FACULTY OF ECONOMICS & BUSINESS

SYLLABUS

FOR

PRE PH.D. COURSE IN ECONOMICS (CREDIT BASED EVALUATION AND GRADING SYSTEM)

EXAMINATION: 2019-20



GURU NANAK DEV UNIVERSITY AMRITSAR

Note: (i) Copy rights are reserved. Nobody is allowed to print it in any form. Defaulters will be prosecuted.

> (ii) Subject to change in the syllabi at any time. Please visit the University website time to time.

SCHEME:

Course	Course Name	Credit	Mid Sem.	End Sem.	Practical	Total
Code			Marks	Marks	Marks	Marks
EOL 901	Research Methodology	4	20	80	-	100
EOL 902	Advanced Economic Theory	3	20	80	-	100
EOL 903	Economics of Development and Planning	3	20	60	20	100
	Any one of the Following:-					
EOL 904	Current Issues in Indian	3	20	80		100
	Economy					
EOL 905	International Economics	3	20	80		100
EOL 906	Monetary Theory and Policy	3	20	80		100
EOL 907	Agricultural Economics	3	20	80		100
EOL 908	Industrial Economics	3	20	80		100
EOL 909	Public Finance	3	20	80		100
EOL 910	Labour Economics					
EOL 911	Environmental Economics					

Note: A candidate has to opt one interdisciplinary paper outside the department besides the above papers.

PRE PH.D. COURSE IN ECONOMICS (CREDIT BASED EVALUATION AND GRADING SYSTEM)

EOL901: RESEARCH METHODOLOGY

Time: 3 Hrs.

Credits: 4–0–0 Total Marks: 100 Mid Semester Marks: 20 End Semester Marks 80

Mid Semester Examination: 20% weightage End Semester Examination: 80% weightage

Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION A

Sampling Techniques: Simple random sampling; pps sampling; Stratified random sampling; multistage sampling (applications only). Testing of hypotheses: Sampling distributions, properties (without proof) of t, F and t^2 distributions and tests bases on these distributions. Univariate one-way and two-way analysis of variance, one way multivariate analysis of variance.

SECTION B

Fisher's linear discriminant analysis. Principal component analysis and factor analysis (basic conceptions only).

Model Formulation and specification of General regression model: Problem of estimation and inference; pooling of cross sectional and time series data.

SECTION C

Regression with dummy explanatory variables. Regression with dummy dependent variables-the probit and logit models. Lagged models: the Koyck model, Nerloves Partial adjustment and the Almon (polynomial) model.

SECTION D

Time series forecasting, Box Jenkins based AR, MA, ARMA and ARIMA. models; causality analysis, Concepts of stationarity, unit root, DF, ADF and PP tests; concept of cointegratrion. Simultaneous equations models: identification problems; rank and order conditions. Indirect least squares (ILS) and two state least squares (2SLS) methods of estimation.

References:

D. Dess Gupta A.M. Moon, M.K. Gupta Pranesh Kumar Daroga Singh, Padam Singh T.W. Anderson Hannen, H R.L. Gorsuch Johnston, S. Koutsoyannis, Gujarati, D.N. Dougherty, C. Intriligator, M.

R. Kothari and K.F. Hatt (1952) Richard J. Harris, (1975) L. Nagar and R.K. Das (1998) P.V. Sukwatme and B.V. Sukwatme An Outline of Statistical Theory (Vol. I &II) Handbook of Sampling Methods. An Introduction to Multivariate Statistical Analysis Modern Factor Analysis Factor Analysis Econometric Methods (1972) A Theory of Econometrics 1978 Basic Econometrics, 4th ed., 2004 Introduction to Econometrics, 3rd ed., 2007. Econometrics Models: Techniques and Applications (1978) Methods in Social Research. A Primer of Multivariate Analysis Statistics and Econometrics Sampling Techniques, Theory and Application.

EOL902: ADVANCED ECONOMIC THEORY

Time: 3 Hrs.

Credits: 3-0-0

Total Marks: 100 Mid Semester Marks: 20 End Semester Marks 80

Mid Semester Examination: 20% weightage End Semester Examination: 80% weightage

Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION A

Contemporary pricing practices and strategies - Role of costs and profitability in pricing decisions. Product life cycle pricing, Product line pricing, New product pricing.

SECTION B

Welfare Economics: Pigovian Welfare, Value judgements, Pareto-optimality for a public vs private good, Externalities, their importance and market failure.

SECTION C

Interaction of real and monetary sectors. Theories of consumption. Investment Spending. Liquidity preference; Finance motive and interdependence of real and monetary factors. Crowding out effect.

SECTION D

Inflation-unemployment trade off. Expectations augmented Phillip's Curve. Rational Expectations hypothesis. Real business cycle theory. New-Keynesian economics.

- 1. Briet W. and Hochman H M (ed.) : Readings in Microeconomics.
- 2. Edwin Mansfield (Ed.) : Microeconomics (Selected Reading) 2nd Edition.
- 3. Pindyck, R S, and Rubinfeld, D L: Microeconomics (3rd ed.), PH; New Delhi (1996).
- 4. Katz, M L, and Rosen, H S: Microeconomics, (2nd ed.), Irwin'(1994)
- 5. Kreps, David: A course in Microeconomics Theory, Princeton,(1990).

- 6. Arrow, K.J and M.D. Intrilligator (Ed.) (1981), Handbook of Mathematical Economics, Vol. I, North Holland, Amsterdam.
- 7. Borch, K.H. (1968): The Economics of Uncertainty, Princeton Univ. Press, Princeton.
- 8. Diamond and Rothschild (Eds.) (1978), Uncertainty in Economics, Academic Press, New York.
- 9. Arnold, A. Roger "Macro Economics", Fourth Edition South -Western College Publishing, An International Thomson Publishing Company, Clincinnati, Ohio, USA, 1998 (Ch.-11,13).
- 10. Froyen, Richard T. Macroeconomics, Theories and Policies, Prentice Hall International Inc. London, 1999 (Ch. 8.6, 9,11,12,14).
- 11. Abel, Andrew B & Ben S. Bernanke Macroeconomics, Pearson Education Singapore, 2003 (Ch.12).
- 12. Dornbusch, Rudiger, Fischer, Stanley, and Startz, Richard: "Macro Economics", Eighth Edition, Tata McGrawHill Publishing Company Limited. New Delhi, 2002. (Ch. 18,19,20).
- Levacic, R. Macro Economics: The Static and Dynamics Analysis of a monetary Economy, ELBS, Second Edition, 1986. (Ch. 3-6, 12, 13, 18, 19).
- 14. Romer, David: Advanced Macro Economics, Tata McGrawHill, 1996, (Ch. 4,5,6 part C).
- 15. Jha, Raghhendra: Contemporary Macro Economic Theory and Policy, Wiley Eastern, 1991, (Ch. 9-14, 22).
- 16. Davidson, Paul Post-Keynesian Macro Economic Theory, Edgar Elgar, 1996, (Ch. 2-5, 7-11).

EOL903: ECONOMICS OF DEVELOPMENT AND PLANNING

Time: 3 Hrs.

Credits: 3-0-0

Total Marks: 100 Mid Semester Marks: 20 End Semester Marks 80

Mid Semester Examination: 20% weightage End Semester Examination: 80% weightage

Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION A

Economic Development: Convergence debate, Dualistic Model with unlimited supplies of labour-Todaro model- implications.

SECTION B

Strategies of Development: Balanced vs unbalanced growth, empirical testing of balanced vs unbalanced growth; foreign investment and development.

SECTION C

Human Capital: Meaning, measurement, processes and returns to investment. Growth models: Endogenous growth models (Locus & Romer).

SECTION D

Planning for Development: Rationale in liberalised regime, types; plan implementation and evaluation, investment criteria; rationale & types.

- 1. Yotopolus, P.A. and Nugent, J.B. : Economics of Development Empirical Investigation.
- 2. Meier, G.(ed.): Learning Issues in Economic Development.
- 3. Singh, S.P.(ed.): Underdevelopment to Development Economics.
- 4. Griffin, K.B. and Enos, J.L.: Planning Development.
- 5. Eckaus, R.S and Parik, K.S. : Planningfor Growth.
- 6. Todaro, R. Development Planning, Models and Methods.
- 7. Todaro, M.P.: Economic Development in the Third World.
- 8. Thirlwall, A.P.: Growth and Development with special reference to Developing Countries IInd Edition (1978).
- 9. A.Sen(ed.) (1999) : Growth Economics, Penguin.
- 10. Barro and Martin (1995) Tata Mc-Graw Hills.

EOL904: CURRENT ISSUES IN INDIAN ECONOMY

Time: 3 Hrs.

Credits: 3-0-0

Total Marks: 100 Mid Semester Marks: 20 End Semester Marks 80

Mid Semester Examination: 20% weightage End Semester Examination: 80% weightage

Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION A

Regional variations in agricultural production; Issues in food security; WTO and sustainable agricultural development.

SECTION B

Structural transformation in Indian Economy, Industrial growth: Performance and Recent Policy initiatives; Public – Private Partnership, Shifts in Industrial Policy Paradigm.

SECTION C

Industrial competitiveness in the context of MNC's and domestic business practices. Climate changes, Sustainable development and Energy.

SECTION D

Globalisation and World Trade Organisation (WTO), Difficulties and prospects, Efficacy of regional trade and economic groupings in the contemporary global setting.

- 1. Rao, Hanumantha, C.H., Technological Change and Distribution of Gains in Indian Agriculture, 1980.
- 2. Ahluwalia, I.J., Industrialisation Growth in Indian Stangation since Mid 60's 1985.
- 3. Kapila, Uma (ed.) Indian Economy Since Independence, 1993.
- 4. Dholkia, B.H., Sources of Economic Growth, 1974.
- 5. Jalan, Bimal (ed.), The Indian Economy Problems and Prospects, 1975.
- 6. Brahamanda, P.R. and Panchmukhi, V.R. (ed.) The Development Process of the Indian Economy, Himalaya Publishing House, Bombay, 1987.
- 7. Dantwala, M.L., Indian Agriculture Development since Independence, Oxford, IBH Pub. Co., New Delhi, 1991.
- 8. Raj Kapila and Uma Kapila, India's Ecnomy in the 21st Century, 2002.

EOL905: INTERNATIONAL ECONOMICS

Credits: 3-0-0

Time: 3 Hrs.

Total Marks: 100 Mid Semester Marks: 20 **End Semester Marks 80**

Mid Semester Examination: 20% weightage End Semester Examination: 80% weightage

Instructions for the Paper Setters: Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION A

The Stopler Samuelson Theorem, The Rybczynski Theorem, Contemporary Trade Theories - Trade and economies of scale; Trade and differentiated products and technological gaps; Differences in demand conditions and trade; Structure of demand and trade patterns; Labour skills and trade.

SECTION B

Internal and external balances in balance of payments : The Swan Model; The Assignment Problem.

SECTION C

International reserves : Demand, adequacy and its determinants.

SECTION D

Current Issues : Regionalism versus Multilateralism; Political Economy of Non-Tariff Barriers.

- 1. Soderston, B.O.: (1994), International Economics.
- 2. Ellsworth, P.T. and Leith, J.c. (1975): International Economics.
- 3. Chacholiadas, M.: (1978), International Trade Theory and Policy.
- Snider, D.A. (1975) : Introduction to International Economics 4.
- Salvatore, D. (1990) : International Economics 5.
- Ethier (1995) : Modern International Economics 6.
- I.M.F.: Annual Reports, Staff Papers and Working Papers. 7.
- 8. Gruebel, H.G. (1984): International Monetary System.
- 9. R.B.I.: Report on Currency and Finance (Various Issues).
- Mundell (1968): International Economics. 10.
- Johnson, H.G. (1964): Money, Trade and Economic Growth. 11.
- James, C. Ingram, Robert, M. Dunn: (1978): International Economics (III Ed.). 12.
- Aquino, A. (1978) : Intra-Industry trade and Inter-industry Specialization as a Concurrent 13. Sources of International Trade in Manufacture.
- 14. Krugman, Paul (ed): Strategic Trade Policy and New International Economics.
- 15. Anderson, K. and Blackvest, R. ed (1993): Regional Integration and the Global Trading System.
- V.R. Panchmukhi and Sohan Rehman (1995): Towards an Asian Economic Area. 16.
- World Bank: Policy Research Working Papers. 17.
- 18. Gruebel, H. (1975): Intra-Industry Trade: The Theory and Measurement of International Trade in Differentiated Products.

EOL906: MONETARY THEORY AND POLICY

Time: 3 Hrs.

Credits: 3-0-0

Total Marks: 100 Mid Semester Marks: 20 End Semester Marks 80

Mid Semester Examination: 20% weightage End Semester Examination: 80% weightage

Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION A

Monetarism vs. Keynesianism; New classical view of Monetary economics.

SECTION B

Demand for Money: Issues and evidence, Finance sector reforms and monetary policy.

SECTION C

Rate of Interest: Factors affecting structure of Interest rates, term structure of interest rate, interest rate policy in India.

SECTION D

Financial Markets: Money and Capital Markets in India.

- 1. Thorn, R.S.: Monetary Theory and Policy.
- 2. Laider, D.E.W.: The Demand for Money, Theories and Evidence (1977).
- 3. Glahe, F.R.: Macroeconomics: Theory and policy (1973) Chapter 8,9, New York, Harcaurt Brace Jovanovich.
- 4. Cargill, T.F.: Money, The Financial System and Monetary Policy (1970) Englewood Cliffs, Prentice Hall, 1979.
- 5. Victoria, C.: The Theory of Monetary Policy (1977).
- 6. Gupta, S.B.: Monetary Planning for India (1981); Delhi, Oxford University Press, 1979.
- 7. Meyer, Paul A.: Money Financial Institutions in the Economy, Irwin, 1986 Ch. 29.
- 8. Jadhav, Narendra: Monetary Economics for India, Delhi, Macmillan, 1994.
- 9. RBI Bulletins: Various Issues, Mumbai, Deba Prasad Rath, Reserve Bank of India.
- 10. Reoprts on Currency & Finances in India: Various Reports, Mumbai, Deba Prasad Rath, Reserve Bank of India.

PRE PH.D. COURSE IN ECONOMICS (CREDIT BASED EVALUATION AND GRADING SYSTEM)

Time: 3 Hrs.

EOL907: AGRICULTURAL ECONOMICS

Credits: 3-0-0

Total Marks: 100 Mid Semester Marks: 20 End Semester Marks 80

Mid Semester Examination: 20% weightage End Semester Examination: 80% weightage

Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION A

Institutional Structure: Relationship between institutional structure and agricultural development; Nature of emerging agrarian structure, Productivity of Indian agriculture; Agricultural finance and credit. Problem of rural indebtedness.

SECTION B

Spatial pattern of agricultural development in India; New technology and labour absorption in Indian agriculture.

SECTION C

Output response to prices in agriculture. Agricultural marketing practices in India, E-Marketing, Agricultural trade : External and Internal.

SECTION D

Agricultural Taxation: Agricultural subsidies - Nature, trends and distributional implications; WTO and Indian agriculture.

Suggested Readings: 1. Sourth Worth, H.M. and John Sten, B.F. (ed.)	Agricultural Development and Economics Growth (1967).
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.	
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, Ju Hopkins, Baltimore, 1971.	
11. Rudra, A.	Indian Agriculture Economics; Myths and Realities, All Publishers, N. Delhi-1982.	
12. Bhalla, G.S. & D.S. Tyagi	Patterns in Indian Agricultural Development, ISID, New Delhi, 19	
13. Dentwala, M.L. (eds.)	Agriculture Growth in India, Indian Society for Agricult Economics Bombay, 1986.	
14. Haque, T & A.S. Sirohi	Agrarian Reforms and Institutional change in India, Conc Publishing Co., Delhi, 1986.	
15. Soni, R.N.	Leading Issues in Agriculture Economics, Arihant Press, Jalandl 1995.	
16. Wasriner, D	Land Reforms in Principles and Practice, Oxford University Pri 1960.	
17. Bhalla, G.S.(Eds.)	Economics Liberalization and Indian Agriculture, ISID, New De 1994.	
18. Bharduria, A	The Economics Structure of Backward Agriculture, Macmil Delhi, 1984.	

PRE PH.D. COURSE IN ECONOMICS (CREDIT BASED EVALUATION AND GRADING SYSTEM)

EOL908: INDUSTRIAL ECONOMICS

Credits: 3-0-0

Time: 3 Hrs.

Total Marks: 100 Mid Semester Marks: 20 End Semester Marks 80

Mid Semester Examination: 20% weightage End Semester Examination: 80% weightage

Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION A

Concept and organization of the firm, ownership, control and objectives of the firm; passive and active behaviour of the firm.

SECTION B

Market Structure: Seller's concentration. Product differentiation. Entry conditions. Economies of scale.

Market Conduct: Product pricing – Theories and evidence, Merger and diversification; Advertising Theory and evidence.

SECTION C

Market Performance: Growth of the firm and Constraints on growth.

SECTION D

Industrial Productivity: Concept and measurement; Capacity utilization – Concept and measurement.

Suggested Readings:

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

EOL909: PUBLIC FINANCE

Time: 3 Hrs.

Credits: 3-0-0

Total Marks: 100 Mid Semester Marks: 20 End Semester Marks 80

Mid Semester Examination: 20% weightage End Semester Examination: 80% weightage

Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION A

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 structures, incidence of taxation, effects of taxation on production and distribution.

SECTION B

Direct vs. Indirect Taxes: Direct taxes; its role in less developed countries; Indirect taxes; its importance in developing countries; Proportional vs. progressive taxes; specific vs. advalorem duties; Tax structure in India; Latest tax reforms in India.

SECTION C

Growth of Public Expenditure: Effects of a public expenditure on production and distribution; Structure of public expenditure in India; Distinction between internal and external debt; Management of public debt in India.

SECTION D

Public Budget: Concept and types: performance and program budgeting in India; 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 : Readings on Taxation in Developing Countries. Oliver Oldman

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. Musgrage, R.A.	: Theory of Public Finance.
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 Niranjan & 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 Polic	: Trends and Issues in Indian Federal Finance. y
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).

15 PRE PH.D. COURSE IN ECONOMICS

(CREDIT BASED EVALUATION AND GRADING SYSTEM)

EOL910: LABOUR ECONOMICS

Time: 3 Hrs.

Credits: 3-0-0

Total Marks: 100 Mid Semester Marks: 20 End Semester Marks 80

Mid Semester Examination: 20% weightage End Semester Examination: 80% weightage

Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION A

Labour Markets: Nature and characteristics of labour markets in developing countries like India ; Paradigms of labour market analysis-classical, neo classical and dual labour merger, labour problems and their scope.

SECTION B

Wage Determination: Concepts of minimum wage, living wage and fair wage; Productivity inflation and wage relationship.

SECTION C

Industrial Relations: Trade Union's objectives and functions ; Collective bargaining ; types and theories; Trade Unions in India. Industrial Disputes in India Dispute Settlement Machinery in India.

SECTION D

State & Labour: Concept of social security and its evolution; social assistance and social insurance; State policies with respect to social security and labour welfare in India; Exit policy, need for safety nets; Second National Commission on labour; Globalization and labour markets.

Suggested Readings:

- 1. Dobb, Maurice
- 2. Dunlop, J. T.(ed.)
- 3. _____
- 4. Giri, V.V.
- 5. Mitra, A.
- 6. Papola, T.S.
- 7. Rama Swami E.A. Rama Swami Uma

- : Wages
- : Industrial Relations System
- : Wage Determination under Trade Unionism.
- : Labour Problems in Indian Industry.
- : Share of Wages in National Income.
- : Principles of Wage Determination.
- : 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,
14	: Economics Surveys.

15. I.L.O.

- ts)
- r, 1969.
- : Economics Surveys.
 - : Approaches to Social Society.

PRE PH.D. COURSE IN ECONOMICS (CREDIT BASED EVALUATION AND GRADING SYSTEM)

EOL911: ENVIRONMENTAL ECONOMICS

Credits: 3-0-0

Time: 3 Hrs.

Total Marks: 100 Mid Semester Marks: 20 End Semester Marks 80

Mid Semester Examination: 20% weightage End Semester Examination: 80% weightage

Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION A

Environment : Basic concepts, Environment and economics, Distinction between Environmental economics and Ecological Economics. Externalities, common property resources, public goods, resource degradation and market efficiency.

SECTION B

Environmental and development trade-off, Concept of sustainable development.

SECTION C

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

SECTION D

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. Ostes (1998) The Theory of Environmental Policy, Cambridge University Press.
- 2. Bromely, D.W. (ed) (1995).
- 3. Hanley, N. and C.J. Roberts (ed.) (2002).
- 4. Kolstad, C.D. (1999)
- 5. Sankar, U. (ed.) (2001)
- 6. Sengupta, R.P. (2001)
- 7. Chadha, G.K. (ed.) (2001)
- 8. Goodstein, E.S. (2002)

9. Kadekodi, G.K. (2004)

- Handbook of Environmental Economics, Blackwell, London.
 - Issues in Environmental Economics, Blackwell, Oxford, Macmillan.
- Environmental Economics, Oxford, New Delhi.
- Enviromental Economics An Indian Perspective, Oxford, New Delhi.
- Ecology and Economics : An approach to Sustainable Development, Oxford, New Delhi.
- WTO and Indian Economy, Deep & Deep, New Delhi.
- Economics and the Environment, John Wiley, New York.
- Environmental Economics in Practice, Oxford, New Delhi.