

**FACULTY OF ECONOMICS & BUSINESS**

**SYLLABUS**

**FOR**

**M.SC. (HONS. SCHOOL) ECONOMICS**

**(Semester: I–IV)**

**(Under Credit Based Continuous Evaluation Grading System)**

**Session: 2014-15**



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**GURU NANAK DEV UNIVERSITY**  
**AMRITSAR**

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- (ii) **Subject to change in the syllabi at any time.**  
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M.Sc. (Hons. School) Economics (Semester System)  
(Under Credit Based Continuous Evaluation Grading System)

**SCHEME OF STUDIES**

| <b>SEMESTER-I</b>                        |  | <b>Total Credit</b> |
|--|--|---------------------|
| EOL401                                   | Microeconomics-I                             | 4                   |
| EOL402                                   | Macroeconomics-I                             | 4                   |
| EOL403                                   | Mathematics for Economists                   | 4                   |
| <b>Any two of the following options:</b> |  |                     |
| EOL404                                   | Money, Banking and<br>Financial Institutions | 4                   |
| EOL405                                   | Public Finance                               | 4                   |
| EOL406                                   | International Economics                      | 4                   |
| EOL407                                   | Industrial Economics                         | 4                   |
| EOL408                                   | Labour Economics and<br>Industrial Relations | 4                   |
| EOL409                                   | Agricultural Economics                       | 4                   |
| EOL410                                   | Computer Applications for Economists-I       | 4                   |
| EOL411                                   | Economics of Public Enterprises              | 4                   |
| EOL412                                   | Demography                                   | 4                   |
| EOL413                                   | Rural Economics                              | 4                   |
| EOL414                                   | History of Economic Thought                  | 4                   |
| EOL418                                   | Economics of Infrastructure                  | 4                   |
| EOL419                                   | Economics of Gender and Development          | 4                   |
| EOL420                                   | Economics of Social Sector                   | 4                   |
| EOL421                                   | Financial Institutions and Markets           | 4                   |

**Note:** The provision of compulsory writing of Dissertation in M.Sc. (H.S.) in Economics, Semester III & IV is being scrapped. Instead of this, from 2011-12, only those students of M.Sc. (H.S.) in Economics, Semester III and IV will be allowed to write the Dissertation who score CGPA of 6.75 or more in M.Sc. (H.S.) in Economics, Semester I & II. This choice of writing Dissertation will be optional. Those students of M.Sc. (H.S.) in Economics, Semester III & IV, who do not opt to write Dissertation, will have to opt for two papers in lieu of Dissertation – one in Semester III and the other in Semester IV. The Dissertation will be evaluated on the basis of GPA.

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**SCHEME OF STUDIES**

**SEMESTER-II**

|        |                        | <b>Total Credit</b> |
|--------|------------------------|---------------------|
| EOL415 | Microeconomics-II      | 4                   |
| EOL416 | Macroeconomics-II      | 4                   |
| EOL417 | Statistical Techniques | 4                   |

**Any two of the following options:**

|        |  |   |
|--------|--|---|
| EOL404 | Money, Banking and<br>Financial Institutions | 4 |
| EOL405 | Public Finance                               | 4 |
| EOL406 | International Economics                      | 4 |
| EOL407 | Industrial Economics                         | 4 |
| EOL408 | Labour Economics and<br>Industrial Relations | 4 |
| EOL409 | Agricultural Economics                       | 4 |
| EOL410 | Computer Applications for Economists-I       | 4 |
| EOL411 | Economics of Public Enterprises              | 4 |
| EOL412 | Demography                                   | 4 |
| EOL413 | Rural Economics                              | 4 |
| EOL414 | History of Economic Thought                  | 4 |
| EOL418 | Economics of Infrastructure                  | 4 |
| EOL419 | Economics of Gender and Development          | 4 |
| EOL420 | Economics of Social Sector                   | 4 |
| EOL421 | Financial Institutions and Markets           | 4 |

**Note 1:** Any two of the options under EOL-404 to EOL-414 and EOL-418 to EOL-421. Not already opted for in semester-I

**Note 2:** The provision of compulsory writing of Dissertation in M.Sc. (H.S.) in Economics, Semester III & IV is being scrapped. Instead of this, from 2011-12, only those students of M.Sc. (H.S.) in Economics, Semester III and IV will be allowed to write the Dissertation who score CGPA of 6.75 or more in M.Sc. (H.S.) in Economics, Semester I & II. This choice of writing Dissertation will be optional. Those students of M.Sc. (H.S.) in Economics, Semester III & IV, who do not opt to write Dissertation, will have to opt for two papers in lieu of Dissertation – one in Semester III and the other in Semester IV. The Dissertation will be evaluated on the basis of GPA.

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**SCHEME OF COURSE**

**SEMESTER – III**

| <b>S.No.</b> | <b>Course No.</b> | <b>C/E/I</b> | <b>Course Title</b>                     | <b>L T P</b> | <b>Total Credit</b> |
|--------------|-------------------|--------------|---|--------------|---------------------|
| 1.           | EOL501            | C            | Economics of Development                | 5 0 0        | 5                   |
| 2.           | EOL502            | C            | Econometrics                            | 5 0 0        | 5                   |
| 3.           | EOD503            | -            | Dissertation                            | 0 2 0        | 2                   |
| 4.           | EOL504            | E            | Theory of Statistics                    | 5 0 0        | 5                   |
| 5.           | EOL505            | E            | Operations Research                     | 5 0 0        | 5                   |
| 6.           | EOL506            | E            | International Trade and Investment      | 5 0 0        | 5                   |
| 7.           | EOL508            | E            | Environmental Economics                 | 5 0 0        | 5                   |
| 8.           | EOL509            | E            | Econometrics and Forecasting Techniques | 5 0 0        | 5                   |

**Interdisciplinary / Optional (I) (To be offered from outside the Department.**

|    |        |   |   |       |   |
|----|--------|---|---|-------|---|
| 9. | EOL507 | I | Computer Applications for Economists-II | 4 0 1 | 5 |
|----|--------|---|---|-------|---|

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**SCHEME OF COURSE**

**SEMESTER - IV**

| <b>S.No.</b> | <b>Course No.</b> | <b>C/E/I</b> | <b>Course Title</b>          | <b>L T P</b> | <b>Total Credit</b> |
|--------------|-------------------|--------------|------------------------------|--------------|---------------------|
| 1.           | EOL510            | C            | Economics of Planning        | 5 0 0        | 5                   |
| 2.           | EOL511            | C            | Indian Economics Development | 5 0 0        | 5                   |
| 3.           | EOL512            | -            | Dissertation                 | 0 2 0        | 2                   |

**EOL401: Microeconomics-I**

**Credits : 4-0-0**

**Minor-I**

Nature of economic theory. Theory of demand and supply. Elasticities of demand-theoretical and empirical aspects and their relationship, static and dynamic models of demand : Cobweb theorem. Utility approach, Indifference curve and revealed preference approach, Revision of demand theory by Hicks.

**Minor-II**

Production function-Isoquants, producer's equilibrium, returns to factor and returns to scale, factor substitution, Euler's theorem. Cobb-douglas, CES and Translog production functions. Technological progress and production functions. Traditional and modern theories of costs- a comparison. Derivation of cost functions from production functions.

**Major (including Minor-I and Minor-II)**

Revenue analysis, price and output determination under perfect competition, monopoly, monopolistic competition and oligopoly-collusive and non-collusive models of oligopoly, workable competition - structure, conduct and performance norms.

Alternative theories of the firm-Baumol's sales maximization hypothesis, Marris model, Williamson's model, limit price model, full cost and behavioural models of the firm.

**Suggested Readings:**

1. Henderson & Quandt : Microeconomic Theory, A Mathematical Approach.
2. Koutsoyiannis A. : Modern Microeconomics.
3. Heathfield & Wibe : An Introduction to Cost and Production Functions.
4. Layard & Walters : Microeconomics Theory
5. Naylor & Vernon : Microeconomics and Decisions Models of the Firm.
6. Ferguson, C.E. : Microeconomics Theory.
7. Dacosta, G.C. : Value and Distribution, Himalaya, 1992.

**EOL402 : Macroeconomics-I**

**Credits : 4-0-0**

**Minor-I**

**National income:** Concept-Production vs. non-productive activities, final vs. intermediate activities, Measurement and difficulties. Domestic and national product and their components. National income at factor cost and at market prices. Real and nominal GNP, GNP and welfare. Inter-temporal and international comparisons of national income. Social accounting and its significance.

**Minor-II**

The classical and Keynesian models of income determination: Equilibrium in the product and money markets. Adjustment towards equilibrium. Fiscal and monetary effects on demand. Balance budget multiplier. The full employment budget surplus.

**Major (including Minor-I and Minor-II)**

The demand for and the supply of labour. Labour supply and money wages. Unemployment and wage rigidity. Overall equilibrium in the basic static model (goods, labour and money markets).

**Consumption:** Keynesian consumption function. The consumption puzzle; Absolute income hypothesis, Relative income Hypothesis, Permanent Income Hypothesis, Life Cycle Hypothesis.

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**Suggested Readings:**

1. Beckeman, W.           An Introduction to National Income Analysis, London, E.L.B.S. 1976.
2. Studenski, Paul, A    The Income of Nations part 2, Theory and Methodology, New York University Press, 1958.
3. U..N.                    The System of National Accounts, Series F no. 2, 1968.
4. Branson, W.H.         Macroeconomics Theory and Policy, New York, Harper & Row, 1972.
5. Ackley G.              Macroeconomics Theory, New York, Macmillan, 1969.
6. Dernbusch, E and    Macroeconomics Auckland, McGraw Hill International , 1981  
S. Fischer
7. Levacic, R             Macroeconomics: The State and Dynamic Analysis of a Monetary Economy, London, Macmillan, 1976.
8. Glahe, F.R.            Macroeconomics : Theory and Policy.
9. Junankar, P.N.        Investment: Theories and Evidence, London, Macmillan, 1972.
10. Crouch, R. L.         Macroeconomics, New York, Harcourt, 1972.
11. Evans, M.K.         Macroeconomics Activity, Harper & Row Publishers, New York, 1969.



**EOL403 : Mathematics for Economists**

**Credits : 4-0-0**

**Minor-I**

**DIFFERENTIATION & INTEGRATION:** Differentiation. Partial derivatives, Euler's theorem and total differentials. Maxima and minima with and without constraints. Indefinite and definite integrals, Economic applications of differentiation and integration techniques.

**Minor-II**

**Linear Algebra:** Matrix: Types, properties of determinants, inverse of matrix, Solution by Cramer's rule and matrix inverse method. Linear independence and dependence of vectors, characteristic roots and vectors, quadratic forms: Application of matrix in input-output analysis.

**Differential and Difference Equations:** Differential and difference equations of first and second order.

**Major (including Minor-I and Minor-II)**

**Linear Programming:** Formulation of L.P.P.: simplex and graphical methods, two-phase simplex method and dual simplex method. Concept of duality.

**Suggested Readings:**

1. Yamane, Taro : Mathematics for Economists.
2. Chiang, A : Fundamental Methods of Mathematical Economics.
3. Chang Yan Chiou : Introduction to Input-output Economics.
4. Taha, H. A. : Operations Research : An Introduction.
5. Monga, G. S. : Mathematics for Management and Economics.

**EOL404 : MONEY, BANKING AND FINANCIAL INSTITUTIONS.**

**Credits : 4-0-0**

**Minor-I**

**Money:** Supply of money and its components. Determinants of money supply, high powered money, money multiplier.

Demand for money – Fisher and Cambridge versions, Approaches of Keynesian, Friedman, Patinkin, Baumol and Tobin.

**Minor-II**

**Money and Capital Market:** Role, constituents and functions.

**Major (including Minor-I and Minor-II)**

**Banking in India** – Commercial banks, co-operative banks and regional rural banks. RBI and its functions; Instruments of credit controls; Credit policy in India – recent developments.

Monetary policy : Objectives, targets and indicators. Monetary policy in India.

**Suggested Readings:**

1. Bhole, L.M. Financial Institutions and Markets: Structure, Growth and Innovations, 2<sup>nd</sup> ed.
2. Glahe, F. R. Macroeconomic Theory and Policy, 1973.
3. Government of India Economic Survey (Annual.)
4. Laidler, D.E.W. The Demand for Money: Theories and Evidence, 1977
5. R.B.I. Functions and Working, 1983.
6. R.B.I. Report of the Committee to review the working of the Monetary System, (Chakrawarty Committee Report), 1985.
7. R.B.I. Narasimhan Committee Report, 1991.
8. Thorn, R.S. Introduction to Money and Banking, 1976.

**EOL405 : PUBLIC FINANCE**

**Credits : 4-0-0**

**Minor-I**

**Equity in Taxation:** Principles of taxation; Taxable capacity; Tax effort; Buoyancy and Elasticity of taxes; Distinction between tax design and tax reform: characteristics of a well-designed tax structure, incidence of taxation, effects of taxation on production and distribution.

**Minor-II**

**Direct vs. Indirect Taxes:** Direct and Indirect taxes: Role and importance in developing countries; proportional vs. progressive taxes; specific vs. advalorem duties; Tax structure in India; Latest tax reforms in India (Basic idea about DTC & GST).

**Growth of Public Expenditure:** Effects of public expenditure on production and distribution; Structure of public expenditure in India.

**Major (including Minor-I and Minor-II)**

Distinction between internal and external debt; Management of public debt in India.

**Public Budget:** Concept and types; Zero Base Budgeting.

**Problems and Principles of Federal Finance:** Union-state financial relations in India. Role of fiscal-policy in a developing country like India.

**Suggested Readings:**

1. Bhargava, R.N. : Theory and Working of Union Finance in India.
2. Bird, Richard, M.and Oliver Oldman : Readings on Taxation in Developing Countries.
3. Cedric Sandford : Economics of Public Finance.(Chapter 2)
4. Chelliah. R.J. : Fiscal-Policy in Underdeveloped Countries.
5. Dalton, Hugh : Principles of Public Finance.
6. Om Parkash : Center-State Financial Relations in India.
7. Misra, B. : Fiscal Policy in the Context of Planning.
8. Musgrave, R.A. : Theory of Public Finance.

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9. Prest, A.R. : Public Finance.
10. \_\_\_\_\_ : Public Finance in Underdeveloped Countries.
11. \_\_\_\_\_ : Public Finance in Theory and Practice.
12. Sahota, G.S. : Indian Tax Structure and Economic Development.
13. Thimmaih, G : Perspectives in Tax Design and Tax Reform (Chapter 1).
14. Tripathi Ram Nirranjan : Public Finance and Economics Development in India.  
& Mrs. M. Tripathi
15. N.C.A.E.R. : Management of Public Debt in India.
16. National Institute of : Trends and Issues in Indian Federal Finance.  
Public Finance and Policy
17. Government of India. : Economic Survey.
18. \_\_\_\_\_ : Central Budget Documents.
19. \_\_\_\_\_ : Long-term Fiscal Policy.
20. \_\_\_\_\_ : Reports of finance commissions.
21. \_\_\_\_\_ : Tax Reforms Committee.  
(Chairman, Raja, J Chelliah)  
Interim Report (Dec, 1991) and final report, First part  
( August, 1992).

**EOL406: INTERNATIONAL ECONOMICS**

**Credits : 4-0-0**

**Minor-I**

**Theory of International trade and commercial policy:** Classical comparative cost theory, Heckscher-ohlin Model, Empirical test of classical and Heckscher-ohlin model, Terms of trade and economic growth – Secular deterioration Hypothesis – a critical view.

Forms of protection : Tariff and Quota (Partial and General Equilibrium Analysis)

**Minor-II**

**Balance of payments :** Meaning, concept, equilibrium and disequilibrium in balance of payments, Traditional, Absorption and Monetary approaches for adjustments in balance of payments. Foreign trade multiplier.

**Major (including Minor-I and Minor-II)**

**Exchange Rates :** Exchange rate and its determination. Theory of Foreign Exchange Markets – Exchange Trading, Arbitrage and Market Hedging.

**International Monetary System:** Special Drawing Rights; Breakdown of the Bretton wood system, the Present International Monetary system. Theory of International Reserves, Optimum Currency Areas – Theory and Impact in the developed and developing countries.

**Suggested Readings:**

1. Argy, Victor                      The Post-War International Money Crisis, Allen & Unwin, 1980.
2. Bilson, J.                              The Monetary Approach to the Exchange Rates Some Empirical Evidence, IMF, Staff Papers, March 1978, pp. 48-75.
3. Caves, R.E.                            Flexible Exchange Rate, American Economic Review, May, 1963.
4. Fleming M.J.                            Domestic Financial Policies under Fixed and under Floating Exchange Rates, IMF, Staff Paper, Nov., 1962.
5. Gomes, Leonard                        International Economic Problems, Macmillan Press, Ltd.
6. Ingram, James, C.                      International Economic Problems, John Wiley & Sons, 1978.
7. Kindleberger, C.                        International Economics, Ontario Richard D. Irwin.
8. Lewis, W.Arthur                        The Evolution of the New International Economic Order, Princeton University Press, 1977.
9. Meade, J.E                              The Balance of Payments, Oxford University.
10. Mier, G.M.                              International Economics. The Theory of Policy, Oxford University Press.
11. Sodersten, B.O.                        International Economics, II Edition Macmillan Press Ltd.

**EOL407 : INDUSTRIAL ECONOMICS**

**Credits : 4-0-0**

**Minor-I**

Frame work and Problems of Industrial Economics; Concept, ownership, control and objectives of the firm; active and passive behaviour of the firm.

**Minor-II**

**Market Structure :** Meaning and determinants. Sellers' and Buyers' concentration; Product differentiation; entry conditions; economies of scale; market structure and innovation.

**Major (including Minor-I and Minor-II)**

**Market Conduct :** Weber and Sargent Florence theories of location; Product pricing in practice; Investment decisions and risk adjustment; Merger and diversification; Advertising expenditure and decisions; Finance : Capital structure; pay-out and retention ratios.

**Market Performance :** Growth of the firm and constraints; Concepts and measurement of industrial productivity and capacity of utilization. Structural transformation of Indian industries; industrial competitiveness and recent industry policy initiatives.

**Suggested Readings:**

1. Hay, D.D.A & D.J. Morris Industrial Economic Theory and Evidence, Oxford University Press, 1979.
2. Devine, P.J. & R.M. Jones (et. al.) An Introduction to Industrial Economics, George Allen & Unwin Ltd., London, 1979.
3. Patel, S.J. Technological Transformation in the Third World, Aldershot Avebury, 1993.
4. Kamien, M.T. & N.L.Schwartz Market Structure and Innovation, Cambridge University Press, Cambridge, 1982.
5. Bains, J.S Industrial Organization, Cheltenham, U.K. An Elgar Critical Writings Reader, 1996.
6. Barthwal, R.R. Industrial Economics, New Delhi: Wiley Eastern Ltd, 1985
7. Kirkpatrick, C.M. Industrial Structure and Policy in Less Developed Countries, N. Lee & E.I. ELBS/George Allen & Unwin, 1984.  
Nixon
8. Herndeen, J.B. The Economics of the Corporate Economy, Dunellin Publishing Co. New York, 1975.
9. Ramamurti, R. & R.Vernon(ed.) Privatization and Control of Stateowned Enterprises, Washington. The World Bank, Washington, 1991

**EOL408 : LABOUR ECONOMICS AND INDUSTRIAL RELATIONS**  
**Credits : 4-0-0**

**Minor-I**

Concept of labour, characteristics of labour, labour markets – definition and characteristics, theories of labour. Market – Classical, Neo-classical and Dualistic labour markets. Structured and unstructured market, Internal and external labour market, Features and characteristics of Indian labour market.

**Minor-II**

**Industrial Relations:** Trade Unions, objectives and functions. Indian Trade Unions. Growth and problems. Industrial disputes, Industrial disputes in India, Dispute settlement machinery in India.

Wages; Concepts of minimum, living and fair wage, Wage, productivity and inflation relationship, Wage policy in India – Minimum Wages Act and Payment of Wages Act.

**Major (including Minor-I and Minor-II)**

**Social Security:** Definition and scope, Social security measures in India, Problems of child labour in India, Women labour and their problems. Major recommendations of Second National Commission on labour, Labour market reforms.

**Suggested Readings:**

1. Dobb, Maurice : Wages
2. Dunlop, J. T.(ed.) : Industrial Relations System
3. \_\_\_\_\_ : Wage Determination under Trade Unionism.
4. Giri, V.V. : Labour Problems in Indian Industry.
5. Mitra, A. : Share of Wages in National Income.
6. Papola, T.S. : Principles of Wage Determination.
7. Rama Swami E.A,  
Rama Swami Uma. : Industry and Labour.
8. Reynolds, L.G. : Labour Economics and Labour Relations.
9. Rothchild : Theory of wages.
10. Saxena, S.R.and  
Saxena, R.C. : Labour Problems and Social Welfare.
11. Government of India : Indian Labour Year Book  
(Various Issues)
12. \_\_\_\_\_ : Labour Investigation Reports  
(Main Reports)
13. \_\_\_\_\_ : Report on National Commission on Labour, 1969.
14. \_\_\_\_\_ : Economics Surveys.
15. I.L.O. : Approaches to social society.

**EOL409: AGRICULTURAL ECONOMICS**

**Credits : 4-0-0**

**Minor-I**

**Agricultural Economics:** Meaning, scope and role in economic development; changing importance of agriculture in the process of economic development; characteristics of subsistence agriculture. Schultz's prescription of transforming traditional agriculture; Interface between agriculture and industry.

**Institutional Structure:** Land reforms - nature, progress and assessment, impact on agrarian structure; subdivision and fragmentation, consolidation of land holdings.

**Minor-II**

Nature of emerging agrarian structure, farm size and Productivity in Indian agriculture; Agricultural finance and credit. Problem of rural indebtedness.

New agricultural technology and its impact on production, employment, labour absorption and income distribution; Growth and Productivity trends in Indian agriculture.

**Major (including Minor-I and Minor-II)**

**Price Instability in Agriculture:** Methods to stabilize income and prices in agriculture; Acreage and output response to prices in agriculture. Diversification of Indian agriculture : objectives, incentives and disincentives. Agricultural marketing in India.

**Agricultural Taxation:** Inter-sectoral terms of trade; Agricultural subsidies - nature, trends and distributional implications; WTO and Indian agriculture.

**Suggested Readings:**

1. Sourth Worth, H.M. Agricultural Development and Economics Growth (1967).  
and John Sten, B.F.  
(ed.)
2. Schultz, T. W. Transforming Traditional Agriculture (1964).
3. Mellor, J.W. The Economics of Agriculture Development (1960).
4. Desgupta, B. The New Agriculture Technology in India, Macmillan (1980).
5. Peter, Domer Land Reforms and Economics Development (1972).
6. Eicher, C.K. and Witt, L.W. Agriculture in Economic Development.



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7. Mamoria, G.B. Indian Agricultural Development .
8. Chaudhari, Pramit Readings in Indian Agriculture Development.
9. Mier,G. M. Leading Issues in Economic Development.
- 10.Hayani, Y & V. Rutan Agriculture Development: An International Perspective, John Hopkins, Baltimore, 1971.
- 11.Rudra, A. Indian Agriculture Economics; Myths and Realities, Allied Publishers, N. Delhi-1982.
- 12.Bhalla, G.S. & D.S. Tyagi Patterns in Indian Agricultural Development, ISID, New Delhi, 1989.
- 13.Dentwala, M.L. (eds.) Agriculture Growth in India, Indian society for Agriculture Economics Bombay, 1986.
- 14.Haque, T & A.S. Sirohi Agrarian Reforms and Institutional change in India, Concept Publishing Co., Delhi., 1986.
15. Soni, R.N. Leading Issues in Agriculture Economics, Arihant press, Jalandhar, 1995.
16. Wasriner, D Land Reforms in Principles and Practice, Oxford University Press, 1960.
- 17.Bhalla, G.S.(Eds.) Economics Liberalization and Indian Agriculture, ISID, New Delhi, 1994.
- 18.Bharduria, A The Economics Structure of backward Agriculture, Macmillan, Delhi, 1984.

**EOL410: COMPUTER APPLICATIONS FOR ECONOMISTS-I**

**Credits : 3-0-2**

**Minor-I**

**Introduction to computers:** History of computer generations, types of computer digitals, analog and hybrid computer.

Types of digital computers, peripheral devices, input output devices.

**Introduction to software:** Introduction to types of system and application software; operating system introduction to MS-DOS.

Introduction to management of computer centre.

**Programming Methodology:** Problem Analysis, flowcharting, Introduction to algorithms and decision tables.

**Minor-II**

**Introduction to C.Programming:** C-Character set data types, constants and variables, operators, expressions, assignment statements and input-output statements.

**Program-looping:** The for statement - The while statement- The do statement.

**Decision Making:** The if Statement- The switch statement – The flags- The Conditional expression operator.

**Major (including Minor-I and Minor-II)**

**Arrays:** Initializing array elements- character arrays- multi-dimensional arrays.

**Functions:** Arguments and local variables - returning functions results - functions calling functions. Tip-down programming - functions and arrays-global variables – automatic and static variables-reversible functions.

**File Processing in C:** creation- maintenance and processing of files.

**Suggested Readings:**

1. Kochan, Stephens, G. : Programming in C.
2. Kenneth,A. : Problem solving and programming.
3. Kernigean, B.W. & Ritchie, P.M. : The C programming Language.
4. Kaicker, S. : Programming in C.
5. Copper, Mallish : The spirit of C; An Introduction to Modern programming.
6. Carver, D.K. : Introduction to Business Data Processing.
7. Subramaniam, N. : Introduction to computer; Fundamentals of computer science.
8. Dromey, G. : How to solve it by computer. Manuals of pc software.
9. Held, G. : IBM, PC & PC XT User's Reference Manual.
10. Coffron, J.W. : The IBM PC Connect.

**EOL411: ECONOMICS OF PUBLIC ENTERPRISES**

**Credits : 4-0-0**

**Minor-I**

Role of public sector in economic development; objectives scope and growth of public sector in India. Criteria for project selection, Cost-benefit analysis, shadow prices, social rate of discount.

**Minor-II**

Organizational pattern of public enterprises, Management of public enterprises, personnel management in public enterprises, Financial and material management in public enterprises.

Pricing policy of public enterprises.

**Major (including Minor-I and Minor-II)**

Accountability of public enterprises, Auditing of public enterprises, role of bureau of public enterprises.

Case study of public steel industry in India- growth, performance, pricing and management.

Public sector reforms and privatization strategies.

**Suggested Readings:**

1. Institute of Public Enterprises : Pricing and Investment in Public enterprises.
2. Khera, S. S. : Management and control in Public Enterprises.
3. Sinha, J.B. P. : Some problems of Public Sector Organisation.
4. Sharma. B. S. : Financial Planning in Indian Public Sector.
5. Govt. of India : Annual Reports on the working of Industrial and commercial undertakings of The Central Govt.
6. Narayn Laxmi. : Management of Public Enterprises.
7. Aggarwal, G.C. : Public Sector Steel Industry in India.

**EOL412:**

**DEMOGRAPHY**

**Credits : 4-0-0**

**Minor-I**

**Demography:** Meaning and its scope, Population and Economic Development: Interdependence between population, development and environment. Demography and related concepts: macro-micro dynamics of population.

Social structure its components and influence on demographic factors; migration, meaning, causes and consequences for economic development.

**Minor-II**

**Population Theories:** Malthusian theory of population, post Malthusian transition, optimum theory of population, theory of demographic transition.

**Mortality:** Death rate, Infant Mortality Rate, Factors for decline in mortality in recent past, Methods of population projection.

**Major (including Minor-I and Minor-II)**

**Changing Characteristics of Population in India:** Population growth rates and trends, density of Population, age structure, life expectancy, sex ratio and occupational structure of population, population policy of India and its evaluation.

**Suggested Readings:**

1. Srinivasan K (1998), Basic Demographic Techniques and Applications, Sage, New Delhi.
2. Simon, J.L. (1992) Population and Development in Poor Countries. Princeton University Press.
3. Novell. C (1988), Methods and Models in Demography, Bellhaven Press, London.
4. Choubey, P .K. (2000), Population Policy in India, Kanishka Publications, New Delhi.
5. Bogue, D.J (1971) Principles of Demography, John Wiley, New York.
6. Dutt Ruddra and Sundram K.P.M., Indian Economy
7. Visaria V. "Infant Mortality in Indian : Level Trends and Determinants" Economic and Political Weekly, Vol.20, No.32, August 10, 1985.

8. Nath V. "1991 Population Census: Some facts and policy issues", EPW, Vol.26 September 14,1991.
9. Gopalan C "Population Problem: Need for a total views EPW. Vol. 26,September 14, 1991.
10. Dandekar, V.M. "Population Front of India's Economic Development" EPW, Vol.22, No.17, April 23, 1998, pp.837-842
11. Rajan Isudaya.S. "Family Planning Programme in India: An Economic Evaluation", The Indian Economic Journal, Vol.34, No.4, April- June, PP 79-86.
12. Cocharane, Susan, H. "Children is By Product" Investment Goods: A Review of some Micro Economics Models of Fertility" Population Studies, Vol.29, No.3, pp 373-390.
13. Ehsanual Haq, "Sociology of Population", Macmillan, New Delhi, 2007.
14. Prithvish Nag, "Atlas of Population Change in India (1951-2001)", National Atlas and Thematic Mapping Organization, Kolkata, 2001.
15. Parul Dave and Pallavi Mehta, "Mental Health and Aging Women : Important Correlates" (edited), Delhi, Kalpaz, p.522, 2008.
16. Anil Bagchi, "The Ageing World", Longman, Delhi, 2006.
17. Ishwar Modi, "Ageing and Human Development: Global Perspectives" (Edited), Rawat, New Delhi, p. 406, 2001.

**EOL413: RURAL ECONOMICS**

**Credits : 4-0-0**

**Minor-I**

**Concept:** Nature and Scope, Agriculture industry interaction: theories and empirical evidences.

**Land:** Utilisation, Land reform, supply and pricing of inputs.

**Rural Labour and employment:** Disguised unemployment, Extent, causes and estimates of rural poverty, Interstate labour migration : factors and implications.

**Minor-II**

**Capital formation in rural sector:** Savings and assets formation, credit-institutional and non-institutional special role of NABARD and RRBS.

**Production:** Agricultural growth in India; Production function, Farm budgeting, Technical changes: Green revolution.

**Rural marketing:** Traditional marketing, regulated markets, co-operative marketing and contract farming.

**Major (including Minor-I and Minor-II)**

**Agricultural prices:** Price behaviour; cobweb cycle; public distribution system; terms of trade, agriculture price policy.

**Rural Industrialisation:** Concept and scope, Government policy, KVIC, Mini-industrial estates. Industrial cooperatives. TRYSEM.

**Economic and social infrastructure:** Transport & Communications, power, education, drinking water, health, Sanitation and rural housing, social forestry and environment.

Strategies of rural development in plans. Poverty alleviation programmes.

**Suggested Readings:**

1. Aziz, Sartaj : Rural Development Learning from China.
2. Hirschman, A.O. : The Strategy of Economic Development.
3. Singh, Radha Raman : Studies in Regional Planning and Rural Development.
4. Shah, S.M., Whitby, M.C. D.L.J. : Rural Development, Planning and Reforms.
5. Robins, A.N. Tensery, K.G. Wills. : Rural Resources Development .
6. Nangundappa, D.M. : Area planning and rural development.
7. Arora, R.C : Integrated Rural Development.
8. Raghava Rao, D.V. : Panchayats and Rural Development.
9. D.S. Tyagi : Public Distribution in India.
10. Sukhpal Singh : Contract Farming and the State : Experience of Thailand and India, Kalpaz Publications, 2006.

**EOL414: HISTORY OF ECONOMIC THOUGHT**

**Credits : 4-0-0**

**Minor-I**

**Mercantilism:** Its origin and contents. Economic growth and International Trade. Outline of Physiocratic Doctrine- The Natural Order; The Net Product: The Circulation of Wealth.

**The classical system:** A smith-division of Labour; International Trade; Theory of value and distribution. D. Ricardo- Theory of value and distribution and Foreign Trade. T.R. Malthus-Theory of population and gluts. J.B.say- The Law of Markets.

**Minor-II**

K.Marx- Theory of value; Theory of Capitalist Competition.

The Historical School– Main Ideas; Subjectivism and Marginalism: Gossan and Jevaons; The Austrian school: Manger and Bohm-Bowerk; K. Wicksell and the Swedish School.

**Major (including Minor-I and Minor-II)**

**Neo classicism & After:** A. Marshall & his system of equilibrium; Contribution of J. Robinson; E.H. Chamberlin and J.M Keynes and his Policies; Major Post-Keynesian Developments– Consumption and Investment.

**EOL418: Economics of Infrastructure**

**Credit Hours: 4-0-0**

**Minor-I**

Infrastructure and economic development; Social and physical infrastructure; Public utilities: meaning and characteristics; The peak load problem, off-peak load problem, Dual principle controversy.

**Minor-II**

Transport: Structure of transport cost. Demand for transport models of freight and passenger demand. Cost function in transport sector.

Telephone: Rate making. Principle of decreasing costs in telephone industry.

Public-private partnership (PPP) and infrastructure. BOT approach.

**Major**

Energy: Energy and economic development; Energy efficiency and conservation; energy pricing.

Pricing of electricity; economics of thermal, hydro and nuclear power plants. National power Grid.

Infrastructure in India: Structure, problems and policies.

**Recommended Readings**

1. Aschauer, David Alan (1989a) "Is public expenditure productive"? *Journal of Monetary Economics*, Vol.23, pg.177-200.
2. Asian Development Bank (2009): 'Energy Infrastructure Priorities, Constraints and Strategies for India, Oxford.
3. Chantler, Philips (1933): 'The Economic Nature of Public Utilities', *The Manchester School*, Vol.2, issue 2, 109-114.
4. Crew, M., Fernando C. and Kleindorfer (1995): 'The Theory of Peak-Load Pricing: A Survey', *Journal of Regulatory Economics*, Vol.8, pp.215-248.
5. Fariss, M.T. and R. Sampson (1975): *Public Utilities*, Houghton Mifflin, Boston.
6. India Infrastructure Report 2010 Infrastructure Development in a Low carbon Economy, 3iNetwork.
7. Maniar Megha (2012): 'The Infrastructure Sector in India', in *India Infrastructure Report*, IDFC Foundation, Routledge.



M.Sc. (Hons. School) Economics (Semester –I)  
(Under Credit Based Continuous Evaluation Grading System)

8. Stephane Straub (2008): ‘Infrastructure and Development: A Critical Appraisal of the Macro Level Literature.’ The World Bank, Policy Research Working Paper 4590.
9. Todaro, Micheal P. (1981): “Economic Development in the Third World” published by the Longman (New York & London), 1981 (2<sup>nd</sup> edition).
10. World Bank “World Development Report 1994; Infrastructure for Development.” Published by Oxford University Press.
11. Lakshmanan, L. (2008) ‘Public-Private partnership in Indian Infrastructure Development: Issues and option, Reserve Bank of India Occasional Papers, Vol.29(1).

**EOL419: Economics of Gender and Development**

**Credit Hours: 4-0-0**

**Minor-I**

Importance and concepts of women studies, Demography of female population: Age structure, mortality rates, and sex ratio – Causes of declining sex ratios and fertility rates in LDCs particularly India – Theories and measurement of fertility and its control; Women and their access to nutrition, health, education, and social and community resources.

**Minor-II**

Factors affecting decision making by women: property rights, access to and control over economic resources, assets; Economic status of women and its effect on work-participation rate, income level, health, and education in developing countries and India.

**Major**

Factors affecting female entry in labour market; Supply and demand for female labour in developed and developing countries, particularly India; Wage differentials in female activities; Determinants of wage differentials; gender, education, skill, productivity, efficiency, opportunity.

Social security of women: entitlements, ensuring economic independence and risk coverage, access to credit and insurance markets; Role of voluntary organizations self help groups in providing social security; Labour market biases and gender discrimination; Gender and development indices.

**Recommended Readings**

1. Agarwal, B. (1994), *A Field of One's Own : Gender and Land Rights in South Asia*, Cambridge University Press, Cambridge.
2. Agnihotri, S.B. (2000). *Sex ratio in Indian Population : A Fresh Exploration*, Sage Publications, New Delhi.
3. Amsden, A.H. (Ed.) (1980), *The Economics of Women and Work*, Penguin, Harmondsworth.
4. Dantwala, M.L., H. Sethi and P. Visaria (1998), *Social Change Through Voluntary Action*, Sage Publications, New Delhi.
5. Desai, N. and M.K. Raj (Eds.) (1979), *Women and Security in India*, Research Centre for Women Studies, SNDT University, Bombay.
6. Dwyer, D. and J. Bruce (Eds.) (1988), *A Home Divided: Women and Income in the Third World*, Stanford University Press, Stanford.
7. Evans, H. and C. Ungerson, (Eds.) (1983), *Sexual Divisions, Patterns and Processes*, Tavistock, London.

8. Government of India (1974), Towards Equality – Report of the Committee on the Status of Women in India, Department of Social Welfare, Ministry of Education and Social Welfare, New Delhi.
9. Gulati, S.C. (1998), Fertility in India: An Econometric Analysis of a Metropolis, Sage Publications, New Delhi.
10. Gupta, J.A. (2000), New Reproductive Technologies, Women's Health and Autonomy, Indo Dutch Studies on Development Alternatives, Sage Publications, New Delhi.
11. ILO (1978), Women's Participation in the Economic Activity of Asian Countries, ILO, Geneva.
12. Jhabwala, R. and R.K. Subramanya (2000) (Eds.) The Unorganized Sector: Work Security and Social Protection, Sage Publications, New Delhi.
13. Kabeer, N. (1994), Reversed Realities: Gender Hierarchies in Development Though, Kali for Women, New Delhi.
14. Krishnaraj, M., R.M. Sudarshan and A. Shariff (1999), Gender, Population and Development, Oxford University Press, New Delhi.
15. Kuhn, A. and A.N. Wolpe (Eds.) (1978), Feminism and Materialism, Routledge and Kegan Paul, London.
16. Seth, M. (2000), Women and Development : The Indian Experience, Sage Publications, New Delhi.
17. Mishra, S. (2000) Voluntary Action in Health and Population: The Dynamics of Social Transition, Sage Publications, New Delhi.
18. Mitra, A. (1979). Implications of Declining Sex Ratio in India's Population, Allied, New Delhi.
19. Papola, T.S. and A.N. Sharma (Eds.) (1999), Gender and Employment in India, Vikas Publishing House, New Delhi.
20. Redcliff, N. and E. Mingione, (Eds.) (1985), Beyond Employment: Household, Gender and Subsistence, Basil Blackwell, Oxford.
21. Sen, A.K. (1990), 'Gender and Cooperative Conflicts' in Tinker (Ed.) Persistent Inequalities : Women and World Development, Oxford University Press, New York.
22. Srinivasan, K. (1998), Basic Demographic Techniques and Applications, Sage Publications, New Delhi.
23. Young, K. et al (Eds.) (1987), Serving Two Masters, Routledge & Kegan Paul, London.
24. Wazir, R. (2000), The Gender Gap in Basic Education : NGOs as Change Agents, Sage Publications, New Delhi.

**EOL420: Economics of Social Sector**

**Credit Hours: 4-0-0**

**Minor-I**

Education as an instrument for economic growth; Human capital – components of human capital; Demand for education – private demand and social demand, Determinants of demand; Cost of Education – Expenditure on education, private costs and social costs and wastage and stagnation; Benefits of education – Direct and indirect benefits, private and social benefits.

**Minor-II**

Educational financing – Resource mobilization and utilization, pricing and subsidies and effects of educational financing on income distribution; Education and labour market – Effects of education, ability and family background on earnings, poverty and income distribution, education and employment; Educational planning and economic growth – Cost-benefit analysis, production function models, growth accounting equations of Schultz and Denison, Economics of educational planning in developing countries with special emphasis on India.

**Major**

Health dimensions of development; Determinants of health – poverty, malnutrition and environmental issues; Economic dimensions of health care – demand and supply of health care; Financing of health care and resource constraints; The concept of human life value; Theory and empirical studies of production of health care; Inequalities in health – class and gender perspectives; Institutional issues in health care delivery. Manpower requirements approach, programming and input-output models.

**Recommended Readings**

1. Baru, R.V. (1998), Private Health Care in India : Social Characteristics and Trends, Sage Publications, New Delhi.
2. Berman, P. and M.E. Khan (1993), Paying for India's Health Care, Sage Publications, New Delhi.
3. Becker, G.S. (1974). Human Capital (2<sup>nd</sup> Edition), National Bureau of Economic Research, New York.
4. Klarman, H.E. (1965), The Economic of Health, Columbia University Press, New York.
5. McMohan, W.W. (1999), Education and Development: Measuring the Social Benefits, Oxford University Press.
6. Schultz, T.W. (1971), Investment in Human Capital, Free Press, New York.

M.Sc. (Hons. School) Economics (Semester –I)  
(Under Credit Based Continuous Evaluation Grading System)

7. Padmanabhan, C.B. (1984). Financial Management in Education, Select Books, New Delhi.
8. Panchamukhi, P.R. (1980), Economics of Health : A Trend Report in ICSSR, A Survey of Research in Economics, Vol.VI, Infrastructure, Allied, Delhi.
9. Tilak, J.B.G. (1994), Education for Development in Asia, Sage Publications, New Delhi.
10. Vaizey, J. (1962), Economics of Education, Faber and Faber, London.
11. Woodhall, M. (1992), Cost Benefit Analysis in Educational Planning, UNESCO, Paris.
12. World Bank (1993), The World Development Report, 1993 : Investing in Health, Oxford University Press, New York.

**EOL421 : Financial Institutions and Markets**

**Credit Hours: 4-0-0**

**Minor-I**

Development financial institutions: Evolution of development banks, changing role, IFCI, IDBI, ICICI, NABARD, SIDBI, State Industrial Development Corporations, State Financial Corporations, Performance of All Indian Financial Institutions.

**Minor-II**

Non-banking financial intermediaries: Definition and types of NBFIs. Mutual Funds: Growth of mutual funds in India, Types of mutual funds schemes, SEBI guidelines relating to mutual funds; Insurance: Origin and development of insurance. LIC, GIC; Role and functions of Insurance Regulatory and Development Authority (IRDA).

**Major**

Role and structure of money and capital markets: Call money market, commercial bill market, discount market – Government Securities Market, Primary and Secondary Market for Securities, SEBI – its impact on working of capital market in India.

**Recommended Readings**

1. Bhole, L.M. (2004), Financial Institutions and Markets: Structure, Growth and Innovation, Tata McGraw Hill, New Delhi.
2. Palande, P.S. et al (2003), Insurance in India: Changing policies and emerging opportunities, Sage Publications, New Delhi.
3. Pendharkar, V.G. (2003), Unit Trust of India: Retrospect and Prospect, UBS Publishers' Distributors Ltd., New Delhi.
4. Pathak, B.V. (2008), The Indian Financial System Markets, Institutions and Services, Dorling Kinderslay (India) Pvt. Ltd., New Delhi.
5. Gutpa, S.B. (2006), Monetary Economics Institutions, Theory and Policy, S. Chand & Co. Ltd., New Delhi.
6. Reserve Bank of India, Handbook of Statistics on Indian Economy, Various Issues.

**EOL415: MICROECONOMICS-II**  
**Credits: 4-0-0**

**Minor-I**

Distribution: Marginal Productivity theory, product exhaustion, factor shares and technical progress. Modern theory of Distribution. Macro Theories – Ricardian, Marxian, Kalecki's theories.

Welfare Economics – Individual and social welfare, role of value judgements, Pigou's concept of welfare.

Problem of welfare maximisation, optimality conditions.

**Minor-II**

Market failure- imperfections, decreasing cost, externalities, Methods of solving problems of externalities – taxes and subsidies, Property rights, Coase theorem, direct government regulation. Public good externalities – Free rider problem. Socialism and Pareto optimality. Theory of second best.

Criteria for welfare improvement- Pareto criterion, General ethical criterion, Kaldor's criterion; measure of welfare cost. Arrow's Impossibility theorem equity-efficiency trade off. Applications of welfare economics.

Meaning of general equilibrium: interdependence of markets, General equilibrium and Macroeconomics, partial versus general equilibrium approach.

**Major (including Minor-I and Minor-II)**

Classical, neo – classical and input-output approaches to general equilibrium, consumption without production (pure exchange). Existence, stability and uniqueness of equilibrium. Production without consumption-one sector model.

Production without consumption-two sector model-relationship between relative commodity and factor prices, (Stolper – Samuelson Theorem). Relationship between output mix and real factor prices, effect of changes in factors supply in closed economy (Rybozinski Theorem). General Equilibrium and Pareto optimality.

**Suggested Readings**

1. American Economic Association : Readings in Income Distribution, George Allen & Unwin, 1950.
2. Bronfenbrenner, M. : Income Distribution Theory, Macmillan, 1971.
3. Henderson & Quandt :Microeconomics Theory A Mathematical Approach.
4. Koutsoyiannis, A. : Modern Microeconomics.
5. Layard & Walters : Microeconomics Theory.
6. Naylor & Vernon :Microeconomics and Decision Models of the Firm.
7. Bruce. N. and R. Boadway : Welfare Economics.
8. Weintraud, E.R. : General Equilibrium Theory.
9. Hanson, E. : A Survey of General Equilibrium Systems.

**EOL416: MACROECONOMICS-II**

**Credits : 4-0-0**

**Minor-I**

Investment: Keynesian, Post-Keynesian, Neo-keynesian, (Jorgenson approach). Lags in investment function.

Trade cycles: Samuelson, Hicks and Kaldor models.

Economic growth: Harrod and Domar conditions for equilibrium growth.

**Minor-II**

Neo-classical growth model (with or without technical progress) savings, Consumption and factors shares in neo-classical model. The golden rule of accumulation.

Mechanics of money supply expansion. Demand for money-classical, Keynesian, Friedman and neo-keynesian approaches.

Inflation - causes, consequences and cures.

**Major (including Minor-I and Minor-II)**

Inflation-unemployment trade-off. The natural rate hypothesis.

Macro-economics policy; meaning and objectives. Targets and Instruments - fixed and flexible Targets approaches.

Uncertainty and economic policy. Lags in the effect of policy. Rules vs. discretion. The Mundell-Fleming model.

Rational expectations and short-run effectiveness of macroeconomics policy. Keynesianism vs. Monetarism. New Keynesianism(elementary)

**Suggested Readings:**

1. Ackley, G. : Micro Economic Theory.
2. Branson, W.B. : Macro Economics Theory and Policy.
3. Brooks J & Evans, R.W. : Macro Economics policy in Theory and practice.  
Evans, R.W.
4. Edgmond, M.F. : Macro Economics: Theory and Policy.
5. Evans, M.K. : Macro Economics Activity.
6. Glahe, F.R. : Macro Economics : Theory and policy.
7. Gordon, J. : Macro Economics.
8. Rogendron, J.S. : Economic Development ch.II.
9. Junankar, P.N. : Investment: Theories and Evidence.
10. Laidler, D.E.W. : Demand for Money: Theories and Evidence.
11. Leveoice, R. : Macro Economics: The Static and dynamic Analysis of a  
Monetary Economy.
12. McConnell, C.R. : Introduction to Macro economics.  
and H.C.Gupta
13. Sayer, S. : An Introduction to Macro Economics policy.
14. Solow, R.M. : Growth Theory an exposition.
15. Thirlwall, A.P. : Growth and Development.
16. Froyen, Richard T. : Macroeconomics Theories and Policies.



**EOL417: STATISTICAL TECHNIQUES**

**Credits : 4-0-0**

**Minor-I**

Correlation and Regression: Meaning, assumptions and limitations of simple correlation and regression-analysis ; pearson's product moment and spearman's rank Correlation coefficients, and their properties; partial and multiple correlation. Simple regression – basic idea about least – squares principle, lines of regression and properties of regression co-efficients. Multiple linear regression equation and co-efficient of multiple determination (application only).

Method of estimation of second degree parabolic, exponential and modified exponential curves; Method of computing average annual rate of growth.

**Minor-II**

Elements of probability: Deterministic and non-deterministic experiments, various types of events. Classical and empirical definitions, laws of addition and multiplication of probability, conditional probability and the concept of independence of events, elementary concept of a random variable, probability mass and density functions.

Expectations, moments and moments generating function of a random variable.

**Major (including Minor-I and Minor-II)**

Properties and applications of binomial, poisson and normal distributions.

Sampling: Concepts uses in sampling, difference between random and non-random sampling, simple random sampling, stratified random sampling and p.p.s. sampling. Concept of a statistic and its sampling distribution.

Elementary tests based upon the distribution of Z, t, and F statistics.

**Suggested Readings:**

1. Chou Ya-Lun : Statistical Analysis.
2. Croxton, Cowden : Applied General Statistics.  
and Klein
3. Gupta S.C. and : Fundamentals of Applied Statistics, Sultan Chand & Sons(1993).  
Kapur V.K.
4. Miller, Jane : Statistics for Advanced Level, Cambridge University Press (1996).
5. Spiegel, M.R. : Theory and Problems of Statistics.
6. Hogg, R.V. and : Introduction to Mathematical Statistics (3rd Ed.), Macmillan  
Craig A.T. Publishing Co. New Delhi.
7. Sukhatme, P.V. : Sampling Theory of Surveys with Applications, Iowa State  
and Sukhatme B.V. University Press, Ames, Iowa (1970).

**EOL404 : MONEY, BANKING AND FINANCIAL INSTITUTIONS.**

**Credits : 4-0-0**

**Minor-I**

**Money:** Supply of money and its components. Determinants of money supply, high powered money, money multiplier.

Demand for money – Fisher and Cambridge versions, Approaches of Keynesian, Friedman, Patinkin, Baumol and Tobin.

**Minor-II**

**Money and Capital Market:** Role, constituents and functions.

**Major (including Minor-I and Minor-II)**

**Banking in India** – Commercial banks, co-operative banks and regional rural banks. RBI and its functions; Instruments of credit controls; Credit policy in India – recent developments.

Monetary policy : Objectives, targets and indicators. Monetary policy in India.

**Suggested Readings:**

1. Bhole, L.M. Financial Institutions and Markets: Structure, Growth and Innovations, 2<sup>nd</sup> ed.
2. Glahe, F. R. Macroeconomic Theory and Policy, 1973.
3. Government of India Economic Survey (Annual.)
4. Laidler, D.E.W. The Demand for Money: Theories and Evidence, 1977
5. R.B.I. Functions and Working, 1983.
6. R.B.I. Report of the Committee to review the working of the Monetary System, (Chakrawarty Committee Report), 1985.
7. R.B.I. Narasimhan Committee Report, 1991.
8. Thorn, R.S. Introduction to Money and Banking, 1976.

**EOL405 : PUBLIC FINANCE**

**Credits : 4-0-0**

**Minor-I**

**Equity in Taxation:** Principles of taxation; Taxable capacity; Tax effort; Buoyancy and Elasticity of taxes; Distinction between tax design and tax reform: characteristics of a well-designed tax structure, incidence of taxation, effects of taxation on production and distribution.

**Minor-II**

**Direct vs. Indirect Taxes:** Direct and Indirect taxes: Role and importance in developing countries; proportional vs. progressive taxes; specific vs. advalorem duties; Tax structure in India; Latest tax reforms in India (Basic idea about DTC & GST).

**Growth of Public Expenditure:** Effects of public expenditure on production and distribution; Structure of public expenditure in India.

**Major (including Minor-I and Minor-II)**

Distinction between internal and external debt; Management of public debt in India.

**Public Budget:** Concept and types; Zero Base Budgeting.

**Problems and Principles of Federal Finance:** Union-state financial relations in India. Role of fiscal-policy in a developing country like India.

**Suggested Readings:**

1. Bhargava, R.N. : Theory and Working of Union Finance in India.
2. Bird, Richard, M.and Oliver Oldman : Readings on Taxation in Developing Countries.
3. Cedric Sandford : Economics of Public Finance.(Chapter 2)
4. Chelliah. R.J. : Fiscal-Policy in Underdeveloped Countries.
5. Dalton, Hugh : Principles of Public Finance.
6. Om Parkash : Center-State Financial Relations in India.
7. Misra, B. : Fiscal Policy in the Context of Planning.
8. Musgrave, R.A. : Theory of Public Finance.

M.Sc (Hons.) in Economics (Semester –II)  
(Under Credit Based Continuous Evaluation Grading System)

9. Prest, A.R. : Public Finance.
10. \_\_\_\_\_ : Public Finance in Underdeveloped Countries.
11. \_\_\_\_\_ : Public Finance in Theory and Practice.
12. Sahota, G.S. : Indian Tax Structure and Economic Development.
13. Thimmaih, G : Perspectives in Tax Design and Tax Reform (Chapter 1).
14. Tripathi Ram Niranjana & Mrs. M. Tripathi : Public Finance and Economics Development in India.
15. N.C.A.E.R. : Management of Public Debt in India.
16. National Institute of Public Finance and Policy : Trends and Issues in Indian Federal Finance.
17. Government of India. : Economic Survey.
18. \_\_\_\_\_ : Central Budget Documents.
19. \_\_\_\_\_ : Long-term Fiscal Policy.
20. \_\_\_\_\_ : Reports of finance commissions.
21. \_\_\_\_\_ : Tax Reforms Committee.  
(Chairman, Raja, J Chelliah)  
Interim Report (Dec, 1991) and final report, First part  
( August, 1992).

**EOL406: INTERNATIONAL ECONOMICS**

**Credits : 4-0-0**

**Minor-I**

**Theory of International trade and commercial policy:** Classical comparative cost theory, Heckscher-ohlin Model, Empirical test of classical and Heckscher-ohlin model, Terms of trade and economic growth – Secular deterioration Hypothesis – a critical view.

Forms of protection : Tariff and Quota (Partial and General Equilibrium Analysis)

**Minor-II**

**Balance of payments :** Meaning, concept, equilibrium and disequilibrium in balance of payments, Traditional, Absorption and Monetary approaches for adjustments in balance of payments. Foreign trade multiplier.

**Major (including Minor-I and Minor-II)**

**Exchange Rates :** Exchange rate and its determination. Theory of Foreign Exchange Markets – Exchange Trading, Arbitrage and Market Hedging.

**International Monetary System:** Special Drawing Rights; Breakdown of the Bretton wood system, the Present International Monetary system. Theory of International Reserves, Optimum Currency Areas – Theory and Impact in the developed and developing countries.

**Suggested Readings:**

1. Argy, Victor                                      The Post-War International Money Crisis, Allen & Unwin, 1980.
2. Bilson, J.    The Monetary Approach to the Exchange Rates Some Empirical Evidence, IMF, Staff Papers, March 1978, pp. 48-75.
3. Caves, R.E.                                        Flexible Exchange Rate, American Economic Review, May, 1963.
4. Fleming M.J.                                        Domestic Financial Policies under Fixed and under Floating Exchange Rates, IMF, Staff Paper, Nov., 1962.
5. Gomes, Leonard                                   International Economic Problems, Macmillan Press, Ltd.
6. Ingram, James, C.                                International Economic Problems, John Wiley & Sons, 1978.
7. Kindleberger, C.                                 International Economics, Ontario Richard D. Irwin.
8. Lewis, W.Arthur                                 The Evolution of the New International Economic Order, Princeton University Press, 1977.
9. Meade, J.E   The Balance of Payments, Oxford University.
10. Mier, G.M.                                        International Economics. The Theory of Policy, Oxford University Press.
11. Sodersten, B.O.                                 International Economics, II Edition Macmillan Press Ltd.

**EOL407 : INDUSTRIAL ECONOMICS**

**Credits : 4-0-0**

**Minor-I**

Frame work and Problems of Industrial Economics; Concept, ownership, control and objectives of the firm; active and passive behaviour of the firm.

**Minor-II**

**Market Structure** : Meaning and determinants. Sellers' and Buyers' concentration; Product differentiation; entry conditions; economies of scale; market structure and innovation.

**Major (including Minor-I and Minor-II)**

**Market Conduct** : Weber and Sargent Florence theories of location; Product pricing in practice; Investment decisions and risk adjustment; Merger and diversification; Advertising expenditure and decisions; Finance : Capital structure; pay-out and retention ratios.

**Market Performance** : Growth of the firm and constraints; Concepts and measurement of industrial productivity and capacity of utilization.

Structural transformation of Indian industries; industrial competitiveness and recent industry policy initiatives.

**Suggested Readings:**

1. Hay, D.D.A & D.J. Morris Industrial Economic Theory and Evidence, Oxford University Press, 1979.
2. Devine, P.J. & R.M. Jones (et. al.) An Introduction to Industrial Economics, George Allen & Unwin Ltd., London, 1979.
3. Patel, S.J. Technological Transformation in the Third World, Aldershot Avebury, 1993.
4. Kamien, M.T. & N.L.Schwartz Market Structure and Innovation, Cambridge University Press, Cambridge, 1982.
5. Bains, J.S Industrial Organization, Cheltenham, U.K. An Elgar Critical Writings Reader, 1996.
6. Barthwal, R.R. Industrial Economics, New Delhi: Wiley Eastern Ltd, 1985
7. Kirkpatrick, C.M. Industrial Structure and Policy in Less Developed Countries, N. Lee & E.I. ELBS/George Allen & Unwin, 1984.  
Nixon
8. Herndeen, J.B. The Economics of the Corporate Economy, Dunellin Publishing Co. New York, 1975.
9. Ramamurti, R. & R.Vernon(ed.) Privatization and Control of Stateowned Enterprises, Washington. The World Bank, Washington, 1991

**EOL408 : LABOUR ECONOMICS AND INDUSTRIAL RELATIONS**  
**Credits : 4-0-0**

**Minor-I**

Concept of labour, characteristics of labour, labour markets – definition and characteristics, theories of labour. Market – Classical, Neo-classical and Dualistic labour markets. Structured and unstructured market, Internal and external labour market, Features and characteristics of Indian labour market.

**Minor-II**

**Industrial Relations:** Trade Unions, objectives and functions. Indian Trade Unions. Growth and problems. Industrial disputes, Industrial disputes in India, Dispute settlement machinery in India.

Wages; Concepts of minimum, living and fair wage, Wage, productivity and inflation relationship, Wage policy in India – Minimum Wages Act and Payment of Wages Act.

**Major (including Minor-I and Minor-II)**

**Social Security:** Definition and scope, Social security measures in India, Problems of child labour in India, Women labour and their problems. Major recommendations of Second National Commission on labour, Labour market reforms.

**Suggested Readings:**

1. Dobb, Maurice : Wages
2. Dunlop, J. T.(ed.) : Industrial Relations System
3. \_\_\_\_\_ : Wage Determination under Trade Unionism.
4. Giri, V.V. : Labour Problems in Indian Industry.
5. Mitra, A. : Share of Wages in National Income.
6. Papola, T.S. : Principles of Wage Determination.
7. Rama Swami E.A,  
Rama Swami Uma. : Industry and Labour.
8. Reynolds, L.G. : Labour Economics and Labour Relations.
9. Rothchild : Theory of wages.
10. Saxena, S.R.and  
Saxena, R.C. : Labour Problems and Social Welfare.
11. Government of India : Indian Labour Year Book  
(Various Issues)
12. \_\_\_\_\_ : Labour Investigation Reports  
(Main Reports)
13. \_\_\_\_\_ : Report on National Commission on Labour, 1969.
14. \_\_\_\_\_ : Economics Surveys.
15. I.L.O. : Approaches to social society.

**EOL409: AGRICULTURAL ECONOMICS**

**Credits : 4-0-0**

**Minor-I**

**Agricultural Economics:** Meaning, scope and role in economic development; changing importance of agriculture in the process of economic development; characteristics of subsistence agriculture. Schultz's prescription of transforming traditional agriculture; Interface between agriculture and industry.

**Institutional Structure:** Land reforms - nature, progress and assessment, impact on agrarian structure; subdivision and fragmentation, consolidation of land holdings.

**Minor-II**

Nature of emerging agrarian structure, farm size and Productivity in Indian agriculture; Agricultural finance and credit. Problem of rural indebtedness.

New agricultural technology and its impact on production, employment, labour absorption and income distribution; Growth and Productivity trends in Indian agriculture.

**Major (including Minor-I and Minor-II)**

**Price Instability in Agriculture:** Methods to stabilize income and prices in agriculture; Acreage and output response to prices in agriculture. Diversification of Indian agriculture : objectives, incentives and disincentives. Agricultural marketing in India.

**Agricultural Taxation:** Inter-sectoral terms of trade; Agricultural subsidies - nature, trends and distributional implications; WTO and Indian agriculture.

**Suggested Readings:**

1. Sourth Worth, H.M. Agricultural Development and Economics Growth (1967).  
and John Sten, B.F.  
(ed.)
2. Schultz, T. W. Transforming Traditional Agriculture (1964).
3. Mellor, J.W. The Economics of Agriculture Development (1960).
4. Desgupta, B. The New Agriculture Technology in India, Macmillan (1980).
5. Peter, Domer Land Reforms and Economics Development (1972).
6. Eicher, C.K. and Witt, L. W. Agriculture in Economic Development.



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7. Mamoria, G.B. Indian Agricultural Development .
8. Chaudhari, Pramit Readings in Indian Agriculture Development.
9. Mier,G. M. Leading Issues in Economic Development.
- 10.Hayani, Y & V. Rutan Agriculture Development: An International Perspective, John Hopkins, Baltimore, 1971.
- 11.Rudra, A. Indian Agriculture Economics; Myths and Realities, Allied Publishers, N. Delhi-1982.
- 12.Bhalla, G.S. & D.S. Tyagi Patterns in Indian Agricultural Development, ISID, New Delhi, 1989.
- 13.Dentwala, M.L. (eds.) Agriculture Growth in India, Indian society for Agriculture Economics Bombay, 1986.
- 14.Haque, T & A.S. Sirohi Agrarian Reforms and Institutional change in India, Concept Publishing Co., Delhi., 1986.
15. Soni, R.N. Leading Issues in Agriculture Economics, Arihant press, Jalandhar, 1995.
16. Wasriner, D Land Reforms in Principles and Practice, Oxford University Press, 1960.
- 17.Bhalla, G.S.(Eds.) Economics Liberalization and Indian Agriculture, ISID, New Delhi, 1994.
- 18.Bharduria, A The Economics Structure of backward Agriculture, Macmillan, Delhi, 1984.

**EOL410: COMPUTER APPLICATIONS FOR ECONOMISTS-I**

**Credits: 3-0-2**

**Minor-I**

**Introduction to computers:** History of computer generations, types of computer digitals, analog and hybrid computer.

Types of digital computers, peripheral devices, input output devices.

**Introduction to software:** Introduction to types of system and application software; operating system introduction to MS-DOS.

Introduction to management of computer centre.

**Programming Methodology:** Problem Analysis, flowcharting, Introduction to algorithms and decision tables.

**Minor-II**

**Introduction to C.Programming:** C-Character set data types, constants and variables, operators, expressions, assignment statements and input-output statements.

**Program-looping:** The for statement - The while statement- The do statement.

**Decision Making:** The if Statement- The switch statement – The flags- The Conditional expression operator.

**Major (including Minor-I and Minor-II)**

**Arrays:** Initializing array elements- character arrays- multi-dimensional arrays.

**Functions:** Arguments and local variables - returning functions results - functions calling functions. Tip-down programming - functions and arrays-global variables – automatic and static variables-reversible functions.

**File Processing in C:** creation- maintenance and processing of files.

**Suggested Readings:**

1. Kochan, Stephens, G. : Programming in C.
2. Kenneth,A. : Problem solving and programming.
3. Kernigean, B.W. & Ritchie, P.M. : The C programming Language.
4. Kaicker, S. : Programming in C.
5. Copper, Mallish : The spirit of C; An Introduction to Modern programming.
6. Carver, D.K. : Introduction to Business Data Processing.
7. Subramaniam, N. : Introduction to computer; Fundamentals of computer science.
8. Dromey, G. : How to solve it by computer. Manuals of pc software.
9. Held, G. : IBM, PC & PC XT User's Reference Manual.
10. Coffron, J.W. : The IBM PC Connect.

**EOL411: ECONOMICS OF PUBLIC ENTERPRISES**

**Credits : 4-0-0**

**Minor-I**

Role of public sector in economic development; objectives scope and growth of public sector in India. Criteria for project selection, Cost-benefit analysis, shadow prices, social rate of discount.

**Minor-II**

Organizational pattern of public enterprises, Management of public enterprises, personnel management in public enterprises, Financial and material management in public enterprises.

Pricing policy of public enterprises.

**Major (including Minor-I and Minor-II)**

Accountability of public enterprises, Auditing of public enterprises, role of bureau of public enterprises.

Case study of public steel industry in India- growth, performance, pricing and management.

Public sector reforms and privatization strategies.

**Suggested Readings:**

1. Institute of Public Enterprises : Pricing and Investment in Public enterprises.
2. Khera, S. S. : Management and control in Public Enterprises.
3. Sinha, J.B. P. : Some problems of Public Sector Organisation.
4. Sharma. B. S. : Financial Planning in Indian Public Sector.
5. Govt. of India : Annual Reports on the working of Industrial and commercial undertakings of The Central Govt.
6. Narayn Laxmi. : Management of Public Enterprises.
7. Aggarwal, G.C. : Public Sector Steel Industry in India.

**EOL412: DEMOGRAPHY**

**Credits : 4-0-0**

**Minor-I**

**Demography:** Meaning and its scope, Population and Economic Development : Interdependence between population, development and environment. Demography and related concepts : macro-micro dynamics of population.

Social structure its components and influence on demographic factors; migration, meaning, causes and consequences for economic development.

**Minor-II**

**Population Theories:** Malthusian theory of population, post Malthusian transition, optimum theory of population, theory of demographic transition.

**Mortality:** Death rate, Infant Mortality Rate, Factors for decline in mortality in recent past, Methods of population projection.

**Major (including Minor-I and Minor-II)**

**Changing Characteristics of Population in India:** Population growth rates and trends, density of Population, age structure, life expectancy, sex ratio and occupational structure of population, population policy of India and its evaluation.

**Suggested Readings:**

1. Srinivasan K (1998), Basic Demographic Techniques and Applications, Sage, New Delhi.
2. Simon, J.L. (1992) Population and Development in Poor Countries. Princeton University Press.
3. Novell. C (1988), Methods and Models in Demography, Bellhaven Press, London.
4. Choubey, P .K. (2000), Population Policy in India, Kanishka Publications, New Delhi.
5. Bogue, D.J (1971) Principles of Demography, John Wiley, New York.
6. Dutt Ruddra and Sundram K.P.M., Indian Economy
7. Visaria V. "Infant Mortality in Indian : Level Trends and Determinants" Economic and Political Weekly, Vol.20, No.32, August 10, 1985.
8. Nath V. "1991 Population Census: Some facts and policy issues", EPW, Vol.26 September 14, 1991.

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9. Gopalan C "Population Problem: Need for a total views EPW. Vol. 26,September 14, 1991.
10. Dandekar, V.M. "Population Front of India's Economic Development" EPW, Vol.22, No.17, April 23, 1998, pp.837-842
11. Rajan Isudaya.S. "Family Planning Programme in India: An Economic Evaluation", The Indian Economic Journal, Vol.34, No.4, April- June, PP 79-86.
12. Cocharane, Susan, H. "Children is By Product" Investment Goods: A Review of some Micro Economics Models of Fertility" Population Studies, Vol.29, No.3, pp 373-390.
13. Ehsanul Haq, "Sociology of Population", Macmillan, New Delhi, 2007.
14. Prithvish Nag, "Atlas of Population Change in India (1951-2001)", National Atlas and Thematic Mapping Organization, Kolkata, 2001.
15. Parul Dave and Pallavi Mehta, "Mental Health and Aging Women : Important Correlates" (edited), Delhi, Kalpaz, p.522, 2008.
16. Anil Bagchi, "The Ageing World", Longman, Delhi, 2006.
17. Ishwar Modi, "Ageing and Human Development: Global Perspectives" (Edited), Rawat, New Delhi, p. 406, 2001.

**EOL413: RURAL ECONOMICS**  
**Credits : 4-0-0**

**Minor-I**

**Concept:** Nature and Scope, Agriculture industry interaction: theories and empirical evidences.

**Land:** Utilisation, Land reform, supply and pricing of inputs.

**Rural Labour and employment:** Disguised unemployment, Extent, causes and estimates of rural poverty, Interstate labour migration : factors and implications.

**Minor-II**

**Capital formation in rural sector:** Savings and assets formation, credit-institutional and non-institutional special role of NABARD and RRBS.

**Production:** Agricultural growth in India; Production function, Farm budgeting, Technical changes: Green revolution.

**Rural marketing:** Traditional marketing, regulated markets, co-operative marketing and contract farming.

**Major (including Minor-I and Minor-II)**

**Agricultural prices:** Price behaviour; cobweb cycle; public distribution system; terms of trade, agriculture price policy.

**Rural Industrialisation:** Concept and scope, Government policy, KVIC, Mini-industrial estates. Industrial cooperatives. TRYSEM.

**Economic and social infrastructure:** Transport & Communications, power, education, drinking water, health, Sanitation and rural housing, social forestry and environment.

Strategies of rural development in plans. Poverty alleviation programmes.

**Suggested Readings:**

1. Aziz, Sartaj : Rural Development Learning from China.
2. Hirschman, A.O. : The Strategy of Economic Development.
3. Singh, Radha Raman : Studies in Regional Planning and Rural Development.
4. Shah, S.M., Whitby, M.C. D.L.J. : Rural Development, Planning and Reforms.
5. Robins, A.N. Tensery, K.G. Wills. : Rural Resources Development .
6. Nangundappa, D.M. : Area planning and rural development.
7. Arora, R.C : Integrated Rural Development.
8. Raghava Rao, D.V. : Panchayats and Rural Development.
9. D.S. Tyagi : Public Distribution in India.
10. Sukhpal Singh : Contract Farming and the State : Experience of Thailand and India, Kalpaz Publications, 2006.

**EOL414: HISTORY OF ECONOMIC THOUGHT**

**Credits : 4-0-0**

**Minor-I**

**Mercantilism:** Its origin and contents. Economic growth and International Trade. Outline of Physiocratic Doctrine- The Natural Order; The Net Product: The Circulation of Wealth.

**The classical system:** A smith-division of Labour; International Trade; Theory of value and distribution. D. Ricardo- Theory of value and distribution and Foreign Trade. T.R. Malthus-Theory of population and gluts. J.B.say- The Law of Markets.

**Minor-II**

K.Marx- Theory of value; Theory of Capitalist Competition.

The Historical School– Main Ideas; Subjectivism and Marginalism: Gossan and Jevaons; The Austrian school: Manger and Bohm-Bowerk; K. Wicksell and the Swedish School.

**Major (including Minor-I and Minor-II)**

**Neo classicism & After:** A. Marshall & his system of equilibrium; Contribution of J. Robinson; E.H. Chamberlin and J.M Keynes and his Policies; Major Post-Keynesian Developments– Consumption and Investment.

**EOL418: Economics of Infrastructure**

**Credit Hours: 4-0-0**

**Minor-I**

Infrastructure and economic development; Social and physical infrastructure; Public utilities: meaning and characteristics; The peak load problem, off-peak load problem, Dual principle controversy.

**Minor-II**

Transport: Structure of transport cost. Demand for transport models of freight and passenger demand. Cost function in transport sector.

Telephone: Rate making. Principle of decreasing costs in telephone industry.  
Public-private partnership (PPP) and infrastructure. BOT approach.

**Major**

Energy: Energy and economic development; Energy efficiency and conservation; energy pricing.

Pricing of electricity; economics of thermal, hydro and nuclear power plants. National power Grid.

Infrastructure in India: Structure, problems and policies.

**Recommended Readings**

1. Aschauer, David Alan (1989a) "Is public expenditure productive"? *Journal of Monetary Economics*, Vol.23, pg.177-200.
2. Asian Development Bank (2009): 'Energy Infrastructure Priorities, Constraints and Strategies for India, Oxford.
3. Chantler, Philips (1933): 'The Economic Nature of Public Utilities', *The Manchester School*, Vol.2, issue 2, 109-114.
4. Crew, M., Fernando C. and Kleindorfer (1995): 'The Theory of Peak-Load Pricing: A Survey', *Journal of Regulatory Economics*, Vol.8, pp.215-248.
5. Fariss, M.T. and R. Sampson (1975): *Public Utilities*, Houghton Mifflin, Boston.
6. India Infrastructure Report 2010 Infrastructure Development in a Low carbon Economy, 3iNetwork.
7. Maniar Megha (2012): 'The Infrastructure Sector in India', in *India Infrastructure Report*, IDFC Foundation, Routledge.



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8. Stephane Straub (2008): ‘Infrastructure and Development: A Critical Appraisal of the Macro Level Literature.’ The World Bank, Policy Research Working Paper 4590.
9. Todaro, Micheal P. (1981): “Economic Development in the Third World” published by the Longman (New York & London), 1981 (2<sup>nd</sup> edition).
10. World Bank “World Development Report 1994; Infrastructure for Development.” Published by Oxford University Press.
11. Lakshmanan, L. (2008) ‘Public-Private partnership in Indian Infrastructure Development: Issues and option, Reserve Bank of India Occasional Papers, Vol.29(1).

**EOL419: Economics of Gender and Development**

**Credit Hours: 4-0-0**

**Minor-I**

Importance and concepts of women studies, Demography of female population: Age structure, mortality rates, and sex ratio – Causes of declining sex ratios and fertility rates in LDCs particularly India – Theories and measurement of fertility and its control; Women and their access to nutrition, health, education, and social and community resources.

**Minor-II**

Factors affecting decision making by women: property rights, access to and control over economic resources, assets; Economic status of women and its effect on work-participation rate, income level, health, and education in developing countries and India.

**Major**

Factors affecting female entry in labour market; Supply and demand for female labour in developed and developing countries, particularly India; Wage differentials in female activities; Determinants of wage differentials; gender, education, skill, productivity, efficiency, opportunity.

Social security of women: entitlements, ensuring economic independence and risk coverage, access to credit and insurance markets; Role of voluntary organizations self help groups in providing social security; Labour market biases and gender discrimination; Gender and development indices.

**Recommended Readings**

1. Agarwal, B. (1994), *A Field of One's Own : Gender and Land Rights in South Asia*, Cambridge University Press, Cambridge.
2. Agnihotri, S.B. (2000). *Sex ratio in Indian Population : A Fresh Exploration*, Sage Publications, New Delhi.
3. Amsden, A.H. (Ed.) (1980), *The Economics of Women and Work*, Penguin, Harmondsworth.
4. Dantwala, M.L., H. Sethi and P. Visaria (1998), *Social Change Through Voluntary Action*, Sage Publications, New Delhi.
5. Desai, N. and M.K. Raj (Eds.) (1979), *Women and Security in India*, Research Centre for Women Studies, SNDT University, Bombay.
6. Dwyer, D. and J. Bruce (Eds.) (1988), *A Home Divided: Women and Income in the Third World*, Stanford University Press, Stanford.
7. Evans, H. and C. Ungerson, (Eds.) (1983), *Sexual Divisions, Patterns and Processes*, Tavistock, London.

8. Government of India (1974), Towards Equality – Report of the Committee on the Status of Women in India, Department of Social Welfare, Ministry of Education and Social Welfare, New Delhi.
9. Gulati, S.C. (1998), Fertility in India: An Econometric Analysis of a Metropolis, Sage Publications, New Delhi.
10. Gupta, J.A. (2000), New Reproductive Technologies, Women's Health and Autonomy, Indo Dutch Studies on Development Alternatives, Sage Publications, New Delhi.
11. ILO (1978), Women's Participation in the Economic Activity of Asian Countries, ILO, Geneva.
12. Jhabwala, R. and R.K. Subramanya (2000) (Eds.) The Unorganized Sector: Work Security and Social Protection, Sage Publications, New Delhi.
13. Kabeer, N. (1994), Reversed Realities: Gender Hierarchies in Development Though, Kali for Women, New Delhi.
14. Krishnaraj, M., R.M. Sudarshan and A. Shariff (1999), Gender, Population and Development, Oxford University Press, New Delhi.
15. Kuhn, A. and A.N. Wolpe (Eds.) (1978), Feminism and Materialism, Routledge and Kegan Paul, London.
16. Seth, M. (2000), Women and Development : The Indian Experience, Sage Publications, New Delhi.
17. Mishra, S. (2000) Voluntary Action in Health and Population: The Dynamics of Social Transition, Sage Publications, New Delhi.
18. Mitra, A. (1979). Implications of Declining Sex Ratio in India's Population, Allied, New Delhi.
19. Papola, T.S. and A.N. Sharma (Eds.) (1999), Gender and Employment in India, Vikas Publishing House, New Delhi.
20. Redcliff, N. and E. Mingione, (Eds.) (1985), Beyond Employment: Household, Gender and Subsistence, Basil Blackwell, Oxford.
21. Sen, A.K. (1990), 'Gender and Cooperative Conflicts' in Tinker (Ed.) Persistent Inequalities : Women and World Development, Oxford University Press, New York.
22. Srinivasan, K. (1998), Basic Demographic Techniques and Applications, Sage Publications, New Delhi.
23. Young, K. et al (Eds.) (1987), Serving Two Masters, Routledge & Kegan Paul, London.
24. Wazir, R. (2000), The Gender Gap in Basic Education : NGOs as Change Agents, Sage Publications, New Delhi.

**EOL420: Economics of Social Sector**

**Credit Hours: 4-0-0**

**Minor-I**

Education as an instrument for economic growth; Human capital – components of human capital; Demand for education – private demand and social demand, Determinants of demand; Cost of Education – Expenditure on education, private costs and social costs and wastage and stagnation; Benefits of education – Direct and indirect benefits, private and social benefits.

**Minor-II**

Educational financing – Resource mobilization and utilization, pricing and subsidies and effects of educational financing on income distribution; Education and labour market – Effects of education, ability and family background on earnings, poverty and income distribution, education and employment; Educational planning and economic growth – Cost-benefit analysis, production function models, growth accounting equations of Schultz and Denison, Economics of educational planning in developing countries with special emphasis on India.

**Major**

Health dimensions of development; Determinants of health – poverty, malnutrition and environmental issues; Economic dimensions of health care – demand and supply of health care; Financing of health care and resource constraints; The concept of human life value; Theory and empirical studies of production of health care; Inequalities in health – class and gender perspectives; Institutional issues in health care delivery. Manpower requirements approach, programming and input-output models.

**Recommended Readings**

1. Baru, R.V. (1998), Private Health Care in India : Social Characteristics and Trends, Sage Publications, New Delhi.
2. Berman, P. and M.E. Khan (1993), Paying for India's Health Care, Sage Publications, New Delhi.
3. Becker, G.S. (1974). Human Capital (2<sup>nd</sup> Edition), National Bureau of Economic Research, New York.
4. Klarman, H.E. (1965), The Economic of Health, Columbia University Press, New York.
5. McMohan, W.W. (1999), Education and Development: Measuring the Social Benefits, Oxford University Press.
6. Schultz, T.W. (1971), Investment in Human Capital, Free Press, New York.

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7. Padmanabhan, C.B. (1984). Financial Management in Education, Select Books, New Delhi.
8. Panchamukhi, P.R. (1980), Economics of Health : A Trend Report in ICSSR, A Survey of Research in Economics, Vol.VI, Infrastructure, Allied, Delhi.
9. Tilak, J.B.G. (1994), Education for Development in Asia, Sage Publications, New Delhi.
10. Vaizey, J. (1962), Economics of Education, Faber and Faber, London.
11. Woodhall, M. (1992), Cost Benefit Analysis in Educational Planning, UNESCO, Paris.
12. World Bank (1993), The World Development Report, 1993 : Investing in Health, Oxford University Press, New York.

**EOL421: Financial Institutions and Markets**

**Credit Hours: 4-0-0**

**Minor-I**

Development financial institutions: Evolution of development banks, changing role, IFCI, IDBI, ICICI, NABARD, SIDBI, State Industrial Development Corporations, State Financial Corporations, Performance of All Indian Financial Institutions.

**Minor-II**

Non-banking financial intermediaries: Definition and types of NBFIs. Mutual Funds: Growth of mutual funds in India, Types of mutual funds schemes, SEBI guidelines relating to mutual funds; Insurance: Origin and development of insurance. LIC, GIC; Role and functions of Insurance Regulatory and Development Authority (IRDA).

**Major**

Role and structure of money and capital markets: Call money market, commercial bill market, discount market – Government Securities Market, Primary and Secondary Market for Securities, SEBI – its impact on working of capital market in India.

**Recommended Readings**

1. Bhole, L.M. (2004), Financial Institutions and Markets: Structure, Growth and Innovation, Tata McGraw Hill, New Delhi.
2. Palande, P.S. et al (2003), Insurance in India: Changing policies and emerging opportunities, Sage Publications, New Delhi.
3. Pendharkar, V.G. (2003), Unit Trust of India: Retrospect and Prospect, UBS Publishers' Distributors Ltd., New Delhi.
4. Pathak, B.V. (2008), The Indian Financial System Markets, Institutions and Services, Dorling Kinderslay (India) Pvt. Ltd., New Delhi.
5. Gutpa, S.B. (2006), Monetary Economics Institutions, Theory and Policy, S. Chand & Co. Ltd., New Delhi.
6. Reserve Bank of India, Handbook of Statistics on Indian Economy, Various Issues.

**EOL501: ECONOMICS OF DEVELOPMENT**

**Credits : 5-0-0**

**Minor-I**

Economic development – meaning, development and underdevelopment, development gap, measuring development, indices of development and quality of life, international comparisons of development, concept of sustainable development. Underdevelopment – meaning and characteristics.

Stylised facts of growth. Sources of economics growth, economic development and echnological change. Redistribution with growth, measurement of inequality.

**Minor-II**

Dualism-social and technological. Lewis, Ranis and Fei, Jorgenson and Todaro Models. Surplus labour in agriculture - measurement and use. Employment and unemployment in underdeveloped countries.

Theories and models of economics development- Rostow’s stage theory. Schumpeter, Harrod-Domar, Solow, Kaldor, Joan Robinson and Optimal Growth Models. Growth models with technical progress.

**Major (including Minor-I and Minor-II)**

Strategies of economic growth-balanced vs. unbalanced growth and their tests, big push and critical minimum efforts thesis, agricultural strategy for economic development, role of agriculture in development, strategy of agricultural development, Trade and development, dependency theory, theory of unequal exchange, trade policy – impart substitution vs. extract promotion.

Liberalisation, Privatization and globalization policies for economic development.

**Capital formation:** Two gap theory, domestic and external sources, foreign investment, multinationals, foreign aid, trade vs. aid, inflation and economic growth. Human capital formation and its utilisation.

**Suggested Readings:**

1. Higgins, B. : Economic Development Problems - Principles and Policies.
2. Meier, G. : Leading Issues in Economic Development.
3. Yotopoulous P.A. & Nugent: Economics of Development.
4. Chenery, H.B. : Redistribution and Growth.
5. Ghatak, S. : An Introduction to Development Economics.
6. Thirlwall, A.P. : Growth and Development.
7. Thirlwall, A.P. : Financing Economic Development.
8. Todaro, M.P. : Economic Development in the Third World.
9. Kindleberger, C.P. : Economic Development.
10. Dension, E.P. : Why Growth Rates Differ?
11. Scott, M.F. : A New View of Economic growth.
12. Singh, S.P.(ed.) : From Underdevelopment to Development.

**EOL502 : ECONOMETRICS**

**Credits : 5-0-0**

**Minor-I**

Nature, meaning and econometrics, Simple and general linear regression model: assumptions, estimation (OLS methods) ; Gauss-markov theorem ; concepts and analysis of variance approach and its application in regression analysis.

**Minor-II**

Estimation of non-linear equations ; Tests of significance and confidence intervals ; Test of restrictions imposed on the relationship of more parameters ; the Chow test.

**Problems in regression analysis:** Nature, test, consequences and remedial steps of problems of heteroscedasticity, multicollinearity and auto-correlation ; Problems of specification error ; Errors of measurement.

**Major (including Minor-I and Minor-II)**

Dummy variables and their uses ; Regression with dummy dependent variables ; The LPM, Logit, Probit and Tobit models - Applications.

**Simultaneous equations models:** The simultaneous equation bias and inconsistency of OLS estimators ; The identification problem ; Rules of identification- order and rank conditions ; Methods of estimating simultaneous equations system ; Recursive methods ; Indirect Least Squares (ILS), 2 SLS, 3 SLS, K-class estimators and ML methods.

**Suggested Readings:**

1. Johnston, J. : Econometric Methods (1972)
2. Koutsoyiannis : Theory of Econometrics (1978)
3. Gujarati, D. : Basic Econometrics (1978)
4. Chow G.C. : Econometrics, McGraw Hill
5. Madala, G.S : Econometrics
6. Pollock, Beg : The Algebra of Econometrics.
7. Judge, C.G.et. al. : Theory and practice of Econometrics.

**EOD503**

**DISSERTATION**

**Credits: 2-0-0**



**EOL504 : THEORY OF STATISTICS**

**Credits: 5-0-0**

**Minor-I**

Axiomatic definition of probability, Properties of probability function, laws of addition and multiplication of probability, conditional probability, independence of events, Baye's theorem, Chebychev's inequality, random variables, expectation, moments, moments generating function.

**Minor-II**

Theoretical probability distribution; derivation of the properties of uniform, exponential, normal, gamma, beta and log normal distribution.

Properties of good estimators; methods of estimation with emphasis on maximum likelihood method.

**Major (including Minor-I and Minor-II)**

Sampling distributions; Derivation of the properties of z, t and F- distributions.

Basic concepts regarding testing of hypothesis: tests of hypotheses based upon z,t and f distribution : Analysis of variance with one – way and two-way classifications.

**Suggested Readings:**

1. Fisz, Marek : Mathematical Statistics.
2. Goon, A.M., Gupta, M.K. : An Outline of Statistical Theory.  
and Dass Gupta, B. (Vol. 1 and 2)
3. Mood, A.M., Gray Bill, :An Introduction to the Theory of Statistics.  
F.A. and Boes
4. Parzen, A : Probability Theory.
5. Yalun Ghou : Statistical Analysis.

**EOL505: OPERATIONS RESEARCH**

**Credits : 5-0-0**

**Minor-I**

**Operations Research** : Definition, scope and limitations ; linear programming, sensitivity analysis, Parametric programming, Transport model.

**Minor-II**

Dynamic programming and Assignment problem. Sequencing models : 'n' jobs '2' machines, 'n' jobs '3' machines, '2' jobs 'm' machine, and 'n' jobs 'm' machines.

**Major (including Minor-I and Minor-II)**

Game Theory: Competitive games, pure strategy, by Dominance, mixed strategy (2x2, 2xn, mx2). Two persons zero sum game, 'n' persons zero sum game, solution of game problem with linear programming.

Queuing models: characteristics, single channel queuing models: (M/M/I) : (FCFS/ $\infty$ / $\infty$ ), (M/M/1): (STRO/ $\infty$ / $\infty$ ), (M/M/1): (FCFS/N/ $\infty$ ), (M/M/1): (FCFS/n/N) Multichannel queuing model: (M/M/C), (FCFS/ $\infty$ / $\infty$ ).

Project scheduling by PERT and CPM.

Inventory models with deterministic and probabilistic demand.

**Suggested Readings:**

1. Wagner, H.M. : Principles of Operations Research with Applications to Managerial Decisions, Prentice Hall of India, New Delhi, 1980, 2<sup>nd</sup> Ed.
2. Levin, R.I. and Kirkpatrick, C.A. : Quantitative Research : A Managerial Emphasis.
3. Handy A.Taha : Operations Research – An Introduction. Macmillan Publishing Co., New York.
4. Harper, W.M. : Operations Research, ELBS, London, 1979.
5. Hiller, F.S. & Lieberman, G.J. : Introduction to Operations Research, Holden Day Inc., San Francisco, 1981.

**EOL506: INTERNATIONAL TRADE AND INVESTMENT**

**Credits: 5-0-0**

**Minor-I**

Linder's trade intensity thesis and its empirical testing, Product-cycle Theory. Imperfect markets and Technology in international trade. Strategic Trade Policy.

**Minor-II**

Terms of trade and economic growth; Terms of trade and offer curve.

Rationale for protection: Infant industry argument; concept of effective protection; Political economy of Non-Trade Barriers (NTB). Regionalism versus Multilateralism; regional integration among developing countries-SAARC; import substitution and industrialisation.

**Major (including Minor-I and Minor-II)**

Foreign Investment : Portfolio and direct foreign investment; determination of direct foreign investment; benefits and cost issues in foreign direct investment; multinational corporations.

Exports and economic growth; Export instability; Trade liberalisation – meaning and its effects, WTO : TRIMS, TRIPS and Domestic measures.

**Suggested Readings:**

1. R.E. Caves, Jaffrey A. Frankel and R.W Jones: World Trade & Payments : An Introduction, 9<sup>th</sup> Edition, Pearson Education.
2. Grant, L. Reuber : Private Foreign Investment in Development, Chapters 2-6, Clarendon press, Oxford.
3. W.M.Corden : The Theory of Protection.
4. R.Findlay : Trade and specialisation chapters 5 & 6.
5. K.Kojema : Direct Foreign Investment .
6. D.Salvatore : International Economics, McGraw-Hill Book Company.
7. R.E.Caves : Multinational Firms, competition and productivity in host country Markets.
8. B.O. Sodersten : International Economics, IInd Edition, Macmillan Press Ltd. 1980.
9. T.W. Sailors, U.S.Qureshi and E.M.Cross : Empirical Verification of Linder's Trade Hypothesis.
10. H.Askari : A Note on the empirical testing of the Ricardian Theory of Comparative advantage, Southern Economics Journal, June 1972.
11. Paul R. Krugman and Maurice Obstfeld : International Economics Theory and Policy, Sixth edition, Pearson Education.
12. Bath V. Yarbrough, Robert M. Yarbrough (2007) : The World Economy Trade and Finance, Thomson, Sixth edition.

**EOL508 : Environmental Economics**

**Credits : 5-0-0**

**Minor-I**

Environment : Basic concepts, Environment and economics, Distinction between Environmental economics and Ecological Economics. Externalities, common property resources, public goods, resource degradation and market efficiency. Pollution level and basis of efficiency standard, safety standard, safety versus efficiency. Environmental externalities - Piguvian taxes and subsidies, marketable pollution permits, Coase theorem, monitoring and enforcement of environmental regulation, environmental institutions and grass root movements.

**Minor-II**

Environmental and development trade-off, concept of sustainable development, sustainability-neo-classical and ecological views. Integrated environmental and economic accounting and measurement of environmentally corrected GDP.

Measurement of benefits and costs of environmental protection and benefit-cost analysis. Environmental regulation and legislation-air, water, land, chemicals and pesticides, endangered species protection, incentive based regulation, promoting clean technology. Energy policy and environment.

**Major (including Minor-I and Minor-II)**

Global issues - poverty, population and environment, global agreements on environment, political economy of sustainable development, trade and policy environment under WTO regime. Environmental policies.

Mechanism for environment regulation in India ; environmental laws and their implementation ; policy instruments for controlling pollution environmental standards; forestry policy ; people's participation in management of common and forest lands, the institutions of joint managements, social forestry- rationale and benefits.

**Suggested Readings:**

1. Baumol, YAN and W.R.      The Theory of Environmental Policy, Cambridge  
Ostes (1998).                      University Press.
2. Bromely, D.W. (ed)              Handbook of Environmental Economics, Blackwell,  
(1995).                                  London.
3. Hanley, N. and C.J.              Issues in Environmental Economics, Blackwell, Oxford,  
Roberts (ed.) (2002).              Macmillan.
4. Kolstad, C.D. (1999)              Environmental Economics, Oxford, New Delhi.
5. Sankar, U. (ed.) (2001)              Enviromental Economics An Indian Perspective, Oxford,  
New Delhi.
6. Sengupta, R.P. (2001)              Ecology and Economics : An approach to Sustainable  
Development, Oxford, New Delhi.
7. Chadha, G.K. (ed.) (2001)              WTO and Indian Economy, Deep & Deep, New Delhi.
8. Goodstein, E.S. (2002)              Economics and the Environment, John Wiley, New York.
9. Kadekodi, G.K. (2004)              Environmental Economics in Practice, Oxford, New Delhi.

**EOL509 : ECONOMETRICS AND FORECASTING TECHNIQUES**

**Credits : 5-0-0**

**Minor-I**

**Dynamic Econometric Model:** Autoregressive and distributed lag models - Koyck model, partial adjustment model, adaptive expectations ; Instrumental variables ; Almon approach to distributed- lag model : Error correlation mechanism, causality test, Granger test and Sim's test.

**Minor-II**

**Generalized least -square method :** Estimation ; properties of GLS estimators ; pooling of cross-sectional and time series data.

**Time Series Analysis :** Stationary time series and their properties ; Time series forecasting methods : based on single equation model, simultaneous equations model, moving averages, exponential smoothing.

**Major (including Minor-I and Minor-II)**

Unit roots, co-integration-scurious regression, tests of stationarity ; Random walk model, Forecasting with ARIMA modelling ; Box-Jenkins methodology.

Vector autoregression ; Problems with VAR modelling-applications.

Multivariate Analysis : Mahalanobis D - Analysis and Fisher's linear discriminant analysis.

Empirical estimation of production and cost functions.

**Suggested Readings:**

1. Koutsoyiannis, A. : Theory of Econometrics (2<sup>nd</sup> edition)
2. Gujarati, D. : Basic Econometrics(3<sup>rd</sup> edition).
3. Intrilligator, M.D : Econometric Models, Techniques and Applications(1978).
4. Kmenta, Jan : Elements of Econometrics(1971).
5. Makridakis, S and Wheel Right, S.C. : Forecasting and Applications, 1978.
6. Holden, K. Peel D.A.: Economic Forecasts: An Introduction, 1974.  
and Thompson, J.L.
7. O, Donovan :Short-term Forecasts: An Introduction to the Box-Jenkins Approach, 1983.
8. Pindyck, R.S. and. : Economic Models and Economic Forecasts, 1985.
9. Rubinfeld D.L
- 10.Heathfield, D.F, and Wibe, S. : An Introduction to cost and production functions, 1982.

**EOL507: COMPUTER APPLICATIONS FOR ECONOMISTS-II**

**Credits : 4-0-1**

**Minor-I**

**Introduction:** What are numerical methods? Numerical methods versus numerical analysis, software and hardware, Mathematical subroutine Libraries, Functions and subroutines, arrays as parameters in subroutines Algorithm Development.

**Errors:** Round off, Truncation, cancellation.

**Linear Algebraic Equation:** Gaussian elimination, LU factorisation, Iterative methods, Gauss-seidel methods, Successive overrelaxation, Gradient methods, Methods of steepest descent, comparison of direct and iterative methods.

**Minor-II**

**Non-Linear Equations:** Iterative solutions, Multiple roots and other difficulties, Interpolation methods, Methods of bi-section, False position method. Extrapolation methods, Newton Raphson methods, A modified newton- Raphson method for systems.

Interpolation & Curve fitting. An Interpolation problem, Lagrangian Polynomials, Divided Difference, Numerical differentiation, Least square Approximations.

**Numerical Differentiation & Numerical Integration :** Getting Derivatives and Integrals Numerically Derivatives from Difference Tables; Extrapolation Technique, Newton-cotes Integration Formulas, Gaussian quadrature.

**Major (including Minor-I and Minor-II)**

**Numerical solutions of ordinary differential Equations:** Definitions & Types of ordinary differential Equation, Initial value problems, Euler's Modified Euler's methods. The Runge-Kutta methods, predictor corrector method. Euler trapezoidal method, Milne's method.

**Curve fitting:** Methods of least squares, curve fitting, fitting of straight line, fitting of parabola of second degree, fitting of exponential curves, most plausible solution of system of linear equations.

**Suggested Readings:**

1. D.V. Griffiths & J.M. Smith : Methods for Engineers: A Programming Approach.
2. Action Foreman : Numerical Method that works Colub, Gene H. and Van Loan, Charies, F. Matrix Computations
3. V. Rajarman : Computer Oriented Numerical Methods.
4. E.Balagurusamy : Computer Oriented Statistical and Numerical Methods.
5. A.A. Affi : Statistical Analysis : A Computer Oriented Approach.
6. Curtis F. GERAL, Patsick Q Weatley : Applied Numerical Methods, 5<sup>th</sup> Edition, Addison Wesley.

### EOL510: ECONOMICS OF PLANNING

**Credits : 5-0-0**

#### Minor-I

**Planning:** Framework and concept; rationale and types of planning; features of planned economies; planning in third world countries in the context of Globalisation and Liberalisation.

**Time horizon in planning:** Long term, medium term, short term and rolling plan, choice element in planning, techniques of planning and its relevance in third world countries.

**Investment criteria:** Rationale, types and application in project planning.

#### Minor-II

Choice of technique; labour intensive vs. capital intensive controversy; choice of appropriate technology for agriculture and industrial sector in the context of third world countries.

**Capital output ratio:** Types and rationale; intermediate technology case for and against international transfer of technology- channels and salient features in India.

**Project evaluation:** Meaning, origin, rationale, project planning and commercial profitability criteria; social cost benefit analysis-meaning and technique; shadow prices; social rate of discount; Little Mirrless and UNIDO approaches - A comparison.

#### Major (including Minor-I and Minor-II)

**Plan models:** Theoretical foundations, consistency in plan models, static and dynamic input-output analysis, plan optimisation; activity analysis.

**Indian plan models:** Harrod-Domar, Mahalanobis, Frisch and Sandee, Manne and Rudra, CeLP model and its applications.

**Indian Planning:** Strategy, objectives, priorities, financing and investment pattern, implementation and evaluation in the context of targets and achievements.

#### RECOMMENDED READINGS

1. Griffin, K.D. and Enos, J. L. : Planning and Development.
2. Eckaus, P.S. and Parikh, K.S. : Planning for Growth.
3. Ahluwalia, I.J. and :India's Economic Reforms and Development: Essays I.M.D. Little for Manmohan Singh (Selected readings) Oxford University Press, New Delhi, 1998.
4. Rudra, Ashok :Indian Plan Models.
5. Todaro, P. : Development Planning : Models & Methods
6. Sen, A.K. : Choice of Techniques.
7. United Nations : Guidelines for project Evaluation.
8. Bhattacharya,D. : India's five year plans: Economic Analysis.
9. Yotopoulos, P.A. and Nugent, G. : Economics of Development and Planning: An Empirical Analysis.
10. Meier, G(ed.) : Leading Issues in Economic Development (selected readings).

**EOL511: INDIAN ECONOMICS DEVELOPMENT**

**Credits: 5-0-0**

**Minor-I**

**Agriculture sector:** Production and productivity trends; regional variation in production; productivity and their determinants institutional and technological factors, technological change and distribution of gains, agriculture price policy, terms of trade between agriculture and industry, agricultural taxation. Agricultural sector-potential and constraints.

**Minor-II**

**Structural changes and growth of Indian economy :** Output, employment and productivity growth; factors in growth; growth and inequalities; employment and unemployment; saving-investment patterns: Infrastructure for economic development- physical and social.

**Industrial sector:** Pattern of growth and performance: New Industrial policy: Instruments, impact and implications: public sector-role, growth and performance: public sector vs. private sector under NEP.

**Major (including Minor-I and Minor-II)**

**Foreign sector:** Foreign trade policy- New Import – export policy: trends in foreign trade of India, problems of foreign exchange reserves. Foreign collaborations and MNC's GATT 94 and India.

**RECOMMENDED READINGS:-**

1. Wadhwa, C.D.(ed.), Some Problems of India's Economic Policy, 1987.
2. Choudhary, Prमित (ed.), Aspects of Indian Economic Development, 1971.
3. Rao, Hanumantha, C.H., Technological change and Distribution of Gains in Indian Agriculture, 1980
4. Ahluwalia, I.J., Industrialising Growth in Indian Stagnation since Mid 60's 1985.
5. Kapila, Uma (ed.) Indian Economy Since Independence, 1993.
6. Dholkia, B.H., Sources of Economic Growth.



7. Jalan, Bimal (ed.), The Indian Economy Problems and Prospects.
8. Chaudhari, Pramit. The Indian Economy : Poverty and Development, 1978.
9. Brahamanda, P.R. and Panchmukhi, V.R.(ed.) The Development Process of the Indian Economy, Himalaya Publishing House, Bombay, 1987.
10. Dantwala, M.L., Indian Agriculture Development since Independence, Oxford, IBH Pub. Co., New Delhi, 1991.
11. Uppal, J.S. Indian Economic Problems- An Analytical Approach (ed.), Tata McGraw Hill, New Delhi (reprint), 1987.
12. Raj, K.N., Sen, A., Rao, Hamumantha (eds.): Studies on Indian Agriculture, Oxford University Press, Delhi 1988.
13. Saini, G.R: Farm Size, Resource use efficiency and Income Distribution, Allied Publishers Pvt. Ltd., New Delhi, 1979.
14. Ahluwalia, I.J.: Productivity and Growth in Indian Manufacturing, Oxford University Press, Delhi, 1991.
15. Swamy, D.S. The Political Economy of Industrialisation, Sage Publications, Delhi, 1994.

Economic and Political Weekly.

Indian Economic Journal

Indian Journal of Agricultural Economics.

Economics Survey, Govt. of India.

Economic Times and Financial Express.

## **EOL512 : DISSERTATION**

**Credits : 0-2-0**