharyya & Mitra (2005.) *Studies in Macroeconomics and Welfare*, Academic Press.
- Markandya & Murty (2001): Measuring Non-user Benefit from Cleaning ganges in *Cleaning up the Ganges: a Cost-benefit Analysis of the Ganga Action Plan*, OUP.
- M. Cole (1998) *Trade Liberalization, Economic Growth and Environment*, Edward-Elgar.

F. Economics of Marx

Paper XIV (CF): 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 XIX (CF): 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.

G. Political Economy of Development

Paper XIV (CG): A Critique of the Political Economy of Development (50 Marks)

1. A Brief History of Development in India.
2. Development and its Fragments: Introduction
3. Class, Economy and Disaggregation: Beyond Dualism
4. Class and Development: Social Surplus, Need and Distribution
5. Modernism and Dualism: determinism, teleology and historicism.
6. Dualism, Normal, Abnormal, Third World and World of the Third: The Discourse of Inclusion and Exclusion.
7. From Heterogeneity to Dualism to Monism in Development: Capitalocentrism and Orientalism
8. Dualism and Capitalist Development: Agriculture versus Industry, Informal versus Formal.
9. Neo-liberal Globalisation, Capitalism and Development: The Post-colonial Condition
10. Global Capitalism, World of the Third and Third World
11. Dislocation and Primitive Accumulation: Confronting World of the third.
12. Development and Violence
13. Development's Response to Dislocation and Violence: Compensation and Resettlement
14. Social Surplus, Poverty and Development: Confronting Third World through Need Discourse
15. Community, Risk Management, Social Capital, Participation: The Case of Poverty Management and Social Funds Approach of World Bank.

Paper XIX (CG): Development Issues and Policy with Reference to India (50 Marks)

Group A

1. Economic Growth and Classical Political Economy: Transition to Capitalism in Western Europe. The Hobbesian nightmare. Smith—the first growth economist. “Passions and Interests”. The stationary state—Ricardo, Malthus.
2. The “necessity” of growth—John Stuart Mill, Karl Marx and John Maynard Keynes. The Gandhi Critique. The anthropological critique. Power/knowledge and the post- development critique.
3. The discourse of development economics: From transformation to management. The rise and fall of early development economics. Sen's critique. Human development and Sustainable development. Reconciling growth with management of people and nature.

4. The discourse of development economics: From the universal to the particular. Participatory democracy, decentralization, community, indigenous knowledge. World Bank and instrumentalization of the “local”.
5. The heterogeneous economy: Capital and its “outside”. Capitalist accumulation, dispossession and surplus population.
6. Management of the surplus population: The Indian Case. Planning regime— land reforms and reservation of industrial products for small-scale in India. Neoliberal regime— NREGA, social security for informal sector, Tribal Rights over forest resources.
7. Beyond state vs. market debate: governmentalization of the state. Conduct of conduct.
8. Development and democracy. Calm expertism versus chaotic democracy. Liberal democracy, populism, political society. The politics of the informal producers— between good citizens and “dangerous classes”.

Group B.

1. New Liberal Globalisation and Capitalism: Market, Competition, Subjectivity and Crisis.
2. Global Institutions, New Economic Order and the Nation State.
3. Global Capital, Circuits of Global Capital, Global Clusters and Global Cities.
4. New Economic Policy and the Transition of the Indian Development State: Recasting Growth and Poverty Need.
5. Reform policy in India and Capitalist Development under Globalization: market reform and competition, privatization, corporate governance, financial market reform, labor market reform, trade reform, pension fund reform, education reform and new agricultural policy.
6. Reading Government of India Policy Documents:
 - OASIS Report
 - National Commission of labor
 - National Agricultural Policy
 - National Rehabilitation Policy
 - Yashpal Committee Report
 - Report of Financial Sector Reforms
 - Suresh Tendulkar Committee Report

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