

AC 29/4/13

Item no. 4.51

UNIVERSITY OF MUMBAI



Revised Syllabus

Sem. I, II, III & IV

Program: M.A.

Course: Economics

(As per Credit Based Semester and Grading System
with effect from the academic year 2013–2014)

A. ABOUT CREDIT SCHEME:

- 96 credits for entire course (24 Credits per semester- 24*4 semester = 96)
- 6 credits per paper (6*4 papers = 24 at each semester)
- 48 teaching hours per paper during the semester
- 12 teaching hours per unit during the semester
- (all papers have 4 units)
- 4 teaching hours per week per paper

B. SCHEME OF EXAMINATION:

The performance of the learners shall be evaluated into two parts. The learner's performance shall be assessed by Internal Assessment with 40% marks in the first part by conducting the Semester End Examinations with 60% marks in the second part. The allocation of marks for the Internal Assessment and Semester End Examinations are as shown below:-

(i) Internal Assessment: 40 Marks (40%)

Sr. No	Evaluation type	Marks
1	One Assignments/Case study/Project	10
2	One Periodical class Test	20
3	Active participation in routine class instructional deliveries(case studies/ seminars//presentation)	05
4	Overall conduct as a responsible student, mannerism and articulation and exhibit of leadership qualities in organizing related academic actives	05

(ii) External Theory examination: 60 Marks (60%)

- **Duration –2 Hours** for each paper.
- There shall be four questions each of 15 marks. On each unit there will be one question and the fourth one will be based on entire syllabus.
- All questions shall be compulsory with internal choice within the questions.
- Questions may be subdivided into sub-questions a, b, c... and the allocation of marks depend on the weightage of the topic.

Questions	Units	Marks
Q1	Based on Unit - 1	15
Q2	Based on Unit - 2	15
Q3	Based on Unit - 3	15
Q4	Based on Unit - 4	15
	Total Marks	60

QUESTION PAPER PATTERN

(Semester End Examination: 60 Marks for 2 hours)

- Note:
1. All questions are **COMPULSORY**
 2. Each question carries 15 marks.
 3. Draw neat diagrams wherever necessary

- Q1. Answer ANY TWO of the following: (From Unit-I) 15 Marks
A
B
C
- Q2. Explain ANY TWO of the following: (From Unit-II) 15 Marks
A
B
C
- Q3. Attempt ANY TWO of the following: (From Unit-III) 15 Marks
A
B
C
- Q4. Explain ANY TWO of the following: (From Unit-IV) 15 Marks
A
B
C
-

C. COURSE & SYLLABUS FOR THE M.A. (By Papers) EXAMINATION IN ECONOMICS

Under the M.A. (by papers) scheme, there are 2 groups, an entire Economics student will have to compulsorily choose both. The student will have to study a total of 16 papers (Group I: 8 Papers and Group II: 8 Papers) in four semesters over the 2-years M.A. degree course.

- GROUP I -ECONOMICS- (COMPULSORY):**
- GROUP II -ADVANCED ECONOMICS – (OPTIONAL)**

Candidates opting for entire Economics at the M.A. degree course are required to select any two optional subjects (of four papers each) from the following 9 optional subjects of Group II, of which Paper I & II will be taught at semester I & II respectively in M.A. – Part I; and Paper III & IV will be taught at semester III & IV respectively in M.A. – Part II.

(Syllabus for semester –I & II at the M.A. Part – I):

□ GROUP I -ECONOMICS- (COMPULSORY):
□ GROUP I - MICRO ECONOMICS (1)
Semester- I: MICRO ECONOMICS PAPER I: EC101
Semester- II: MICRO ECONOMICS PAPER II: EC201
□ GROUP I - MACRO ECONOMICS (2)
Semester- I: MACRO ECONOMICS PAPER I: EC102
Semester- II: MICRO ECONOMICS PAPER II: EC202
□ GROUP II -ADVANCED ECONOMICS – (OPTIONAL):
□ GROUP II – (i) AGRICULTURAL ECONOMICS (03)
Semester- I: AGRICULTURAL PRODUCTION ANALYSIS PAPER I: EC103
Semester- II: AGRICULTURAL MARKETING ANALYSIS PAPER II: EC203
□ GROUP II – (ii) INDUSTRIAL ECONOMICS (04)
Semester- I: INDUSTRIAL ECONOMICS PAPER I: EC104
Semester- II: INDUSTRIAL ECONOMICS PAPER II: EC204
□ GROUP II – (iii) MONETARY ECONOMICS (05)
Semester- I: MONETARY THEORY PAPER I: EC105
Semester- II: MONETARY THEORY PAPER II: EC205
□ GROUP II – (iv) ECONOMICS OF INFRASTRUCTURE & SERVICES (06)
Semester- I: TRANSPORTATION ECONOMICS PAPER I: EC106
Semester- II: TRANSPORTATION ECONOMICS PAPER II: EC206
□ GROUP II – (V) INTERNATIONAL ECONOMICS (07)
Semester- I: INTERNATIONAL TRADE & COMMERCIAL POLICY PAPER I: EC107
Semester- II: INTERNATIONAL TRADE & COMMERCIAL POLICY PAPER II: EC207
□ GROUP II – (vi) MATHEMATICAL ECONOMICS (08)
Semester- I: MATHEMATICAL METHODS & PROGRAMMING PAPER I: EC108
Semester- II: MATHEMATICAL METHODS & PROGRAMMING PAPER II: EC208
□ GROUP II – (vii) ECONOMETRICS (09)
Semester- I: FOUNDATION OF ECONOMETRICS PAPER I: EC109
Semester- II: FOUNDATION OF ECONOMETRICS PAPER II: EC209
□ GROUP II – (viii) FINANCIAL ECONOMICS (10)
Semester- I: FINANCIAL ECONOMICS PAPER I: EC110
Semester- II: FINANCIAL ECONOMICS PAPER II: EC210
□ GROUP II – (ix) URBAN ECONOMICS & REGIONAL DEVELOPMENT (11)
Semester- I: MICRO-THEORY & POLICY ISSUES PAPER I: EC111
Semester- II: MICRO-THEORY & POLICY ISSUES PAPER II: EC211

(Syllabus for semester –III & IV at the M.A. Part – II)

<input type="checkbox"/> GROUP I -ECONOMICS- (COMPULSORY):
<input type="checkbox"/> GROUP I - DEVELOPMENT ECONOMICS (1)
Semester- III: DEVELOPMENT ECONOMICS: PAPER I: EC301
Semester- IV: DEVELOPMENT ECONOMICS: PAPER II: EC401
<input type="checkbox"/> GROUP I - PUBLIC ECONOMICS (2)
Semester- III: PUBLIC ECONOMICS: PAPER I: EC302
Semester- IV: PUBLIC ECONOMICS: PAPER II: EC402
<input type="checkbox"/> GROUP II -ADVANCED ECONOMICS – (OPTIONAL):
<input type="checkbox"/> GROUP II – (i) AGRICULTURAL ECONOMICS (03)
Semester- III: AGRICULTURAL GROWTH & DEVELOPMENT PAPER III: EC303
Semester- IV: AGRICULTURAL GROWTH & DEVELOPMENT PAPER IV: EC403
<input type="checkbox"/> GROUP II – (ii) INDUSTRIAL ECONOMICS (04)
Semester- III: LABOUR ECONOMICS & INDUSTRIAL RELATIONS PAPER III: EC304
Semester- IV: LABOUR ECONOMICS & INDUSTRIAL RELATIONS PAPER IV: EC404
<input type="checkbox"/> GROUP II – (iii) MONETARY ECONOMICS (05)
Semester- III: MONETARY POLICY PAPER III: EC305
Semester- IV: MONETARY POLICY PAPER IV: EC405
<input type="checkbox"/> GROUP II – (iv) ECONOMICS OF INFRASTRUCTURE & SERVICES (06)
Semester- III: ECONOMICS OF SOCIAL INFRASTRUCTURE PAPER III: EC306
Semester- IV: ECONOMICS OF SOCIAL INFRASTRUCTURE PAPER IV: EC406
<input type="checkbox"/> GROUP II – (v) INTERNATIONAL ECONOMICS (07)
Semester- III: INTERNATIONAL FINANCE & MONETARY SYSTEMS PAPER III: EC307
Semester- IV: INTERNATIONAL FINANCE & MONETARY SYSTEMS PAPER IV: EC407
<input type="checkbox"/> GROUP II – (vi) MATHEMATICAL ECONOMICS (08)
Semester- III: ADVANCED MATHEMATICAL METHODS PAPER III: EC308
Semester- IV: ADVANCED MATHEMATICAL METHODS PAPER IV: EC408
<input type="checkbox"/> GROUP II – (vii) ECONOMETRICS (09)
Semester- III: ECONOMETRIC MODELS, TECHNIQUES & APPLICATIONS PAPER III: EC309
Semester- IV: ECONOMETRIC MODELS, TECHNIQUES & APPLICATIONS PAPER IV: EC409
<input type="checkbox"/> GROUP II – (viii) FINANCIAL ECONOMICS (10)
Semester- III: FINANCIAL ECONOMICS – MANAGEMENT PAPER III: EC310
Semester- IV: FINANCIAL ECONOMICS – MANAGEMENT PAPER IV: EC410
<input type="checkbox"/> GROUP II – (ix) URBAN ECONOMICS & REGIONAL DEVELOPMENT (11)
Semester- III: MACRO-THEORY & POLICY ISSUES PAPER III: EC311
Semester-IV: MICRO-THEORY & POLICY ISSUES PAPER IV: EC411

(STRUCTURE OF SEMESTER –III & IV AT THE M.A. PART – II)

SEMESTER –III

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-I	COMPULSORY PAPER:		
EC301	DEVELOPMENT ECONOMICS: PAPER- I	6	100
EC302	PUBLIC ECONOMICS: PAPER- I	6	100
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL):		
EC303	AGRICULTURAL GROWTH & DEVELOPMENT: PAPER- III	6	100
EC304	LABOUR ECONOMICS & INDUSTRIAL RELATIONS: PAPER- III		
EC305	MONETARY POLICY: PAPER - III	6	100
EC306	ECONOMICS OF SOCIAL INFRASTRUCTURE: PAPER - III	6	100
EC307	INTERNATIONAL FINANCE AND MONETARY SYSTEMS: PAPER-III	6	100
EC308	ADVANCED MATHEMATICAL METHODS PAPER III	6	100
EC309	ECONOMETRIC MODELS, TECHNIQUES & APPLICATIONS: PAPER- III	6	100
EC310	FINANCIAL ECONOMICS – MANAGEMENT: PAPER- III	6	100
EC311	URBAN ECONOMICS & REGIONAL DEVELOPMENT MACRO-THEORY & POLICY ISSUES: PAPER- III	6	100

SEMESTER –IV

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-I	COMPULSORY PAPER:		
EC401	DEVELOPMENT ECONOMICS: PAPER- II	6	100
EC402	PUBLIC ECONOMICS: PAPER -II	6	100
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL):		
EC403	AGRICULTURAL GROWTH & DEVELOPMENT: PAPER- IV	6	100
EC404	LABOUR ECONOMICS & INDUSTRIAL RELATIONS: PAPER- IV	6	100
EC405	MONETARY POLICY: PAPER - IV	6	100
EC406	ECONOMICS OF SOCIAL INFRASTRUCTURE: PAPER - IV	6	100
EC407	INTERNATIONAL FINANCE AND MONETARY SYSTEMS: PAPER-IV	6	100
EC408	ADVANCED MATHEMATICAL METHODS PAPER- IV	6	100
EC409	ECONOMETRIC MODELS, TECHNIQUES & APPLICATIONS: PAPER- IV	6	100
EC410	FINANCIAL ECONOMICS – MANAGEMENT: PAPER- IV	6	100
EC411	URBAN ECONOMICS & REGIONAL DEVELOPMENT MICRO-THEORY & POLICY ISSUES: PAPER- IV	6	100

GROUP-(I) DEVELOPMENT ECONOMICS

SEMESTER –III

<i>COURSE CODE</i>	<i>PAPER TITLE</i>	<i>CREDITS</i>	<i>MARKS</i>
<i>GROUP-I</i>	<i>COMPULSORY PAPER</i>		
<i>EC301</i>	<i>DEVELOPMENT ECONOMICS: PAPER- I</i>	<i>6</i>	<i>100</i>

Unit- I: Meaning and Pattern of Development

Alternative Measures of Development – Per Capita Income, PPP GDP per capita – International Comparison of Prices – Patterns of Development: Contributions of Clark, Kuznets and Chenery – Development, Growth and Poverty Alleviation – Redistribution with growth – Capabilities Approach – Concept of Inclusive Growth.

Unit- II: Human Development

Concept of human development – Different approaches to human development – Role of freedoms in promoting human development – Measures of human development: HDI, Gender-related Development Index, and Human Poverty Index – Correlation between HDI and per capita income – Millennium Development Goals and their attainment.

Unit-III: Classical Theories of Growth and Development

Contributions of Adam Smith, David Ricardo, Karl Marx, Joseph Schumpeter and W.W. Rostow – Big push, balanced growth, critical minimum effort, low-level equilibrium trap, and unbalanced growth.

Unit- IV: Modern Theories of Growth and Development

Harrod-Domar Model – Solow-Swan Model – Absolute and Conditional Convergence – Models of Endogenous Growth: human capital, Research and Development, Innovations – AK Model – Growth Accounting – Total Factor Productivity – Determinants of Growth.

SEMESTER –IV

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-I	COMPULSORY PAPERS		
EC401	DEVELOPMENT ECONOMICS: PAPER-II	6	100

Unit- I: Microeconomics of Development

New Development Economics – Markets in agriculture – Land rental contracts – Segmented labour markets – Under-nutrition and labour markets – Efficiency wage hypothesis – Theories of informal credit markets – Limits to insurance: Information and Enforcement – Rural markets and inter-linked transactions: credit and labour market, credit and output market – Theory of demographic transition – Economic theories of fertility

Unit- II: Macroeconomics of Development

Agriculture-industry interrelationships in the development process – Dual economy models – Financing development from domestic and foreign resources – Financial repression and capital controls – Effects of interest rate liberalization – Capital mobility and monetary autonomy – Credibility and exchange rate management – Speculative attacks and BOP crises – Contractionary Devaluation – Real exchange rate targeting – Structuralist-monetarist models of inflationary process – Disinflation and nominal anchors – Debt, investment and growth.

Unit- III: Economics of Environment and Issues in Development

Economic growth and environment – Limits to growth and sustainable development – Environmental Kuznets curve – Environment as an economic and social good/ asset – Natural resources (exhaustible, renewable, common property resources) – Environment, property rights and development – Green accounting – Global warming and climate change. Development Issues: Interconnections between inequality and development – Rural-urban migration

Unit- IV: Development Strategy, Development Planning and Development Policy

Resource allocation and shadow prices – Development planning models – Dual gap analysis and its extension to three gap framework – Growth Programming: Revised Minimum Standard Model (RMSM) – Merged Bank-Fund model – Inter-sectoral complementarities and coordination failures – Linkages and policy – Stabilization and Structural Adjustment – Sequencing of reforms – Inward and Outward-oriented strategies of development – WTO and developing countries.

References

1. Ray, Debraj, *Development Economics*, New Delhi: OUP, 1998.
2. Agenor, Pierre-Richard, *Economics of Adjustment and Growth (2e)*, Cambridge, Ms.: Harvard Univ. Press, 2004.
3. Ghatak, Subrata, *Introduction to Development Economics*, London: Routledge, 2003.
4. Bardhan, Pranab and Christopher Udry, *Development Microeconomics*, New Delhi: OUP, 1999.
5. Basu, Kaushik, *Analytical Development Economics: The Less Developed Economy Revisited*.
6. Sen, Amartya, *Development as Freedom*, New Delhi: OUP, 1999.
7. Yujiro, Hayami and Yoshihisa Godo, *Development Economics: From the Poverty to Wealth of Nations (3e)*, New Delhi: OUP, 2005.
8. Dev, Mahendra S. *et al*, *Social and Economic Security in India*, New Delhi: Institute for Human Development, 2001.
9. Kolstad, Charles, *Environmental Economics*, New York: OUP, 2006.

GROUP-(I) PUBLIC ECONOMICS

Objectives:

- i) To analyze the need for State intervention in economic activities.
- ii) Explain the role of fiscal tools in the regulation of economic activities.

SEMESTER –III

<i>COURSE CODE</i>	<i>PAPER TITLE</i>	<i>CREDITS</i>	<i>MARKS</i>
<i>GROUP-I</i>	<i>COMPULSORY PAPERS</i>		
<i>EC302</i>	<i>PUBLIC ECONOMICS: PAPER- I</i>	<i>6</i>	<i>100</i>

Unit- I: Foundations for Public Economics (10)

Efficiency in resource allocation – First Best economy – Market Failures – Rationale for State intervention – Regulation and taxation – Distributional objectives of the state-social welfare functions

Unit- II: Decision making in government (10)

Arrow Impossibility theorem- Government Failures – Interest Group capture – Politico-Economic interactions – Privatization

Unit- III: Social Cost Benefit Analysis- (10)

Evaluation of government expenditure – welfare foundations of Social Cost Benefit analysis – Shadow pricing – UNINDO versus Little-Mirrlees approach – Relevance of Cost Benefit Analysis

Unit- IV: Taxation and Public Sector Pricing- (15)

Efficiency aspects of taxation: Excess Burden – Effects of Taxation on labour supply, savings and Risk Taking –Harberger Incidence model- Optimal Commodity and Income Taxation – general theory of Tax reform – Application to Developing Countries – Value Added Tax Marginal cost Pricing – Departures from Marginal cost pricing – Ramsey prices – Regulatory aspects of pricing

SEMESTER –IV

Objectives:

- I) To understand the nature and working of fiscal policy,
- II) To examine the revenue and expenditure administration at the national, regional and local levels.

<i>COURSE CODE</i>	<i>PAPER TITLE</i>	<i>CREDITS</i>	<i>MARKS</i>
<i>GROUP-I</i>	<i>COMPULSORY PAPERS</i>		
<i>EC402</i>	<i>PUBLIC ECONOMICS: PAPER- II</i>	<i>6</i>	<i>100</i>

Unit- I: Fiscal Policy- (10)

Macroeconomic effects of fiscal deficits – Inflation, money and fiscal deficits: the high inflation trap – Deficits, inflation and the “tight money” paradox: the Sargeant-Wallace hypothesis – Deficits, real interest rates and crowding out – Deficits, the current account and the exchange rate – Taxation, interest rate differential and the direction of capital flows – The twin deficits approach to growth and inertial inflation

Unit- II: Fiscal Federalism- (10)

Fiscal Federalism – Fiscal decentralisation – Decentralisation theorem – Tax assignment problem – Intergovernmental grants and revenue sharing – –the Flypaper effect –Public Choice and Fiscal Federalism – Federalism as a principal agent problem.

Unit- III: Indian Tax and Expenditure Structure- (10)

Taxes levied by Central and State Governments-Pattern of expenditure incurred by Central and State Governments- Tax and expenditure reforms in India – Deficit finance-Causes and consequences

Unit- IV: Federal Decentralization in India- (15)

Need for decentralized and autonomous Sources of revenue - The role of Planning and Finance Commissions-Issues related to intergovernmental transfers –Infrastructure financing in India.

References:

1. Atkinson A. B.,and Siglitz J. E. (1980), Lectures on Public Economics,Tata MacGraw Hill, New York.
2. Buchanan, J. M. (1970), The Public Finances, Richard D.li-win, Homewood.
3. Chelliah, Raja J.(ED.) 1997, Towards, Sustainable Growth, Oxford University Press, New Delhi.
4. Dornbusch R., Fischer and Startz (1998), Macroeconomics, Mcgraw Hill, New York.
5. Goode R. (1986), Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.
6. Jha , R. (1998), Modern Public Economics, Routledge, London.
7. Menutt, P. (1986), The Economics Of Public Choice, Edward Elgar, London.
8. Mishan E. J.(1982),Cost-Benefit Analysis: An Informal Introduction, George Allen and Unwin, London.
9. Musgrave R. A. and Musgrave P. B. (2001),Public Finance in Theory and Practice, McGraw Hill Book Company, New Delhi.

GROUP (II) AGRICULTURAL ECONOMICS

Preamble

This course aims to enhance the students' understanding of agricultural development. Starting from basic questions like what factors lead to agricultural development or why does the share of agriculture in GDP go down once economies start developing, the course tries to enhance the students' awareness on contemporary debates in the literature, and leads them to analysis of current governmental policies and strategies for surviving in the globalizing world.

SEMESTER - III

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC303	AGRICULTURAL GROWTH & DEVELOPMENT PAPER- III	6	100

Unit-I: India's Agricultural Development since Independence (12 lectures)
Agricultural Productivity – Extensive vs. intensive growth – Agriculture in India's national economy. Equity (inter-regional and intra-regional), input use efficiency and sustainability of growth since Independence. Issues relating to public and private capital formation in agriculture. Agriculture's adjustment problems in a liberalised and globalising economy – Emerging constraints and potential.

Unit-II: Theories of agricultural development (12 lectures)
Role of agriculture in a developing economy vis-à-vis a developed economy; Theories of agricultural development (Lewis, Schultz, Mellor, Hayyami and Ruttan)

Unit-III: Water Resources – Availability, Utilisation and Management (12 lectures)
Productivity, equity and sustainability aspects of water use w.r.t. major, medium and minor irrigation systems – Pricing and institutional reforms in irrigation – Public investment in irrigation and watershed development – Equity, ecological and externality aspects.

Unit-IV: Competitiveness of agriculture products and marketing (12 lectures)
Measurement of efficiency & competitiveness of agricultural products in international markets; Efficiency of agricultural markets in India; Form and impact of government intervention in the markets and its effects on efficiency; Commodity markets: operation and likely impacts; Strategies for surviving in a globalizing world

SEMESTER – IV

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC403	AGRICULTURAL GROWTH & DEVELOPMENT: PAPER- IV	6	100

Unit-I: Agricultural Growth and Rural Development (12 Lectures)
Role of agriculture in developing economies – Trends in agricultural employment and real wages – Inter-class and gender based income disparities and poverty – Trends in rural-urban income disparity.

Unit-II: Sustainable agricultural development and food security (12 lectures)
Impact of green revolution; Models of spread of technology and experiences in input use efficiency; Measurement and strategies for sustainable development; Food and nutritional security: Concept, measurement, magnitude, and critical evaluation of government policies.

Unit-III: Incentives and Disincentives for Growth (12 Lectures)

Land reform policies and growth. Development and evaluation of research and extension systems. Resource allocation for agricultural development programmes – Evaluation of rural credit policies – Financial sector reforms and rural credit – Micro -finance, self-help groups and NGO's — Crop and livestock insurance – Infrastructural development.

Unit-IV: History and policies for agricultural development in India (12 lectures)
Trends in production since 1950; Agriculture Policy: Price ; Subsidy and Taxation- Terms of Trade -Trends in India's agricultural exports and imports and implications, Foreign Capital and Indian agriculture- Issues relating to globalisation of agricultural trade – WTO

References

1. Basu Kaushik (1998). Analytical Development Economics. Oxford University Press.
2. Bhalla G S. (2004). Globalization and Indian Agriculture. Volume 19 of the State of the Indian Farmer Series. Academic Foundation.
3. Dreze Jean and Amartya Sen (1989). Hunger and Public Action. Oxford University Press.
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11. Venugopal Pingali (2004). Input Management. Volume 8 of the State of the Indian Farmer Series. Academic Foundation. Exe summary,
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13. Bhupat M. Desai, Errol D'souza, John W Mellor, Prabhakar Tamboli & Vijay Charma. Economic & Political Weekly Vol XLVI No. 53, December31, 2011.
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17. Ashok K. Mitra , Economic and Political Weekly Vol. XXXII No. 13, march29, 1997 “ Irrigation Reform
18. V. K. Gaur and T.N Narasimhan Economic and Political weekly , Vol. XLV No. 30, July 24, 2010, “ A Framework of India's Water Policy”.
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20. Johnston Bruce F. And John W. Mellor (1961), The Role of Agriculture in Economic Development, The American Economic Review Vol. No. 51, No. 4,
21. Indian Economic Reforms and Development (1998) (Ed) Isher Judge Ahluwalia & IMD little
22. Agricultural Development Paradigm for the 9th plan under new economic environment, Oxford press.
23. Jayanta Bandyopadhyay; Economic & Political Weekly Vol. XLVI No. 31, August 01,2009

GROUP (II) INDUSTRIAL ECONOMICS

SEMESTER – III

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC304	LABOUR ECONOMICS & INDUSTRIAL RELATIONS PAPER- III	6	100

Unit-I: Conceptual Issues 12

Definition, Basic Issues of Labour Force: Determinants of Labour Force Participation –Male, Female and Child Work Participation India. Employment: Concept Measurement, Unemployment: Types, Rates and Composition, Causes and Effects, Employment Generation Policies. Concept of Human Capital Human Capital Theory, Investment in Education and Health with special reference to Skilled and Unskilled Labour. Migration: Internal and International Migration.

Unit-II: Demand for Labour 12

Demand for Labour in Short and Long Run. The Determinants of Labour Demand. Impact of Technological Change on Labour: Mechanisation, Automation, New Technology. Impact of Globalisation on Labour, International Division of Labour, Methods of restructuring Labour, Outsourcing of Labour as a Global Phenomenon, Impact of Outsourcing on Developing Countries.

Unit-III: Theories of Labour Market 12

Definition of Labour Market. Demand and Supply aspects of Labour. Search in the Labour Market. Economics of Unions. Impact of Unions and Productivity and Wages, Employment Security and Efficiency. Labour Legislation: Deregulation and Labour Market Dynamics. Insider – Outsider Theory. Implicit Contract Theory. Efficiency Wage/Effort Regulation Models.

Unit-IV: Wage Issues in Labour Market 12

The Determination of Wages, Wage Structure, and Components of Wages, Share of Wages Distribution and Inequality of Wage Income. Wage Differentials with Reference to Gender. Inter-sectoral Wage Differentials. Labour Market Rigidities and Flexibilities, Minimum Wages, Wages and Income Policy in India. . Wage Determination and Collective Bargaining, Theories of Wages.

SEMESTER – IV

COURSE CODE	PAPER TITLE	CREDITS	MARK
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC404	LABOUR ECONOMICS & INDUSTRIAL RELATIONS PAPER- IV	6	100

Unit-I: Labour Markets in India 12

Competitive and Non-competitive Markets. Internal Labour Markets, the Segmented Labour Markets, Formal and Informal Labour Markets, Contact Labour. Rural Non-farm and Urban Labour Markets: Rural Labour Contracts, Role of Risk, Information, and Incentives. Dualism and Segmentation, Labour Market Flexibility. Employee Turnover; Causes, Consequences and Remedies, Migrant Labour. Impact of Privatization. Report of Second Labour Commission on Various Aspects of Labour Market.

Unit-II: Industrial Relations 12

Definition and Scope of Industrial Relations, System Approach and Class Conflict Approach. Industrial Relation in India: History and Structure of Trade Unions in India, Organised and Unorganised Labour. Employers Organisations and Their Role in Labour – Management Relations, State and Labour Markets: Social Security, Occupational Safety, Work Safety, Work Security. Profit Sharing and Workers' Participation in Management. Strikes, Lockouts and Closures Tripartism, Labour Legislation affecting Industrial Relations.

Unit-III: Trade Unions 12

Evolution and Role of Trade Unions, Origin, Structure and Growth of Trade Unions, Bargaining Theory of Wages, Impact of Unions on Productivity and Wages, Employment Security and Efficiency. Impact of Trade Unions in the Globalised Labour Market, Implications for Developing countries, Role and functions of ILO, Structural Adjustment Policies and Their Impact on Labour.

Unit-IV: Industrial Relations in India: 12

Composition of Workers in India. History of Trade Unions in India, Independent and White Collar Unions in India. Trade Unions and Contract Workers. Employer's Organisations: Role of Managerial Class in Industrial Relations. Labour Policy in India, Role of State in Industrial Relations. Industrial Conflict: Forms of Conflict, Strikes, Lockouts, Absenteeism, Employee Turnover, Causes and Consequences of and Trends in Industrial Disputes, Settlement of Industrial Disputes in India.

References:

- Amin, Ash (Ed.) (1994) 'Post-Fordism-A Reader' Blackwell, Oxford
Bhagoliwal T.N. (1985) Economics of Labour and Industrial Relations, Sahitya Bhawanm Agra.
Cahuc Pierre and Andre Zylberberg (2004) Labour Economics, MIT Press, Massachusetts
Government of India (2002) Ministry of Human Resource Development, Report of Second National Commission of Labour.
Hicks J.R. (1932) 'The Theory of Wages' Clarendon Press, Oxford.
Monappa, Arun (1985) (2^{8th} Reprint, 2005) 'Industrial Relations' Tata McGraw Hill, New Delhi.
Pencavel, John (1991) 'Labour Markets under Trade Unionism: Employment, Wages and Hours' Basil Blackwell, Cambridge, Massachusetts
Rees, Albert (1973) 'The Economics of Trade Unions' (3rd Ed.) University of Chicago Press, Chicago
Sapsford David and Zafiris Tzannatos (1993) The Economics of Labour Mrket, Macmillan, London.
Singh Jwitesh Kumar (1998) Labour Economics, Deep and Deep Publishers, Delhi

GROUP (II) MONETARY ECONOMICS

Preamble: This paper provides a comprehensive treatment of monetary policy which is now recognized and clearly defined arm of macroeconomic policy. Monetary policy developments in

India, especially since liberalization which has been dominated by efforts at promoting economic growth with price stability. Financial liberalization has implied the monetary policy initiatives have been supplemented by wide ranging financial sector reforms. The impact of such reforms has been long lasting on financial markets as well. In the backdrop of openness the financial regulation is still aptly relevant. Paper tries to focus on the Indian Macro-monetary aspects with varied dimensions.

SEMESTER – III

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC305	MONETARY POLICY: PAPER - III	6	100

Unit-I: Overview of Monetary Policy Developments in India:

12

Structural changes in the monetary sector – Basic trends in monetary aggregates – measures of liquidity. Indicators of monetary and financial deepening – Monetary and credit policies of the RBI – Monetary trends and the price situation – financial sector reforms, bank behaviour and credit growth.

Unit-II: Targets of Monetary Policy:

12

Multiple targets of monetary policy – Price stability and economic growth – Inflation targeting – Trade-offs and conflicts in monetary policy objectives – Intermediate targets: Monetary and interest rate targeting.

Unit-III: Instruments and Indicators of Monetary Policy:

12

Choice of instruments – Reserve Money – General versus selective credit controls – Bank rate – Open market operations (OMO) – Reserve requirements – SLR and CRR – Liquidity Adjustment Facility (LAF) – Micro Management of Interest rate – Multiple indicators approach – core inflation – Monetary conditions index.

Unit-IV: Specification of Monetary Policy:

12

Channels of monetary policy transmission: Interest rate and credit channels – Dynamics of monetary policy – Lags in monetary policy – Payment mechanism – countercyclical monetary policy – Built-in stabilizers – fiscal deficit and the monetary base – Interest rates: Term structure and yield curves – term structure and inflationary expectations.

SEMESTER – IV

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC405	MONETARY POLICY: PAPER - IV	6	100

Unit-I: Banks, Institutions and Markets in India: 12

Money, banks and financial institutions – Monetary reforms: The Chakravarthy and Narsimham (I and II) Committee Reports – Universal Banking: Khan Committee Report – Structure of financial markets: Credit, money, foreign exchange, debt, capital, insurance and derivatives markets - financial markets and monetary policy – central bank autonomy.

Unit-II: Banking Regulation and Restructuring: 12

Banking in the theory of finance – The separation between supervisory and monetary functions – Prudential regulation of banks – Macro and micro prudential indicators and financial surveillance – Restructuring the banking sector – RBI's New banking license norms.

Unit-III: Financial Markets Regulation and Efficiency: 12

Transparency and credibility – Disclosure norms – International financial standards and codes: The Basel core principles – Macro economic co-ordination and financial markets – Efficiency of financial institutions – Indicators of efficiency – Payment system and efficiency.

Unit-IV: International Aspects of Monetary Policy: 12

International financial integration – Alternative indicators of openness - Interest rate differentials – capital mobility and monetary autonomy – Exchange rate management – Exchange rate regime and monetary policy – Financial crisis: banking and currency crisis – Internationalization of commercial banking – offshore banking.

References:

1. Agenor P. R. and P. J. Montier (1996): 'Development Macroeconomics', Princeton University Press, Princeton N J.
2. Freixas X and J C Rochet (1997): 'Microeconomics of Banking', The MIT Press, Chambridge
3. Goodheart C.A.E. (1998): 'Money, information of Uncertainty', MacMillan press, London
4. Government of India (1991, 1998): 'Narsimham Committee Report I &II on financial System'.
5. Lewis M. K. & P. D. Mizen (2000): 'monetary Economics', Oxford University Press.
6. Lewis M. K. & P. D. Mizen (2000): 'Political Economics', Chambridge University Press.

GROUP (II) ECONOMICS OF SOCIAL INFRASTRUCTURE

Preamble: This paper covers theoretical foundations of Economics of Social Infrastructure and techniques of economic evaluation. The emphasis will be on policy options and issues for India but will also draw on the experience of other developing countries wherever relevant. All the Units have equal weightage.

SEMESTER – III

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC306	ECONOMICS OF SOCIAL INFRASTRUCTURE: PAPER - III	6	100

Unit-I: Approaches to Social Infrastructure

12

Human Resource Development and Human Development: Differences and Linkages, Measurement of Human Development – Special Characteristics of Education, Health, Nutrition and Environment – Externalities and Role of the State -Social Infrastructure and Economic Growth.

Unit-II: Human Capital – Theory of Human Capital

12

Consumption and Investment Aspects – Education, Productivity and Employment-Rates of Return and their Measurement – Issues and Limitations – Endogenous Growth Theories: Romer and Lucas - Concept of Social Capital: Role and Policy Implications.

Unit-III: Approaches to Nutrition

12

Concepts of under nutrition and malnutrition- Characterization and measurement of under nutrition- Linkages with Morbidity, Mortality, Implications for Human capital formation- Implications for Economic analysis and policy.

Unit-IV: Social Sector Policies in India

12

Policy Framework in Five-Year Plans – Economic Reforms and Social Sectors - Typology of Economic Growth and Human Development in Indian States – Trends and Disparities in Social Infrastructure Development – Role of Public and Private Sectors – Financing of Social Sectors - Pricing of Social Sectors – Social Attainment – Limitations of Policy – Social Security – Special Policy Issues.

References:

1. Svedberg Peter (2002): Poverty and Undernutrition Theory Measurement and Policy, Oxford University Press, New Delhi.(Unit 1)
2. Ehtisham Ahmed (ed) (1999): Social Security in Developing Countries, Oxford University Press, New Delhi.(Unit 4)
3. Gillespie S. and Hadda L(2003): The Double Burden of Malnutrition in Asia, Sage publication (Unit 1)
4. Sen Amartya (2002): Commodities and Capabilities, Oxford India Paperbacks, New Delhi. (Unit 1)
5. Ray Debraj (1997): Development Economics, Princeton University Press (Unit 2)
6. Dreze, Jean and Amartya Sen (ed), 1997:Indian Development- Selected Regional Perspectives, OUP Chapter: 1 (Unit 4)
7. Feldstein, P. J. (1993):Health Care Economics, Wiley (Unit 3)

8. Henderson, J.W.(2001): Health Economics and Policy, South –Western, Thomson(Unit 3)
9. Chelliah Raja J and R. Sudarshan (ed), 1999, *Income Poverty and Beyond: Human Development in India* UNDP, Social Science Press, New Delhi(Unit 4)
10. Sen Amartya, 1999: *Development as Freedom*, Oxford University Press, New Delhi.
11. Sen Amartya and Jean Dreze, 1998: *India: Economic Development and Social Opportunity*, Oxford University Press, New Delhi (Unit 4)
12. Fukuda-Parr S. and Shiva Kumar A K (ed), 2003: *Readings in Human Development: Concepts, Measures and Policies for a Development Paradigm*, Oxford University Press, New Delhi (Unit 1)
13. Tapas Muzumdar (1983): *Investment in Education and Social Choice*, Orient Longman, Delhi (Unit 3)

GROUP (II) ECONOMICS OF SOCIAL INFRASTRUCTURE

Preamble: In this paper two aspects of social infrastructure namely education and health are clubbed together because there is an interdependence of output and existence of large externalities in both health and education sectors. Also these are important components having critical linkages to human development through improving human capabilities and empowerment. All the units have equal weightage.

SEMESTER IV

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC406	ECONOMICS OF SOCIAL INFRASTRUCTURE: PAPER - IV	6	100

Unit-I: Economics of Health

12

Distinction between health and health care- Nature of health care as an economic commodity- Demand for health and Supply of health- Opportunity costs and problems of rationing health care. Costs and efficiency- Costs: fixed, marginal and average costs. Efficiency - technical and allocative efficiency, and of various types of equity. Market System and health care needs- Market failure and the role of government – how insurance markets work, and how they can fail for health care.

Unit-II: Financing health care, delivery of health care

12

The economics of financing health care and different approaches taken by governments in different countries-Options for financing health care in developing countries- The rationale of government funding and regulation of health care- examining the potential role of user charges and community financing schemes. Delivery of health care -decentralization and the role of the private/public mix.- health system reforms. The future of Health Sector reforms in developing countries like India.

Unit-III: Economics of Education:

12

Formal and non-formal education-Special characteristics of education- Implications for economic analysis- Role of the state – Education, Productivity and Employment-Investment in education: Costs and benefits, Private and social rates of return (Human capital and Signaling theories of education).

Unit-IV: Indian Education system

12

Indian Education system –Rationale of government funding and regulation of education- Alternative method of financing education- Resource allocation to primary, secondary and higher education- Efficiency, equity and distributional aspects: Implications for gender and social groups- Role of private and public sectors, Union and State governments- Special programmes for education.

Basic reading list:

1. Becker, G.S. (1974): Human Capital .2nd.Edn. ,NBER, New York
2. Cecchi, Daniel. (2008): Human Capital, Family Background and Inequality. Cambridge University Press
3. Feldstein, P. J. (1993): Health Care Economics, Wiley Unit 1).
4. Grand, J., Propper. C and Ray Robinson (2002): The Economics of Social Problems, Palgrave.(Units 1 and 3)
5. Henderson, J.W.(2001): Health Economics and Policy, South –Western, Thomson Learning. Chpters: 2 and 3 (Unit 2)
6. Mcpake, B., L. Kumanayake and C. Normand (2002): Health Economics: An International Perspective, Routledge. (Unit 1)
7. Musgrove, P. (2004): Health Economics in Development, The World bank. Chapters: 2,3,4,9 and 10 (Units 1 and 2)
8. Panchamukhi, P. R. (2002): Economics of Health: An Introductory Review. ICSSR (Units 1 and 2)
9. Robinson, E.A.G. and Vaizey, J. (eds) (1966): The Economics of Education, International Economic Association , Macmillan , London (Units 3 and 4)
10. Tilak, J.B.G.(1989):Economics of Inequality in Education, Sage, New Delhi.(Unit 4)

GROUP (II) INTERNATIONAL ECONOMICS

Preamble: The paper provides a deep understanding about the broad Principles and theories which tend to govern the free flow of trade in goods and services. Besides preparing the students about the relevance and limitations of these principles the contents of the paper spread over different Units emphasis the theory and nature of the subject, which in turn, will greatly help them to examine the impact of the trade policies, followed both at national and international levels.

SEMESTER – III

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC307	INTERNATIONAL FINANCE AND MONETARY SYSTEMS: PAPER-III	6	100

Unit-I: Balance of Payments

(12)

Meaning, Components & Importance of Balance of Payments. Current Account balance & Capital Account Balance. Disequilibrium in the balance of payments. Kinds, causes, measures to correct the disequilibrium of balance of payments.

Unit-II: Foreign Exchange Rates & Markets

(12)

Nominal and real exchange rate, bilateral and multilateral exchange rate- fixed and flexible exchange rate. Spot and forward exchange rate-managed flexible exchanged rate. Purchasing Power Parity Theory-Absolute and Relative.

Module-III: International Capital Market

(12)

Growth and structure of international capital market, Euro dollar market- Euro dollar market and international liquidity. Euro bond market, International Debt crisis and highly-indebted countries. International Capital Mobility.

Unit-IV: Balance of payments adjustment and open economy macroeconomics (12)

Role of devaluation across approaches - role of expenditures-expenditures reducing policy and expenditures switching policy in an open economy macroeconomic models- fiscal versus Monetary Policy and Exchange Rate Regimes.

Reference:

1. Kenen Peter (2000), "The International Economy", 4e Cambridge University Press Cambridge
2. Krugum Paul R. and Maurice Obstfeld (2000), International Economics: Theory & Policy, 5th edition, Addison Wesley, Delhi.
3. Levi Maurice D. (2005), International Finance, Routledge, New York
4. Levich Richard M (1998), International Financial Markets: Prices and policies. Irwin McGraw Hill Boston
5. Mithani D. M (2003), International Economics, Himalaya Publishing House Mumbai
6. Pilbeam Keith (2006), International Finance, Plagrave, New York.
7. Salvatore D. (2002), International Economics, John Wiley and Sons, Singapore
8. Sodersten Bo and Geoffrey Reed (1994), International Economics, Palgrave London
9. Soloman Robert (1932), International Monetary System 194S-19E1 Harper 1982.

GROUP (II) INTERNATIONAL ECONOMICS

Preamble: The paper provides a deep understanding about the broad Principles and theories which tend to govern the free flow of trade in goods and services. Besides preparing the students about the relevance and limitations of these principles the contents of the paper spread over different Units emphasis the theory and nature of the subject, which in turn, will greatly help them to examine the impact of the trade policies followed both at national and international levels.

SEMESTER-IV

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC407	INTERNATIONAL FINANCE AND MONETARY SYSTEMS: PAPER-IV	6	100

Unit-I: International financial institutions (12)

Functions of international monetary fund (IMF), Bretton Woods System, Special Drawing Right (SDR) and their achievements and failures. European Economic & Monetary Union & Euro. International bank, reconstruction and development (IBRD), Asian Development Bank (ADB), International Development Association & India. European economic & monetary union & Euro currency crisis.

Unit-II: India's Exchange arrangements (12)

Structural changes in India's Balance of Payments in the post-liberalization period. India's International debt-convertibility of Indian rupee- current versus capital account- India and IMF.

Unit-III: Economic reforms in India (12)

Economic reforms since 1991 and balance of payment crisis. India's foreign debt and debt trap, structural adjustment & stabilization programmes, policy of import control, new export policy and its challenges. Liberalization, Privatization, Globalization and economic reforms (1991) .

Unit-IV: India's foreign trade and trade policies (12)

Volume, composition and direction of India's foreign trade after 1991, Role of Multinational Corporations (MNCs), Recent Import and Export policies.

Reference:

1. Kenen Peter (2000), The International Economy", 4e Cambridge University Press Cambridge.
2. Krugum Paul R. and Maurice Obstfeld (2000), International Economics: Theory & Policy, 5th edition, Addison Wesley, Delhi.
3. Levi Maurice D. (2005), International Finance, Routledge, New York.
4. Levich Richard M (1998), International Financial Markets: Prices and policies. Irwin McGraw Hill Boston.
5. Mithani D. M (2003), International Economics, Himalaya Publishing House Mumbai
6. Pilbeam Keith (2006), International Finance, Plagrave, New York.
7. Salvatore D. (2002), International Economics, John Wiley and Sons, Singapore.
8. Sodersten Bo and Geoffrey Reed (1994), International Economics, Palgrave London.
9. Soloman Robert (1932), International Monetary System 194S-19E1 Harper 1982.

GROUP (II) MATHEMATICAL ECONOMICS

Objective: To familiarize the students with basic techniques of static and dynamic optimisation

SEMESTER – III

COURSE CODE	PAPER TITLE	CREDIT	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC308	ADVANCED MATHEMATICAL METHODS: PAPER- III	6	100

Unit-I: Static Optimisation Techniques (10)

Linear mathematics – Convexity, concavity – Matrix algebra and vector spaces – Linear dependence and independence – Basis of a vector space.

Unit-II: Linear Programming (10)

Basic theorem of linear programming – Simplex methods and extensions – Duality and economic interpretation – Revised simplex.

Unit-III: Non-linear and Integer Programming (10)

Kuhn Tucker optimality conditions – Duality in nonlinear programming – Integer programming – Algorithms for integer programming.

Unit-IV: Dynamic Programming (15)

Dynamic programming – Bellman's optimality principle, stochastic and deterministic problems, finite and infinite horizon problems – Formulation and solution – Applicability of dynamic programming

References:

1. Simon C and L. Blume , Mathematics for Economists, Viva books, 2009
2. Dorfman, samuelson and Solow, Linear programming and Economic Analysis, Dover, 1958
3. Dimitri Bertsekas, Non-Linear Programming, Atlanta Scientific, 2000
4. Chaing A.C, Elements of Dynamic Optimisation, Waveland Press, 1992

GROUP II (IV) MATHEMATICAL ECONOMICS

Objectives: To familiarise the students with advanced methods in mathematical economics

SEMESTER – IV

COURSE CODE	PAPER TITLE	CREDIT	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC408	ADVANCED MATHEMATICAL METHODS: PAPER- IV	6	100

Unit-I: *General Equilibrium Theory* (12)

Mathematical concepts: Elements of Set theory, Continuous functions, Convexity, Fixed point theorems, Separation theorems - Equilibrium in exchange and production– Pareto-efficient allocations – Blocking coalitions and the core – Existence of equilibrium – Uniqueness – Walrasian equilibrium allocations – First and Second Welfare theorems – Replica economics – Equal treatment in the core – Edgeworth-Debreu-Scraf theorem – Non-Walrasian Equilibrium.

Unit-II: *Game Theory* (12)

Strategic form games : dominant strategy, pure and mixed strategy and Nash equilibrium (definition) - Nash Equilibrium - Games of incomplete information - Bayesian - Nash Equilibrium- Proof of existence - Extensive form games - Repeated and dynamic games - Games of perfect information and backward induction strategies - Nash equilibrium and backward induction - Subgame Perfect Nash Equilibrium (SPNE) - SPNE and Backward Induction - Games of Perfect Recall - Sequential Equilibrium - Kreps and Wilson Proof of Existence of Sequential Equilibrium - Evolutionary game theory.

Unit-III: *Calculus of Variation* (12)

Concepts of a functional, first variation and second variation - Necessary conditions for optimality - Euler equation - Rayleigh-Ritz solution method - Weierstrass - Erdmann corner conditions - Legendre-Clebsch conditions - Regularity - Weierstrass E - function - Sufficiency conditions - convexity and concavity - Hilbert's Independence condition - Discrete versions of Euler equation - Stochastic version - Applications in growth theory and finance.

Unit-IV: *The Theory of Optimal Control* (12)

Control methods and economic policy – Open-loop, closed-loop and feedback control – Basic characteristics of control systems – Deterministic, stochastic and adaptive control – State space models – The Linear-Quadratic-Gaussian (LQG) representation of a control system – Formulation and solution of the optimal control problem – Properties of dynamic systems: Controllability and observability – Adaptive control of models with measurement error – The Kalman filter.

References:

1. Fudenberg and Tirole, Game Theory, MIT Press, 1991
2. Chiang A.C, Dynamic Optimisation, Wave Books, 1993.
3. De La Fuente Mathematical Methods and Models for Economists, Cambridge University Press, 2000
4. Starr R, General Equilibrium Theory, Cambridge University Press, 2001

GROUP (II) ECONOMETRICS

Objectives: To understand the fundamentals of Econometric Inference

SEMESTER – III

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC309	ECONOMETRIC MODELS, TECHNIQUES & APPLICATIONS: PAPER- III	6	100

Unit-I: Probability Theory (10)

Calculus of probability – Sample space and events – Notion of random variables and distribution functions – Conditional probability and statistical independence – Conditional distribution of a random variable – Mathematical expectation and moments of random variables – Conditional expectations – Laws of large numbers – Central Limit Theorem.

Unit-II: Statistical Inference (10)

Estimation theory – Unbiasedness, sufficiency, consistency and asymptotic efficiency – MLE estimation – Cramer-Rao inequality and minimum variance bound estimators – Rao-Blackwell theorem – Sufficiency, completeness and stochastic independence – Interval estimation – Hypothesis testing – Likelihood ratio tests – Wald tests and Lagrange multiplier tests.

Unit-III: The Regression Model: OLS (15)

The classical linear regression model and theory of least squares – Gauss Markov theorem – Statistical properties of the least square estimator in finite samples – Inference and prediction – Testing restrictions – Tests of structural change – Tests of model stability – Testing for functional form and specification of the regression model – Multicollinearity – ridge regression.

Unit-IV: The Regression Model: GLS (10)

Nonspherical disturbances – Consequences for least squares estimation – Generalised least squares – Feasible GLS – Heteroscedasticity – Testing for presence of heteroscedasticity – Remedial measures – Autocorrelation – Testing for presence of autocorrelation – Remedial measures.

References:

1. William Greene, Econometrics, Edition 3. Pearson, 2003
2. James Davidson, Econometric Theory, Blackwell, 2000
3. Herman Bierns, Introduction to Mathematical and Statistical Foundations of Econometrics, Cambridge University Press, 2005

GROUP (II) ECONOMETRICS

Objective: To familiarize the students with the most common applied econometric methods

SEMESTER – IV

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC409	ECONOMETRIC MODELS, TECHNIQUES & APPLICATIONS PAPER-IV	6	100

Unit-I: Topics in Applied Econometrics (10)

Models for Panel Data: Fixed effects, Random effects. Model Selection Criteria: Akaike FPE, AIC, Schwarz criterion, Hannan-Quinn criterion. Distributed Lag Models: Finite distributed lags: Almon distributed lag, Shiller's distributed lags, Infinite distributed lags, Adaptive expectations, Partial adjustment, Geometric lag models, lagged dependent variable, Koyck transformation. Limited Dependent Variable and Duration Models: Truncation, Censored regression, Parametric models of Duration.

Unit-II: Multi-equation Systems (10)

Simultaneous Equation Models: Identification, Indirect least squares, Two stage least squares, LIML, LVR and k-class estimators, Three stage least squares, FIML, Seemingly Unrelated Regressions Model. VAR Models: Reduced form and Recursive VARs, Structural VAR analysis, Identification problem, Impulse response functions, VAR models in rational expectations, Forecasting with VAR models, Forecast Error Variance Decomposition (FEVD).

Unit-III: Univariate Times Series Analysis (15)

ARIMA Modelling: Wold decomposition theorem, Autocorrelation and the spectrum, Stationarity and Ergodicity, Box-Jenkins approach (identification, estimation and diagnostic checking), Seasonal ARIMA models, Transfer function modelling, Intervention analysis. ARCH Models: Conditional heteroscedasticity, Hysteresis and persistence, Engle's LM test, ARCH in mean (ARCHM) and GARCH models, Modelling time varying risk premia.

Unit-IV: Unit Roots and Cointegration(10)

Unit Roots and Cointegration: Data Generating Process, Dickey-Fuller and Phillips-Perron approaches to unit root tests, Bayesian approach to unit root testing, HEGY test, Stock and Watson common trends analysis.

Common trends and Cointegration: Engle-Granger two step method, Cointegration in VAR systems, Johansen-Juselius approach.

References:

1. William Greene, Econometrics, Edition 3. Pearson, 2003
2. Hamilton James, Time Series, Princeton, 1994
3. Enders Walter, Applied Econometric Time Series, Wiley, 2000

GROUP (II) FINANCIAL ECONOMICS

SEMESTER – III

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC310	FINANCIAL ECONOMICS – MANAGEMENT: PAPER III	6	100

Unit-I: Basic Concepts in Finance: 12

Periodic, compounded and effective annual rates of interest – Pure discount bonds and spot yields, coupon paying bonds, holding period return –Utility, uncertainty and measures of risk aversion.

Unit-II: Portfolio Theory: 12

Portfolio return, portfolio risk, Covariance – Two Asset Portfolio – Risk Aversion and Utility Indifference Curves – Optimum Portfolio - Capital Allocation Line and Utility Indifference Curves – Finding Optimal Portfolio – Finding the Efficient Frontier – Markowitz Model – Power of Diversification.

Unit-III: Capital Asset Pricing Model: 12

Mean-Variance criterion, measuring risk and return for a single asset and for a Portfolio, Portfolio diversification, Portfolio efficiency frontier, capital market line, market portfolio, security market line, extensions of the CAPM, performance measures, Roll's critique, arbitrage pricing theory.

Unit-IV: Valuation Models: 12

Rational Valuation Formula, Consumption CAPM, Efficient Markets Hypothesis – Stock prices and martingales – Weak form, semi-strong form and strong form – Test of the EMH – Empirical evidence on efficiency in the stock market.

References:

1. Copeland T.E., J. F. Weston and K. Shastri (2005): Financial Theory and Corporate Policy, Fourth Edition, Pearson Addison-Wesley USA.
2. Cuthbertson, K, (1996): Quantitative Financial Economics: Stocks, Bonds and Foreign Exchange, John Wiley and Sons, USA
3. Eichberger J. and I.R. Harper (1997): Financial Economics, Oxford University Press, New York.
4. Tuckman, B. (1995), Fixed Income Securities – Tools for Today's Markets, Wiley Frontiers in Finance.
5. Zvi Bodie, Alex Kane and Alan J. Marcus, Investments, 8th edition, ISBN: 0-07-338237-X, McGraw-Hill

GROUP (II) FINANCIAL ECONOMICS

SEMESTER – IV

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC410	FINANCIAL ECONOMICS – MANAGEMENT: PAPER IV	6	100

Unit-I: Rational Bubbles Euler Equation and the Rational Valuation Formula: 12
Test of rational bubbles - Intrinsic Bubbles – Anomalies and Noise Traders – The Winner’s Curse, Noise Trading and Herding (Shiller), Noise Traders and Contagion (Kirman), Shleifer – Vishny model of short-termism.

Unit-II: Systems of Financial Markets: 12
Spot Markets – Contingent Claims Markets – Arrow Securities – Ordinary Securities Markets – Incomplete Markets – Financial Markets and Financial Intermediaries.

Unit-III: The Bond Market: 12
The Yield to Maturity –Term structure models, Ho-Lee model, Black-Derman Toy model, Black-Karasinski model – Measures of price sensitivity – Price value of a basis point, duration and convexity, Macaulay and Modified Duration.

Unit-IV: Firms and Financial Markets: 12
Firms and Stock Market Equilibrium – Separation of Ownership and Control – Financial Structure of the Firm – Insurance Markets – Debt Contracts – Credit Rationing.

References:

1. Copeland T.E., J. F. Weston and K. Shastri (2005): Financial Theory and Corporate Policy, Fourth Edition, Pearson Addison-Wesley USA.
2. Cuthbertson, K, (1996): Quantitative Financial Economics: Stocks, Bonds and Foreign Exchange, John Wiley and Sons, USA
3. Eichberger J. and I.R. Harper (1997): Financial Economics, Oxford University Press, New York.
4. Tuckman, B. (1995), Fixed Income Securities – Tools for Today’s Markets, Wiley Frontiers in Finance.
5. Zvi Bodie, Alex Kane and Alan J. Marcus, Investments, 8th edition, ISBN: 0-07-338237-X, McGraw-Hill

GROUP (II) URBAN ECONOMICS AND REGIONAL DEVELOPMENT

Preamble

As, infrastructure in general and urban infrastructure in particular poses several challenges, the course is designed to acquaint the students with the current state of affairs in the Indian context. The existing gap in the demand and supply of infrastructure has to be addressed in various ways. The students will learn the standard financing methods as well as variants in the realm of PPP.

SEMESTER – III

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC311	URBAN ECONOMICS & REGIONAL DEVELOPMENT MACRO-THEORY & POLICY ISSUES: PAPER- III	6	100

Unit-I: Urban governance – fiscal federalism – local public finance – provision and pricing of amenities (public utility pricing) — property tax – municipal finances – theoretical considerations. (12 Lectures)

Unit-II: The rationalisation of user charges in provision of public amenities – a detailed study of water supply/sanitation – electricity – transportation in the city of Mumbai – Problems and solutions. (12 Lectures)

Unit-III: Theoretical analysis of (urban) problems – concept and measurement of urban poverty – theoretical (micro and public economics) conceptualisation of environmental concerns – measurement issues and econometric models – cost benefit analysis – public and private (corporate and NGOs) initiatives and governmental policy. (12 Lectures)

Unit-IV: Current issues – Case study approaches (illustrations of land use and environmental studies) – Project report to enable hands on experience for the students in undertaking research (This will be a group activity and may include specific area study and/or comparison). **To be announced at the beginning of each academic year by the course instructor.** (12 Lectures)

References

1. *India Infrastructure Reports* (Chapters related to Urban Infrastructure)
2. Bahl, R and J. Linn (1992) *Urban Public Finance in Developing Countries*, OUP (WB)
3. Singh, K and B. Tai (eds) (2000) *Financing and Pricing of Urban Infrastructure*, New Age International, New Delhi

Essential Reading

Henderson, J.V. and J.F. Thisse (eds) (2006) *Handbook of Urban and Regional Economics*, Elsevier

Also http://www.mu.ac.in/arts/social_science/eco/vibhuti_html

GROUP (II) URBAN ECONOMICS AND REGIONAL DEVELOPMENT

Preamble: As, Macroeconomic planning forms an important part of any all development process the course aims at focusing on the different instruments of planning while studying urban and regional development. It would help in analyzing regional growth policies in India. Evaluation of policy will focus on case studies on regional development and growth.

SEMESTER – IV

COURSE CODE	PAPER TITLE	CREDITS	MARKS
GROUP-II	ADVANCED ECONOMICS – (OPTIONAL)		
EC411	URBAN ECONOMICS & REGIONAL DEVELOPMENT MACRO-THEORY & POLICY ISSUES: PAPER- IV	6	100

Unit-I: Regional economic development policy and planning with special reference to developing countries and in particular India. State Finance Commissions in India – Critical and comparative study of SFC reports. (10 Lectures)

Unit-II: Regional development indicators – Indices – variations in developing and developed countries – State development reports – Regional Backwardness: Dandekar Committee – inter and intra state inequalities – income, growth, sectoral comparison - social and physical sector investment. (12 Lectures)

Unit-III: Regional Policy - *Macro policy Instruments:* Fiscal policy, regional aspects of taxation and government expenditure, monetary policy, import control, devolution and regional policy. *Micro Policy Instruments:* Reallocation of labour, capital (10 Lectures)

Unit-IV: Evaluation of Regional Policy - Measuring regional disparities, regional development indices, use of composite index, econometric models, regional input output multipliers, principal component analysis, DEA etc. – case studies (16 Lectures)

References

1. Dandekar Committee Report on Regional Backwardness
2. State Finance Commission reports
3. State Development Reports
4. Armstrong, Harvey and Jim Taylor (2004) *Regional Economics and Policy* (3rd edition) Blackwell Publishing, UK. (Unit 3)
5. McCann, Philip(2001) *Urban and Regional Economics* Oxford University Press, UK.(Unit 4).
6. Ramanathan, R (2003) *An Introduction to Data Envelopment Analysis A tool for performance measurement*, Sage Publications New Delhi (Unit 4).
7. Sudhanshu Shekhar (2004) *Regional Planning in India Vol I & II*, Anmol Publications Pvt Ltd, New Delhi. (Unit 4).