

DEPARTMENT OF ECONOMICS



UNIVERSITY OF BURDWAN

Syllabus for M.Phil Coursework 2017-18 Session onwards

Preamble

The Department of Economics, University of Burdwan proposes to revise the syllabus for PhD Coursework in Economics leading to M.Phil degrees, keeping in line with the recent UGC guidelines, University Regulations, changing academic scenario and needs of both academics and job-market.

The salient features of the syllabus are as follows:

- The Coursework shall be spread over 2 semesters.
- Each paper shall be of 4 credits each requiring 4 lecture hours per week.
- A candidate has to earn 24 credits to qualify in the Coursework
- There shall be two types of papers/courses: Core Course – A course which should compulsorily be studied by a candidate as a core-requirement is termed as a Core course. These are compulsory courses under the concerned department; Elective Course – Generally a course which can be chosen from a pool of courses.
- 4 credits shall have to be earned from Departmental Core Course on Research Methodology and shall be Compulsory (marked with an * in the framework)
- A student may opt for Electives from sister departments subject to extant University regulations allowing them to do so. In this case a maximum of 4 credits can be earned from Non-departmental Electives (note that departmental class-routine shall not accommodate such non-departmental electives).
- Each paper of 4 credits shall have 4 hour session of Lectures per week over a period of one semester of 16 weeks for teaching-learning process.
- The performance of a candidate in a theoretical course (paper) will be assessed for a maximum of 50 marks as explained below:
 - 40 marks as end-semester examination
 - 10 marks as Term Paper/Seminar Presentation/Practical/ Assignment, modalities for which are to be decided by the concerned course-in-charge and notified to the students at the beginning of the semester. For the paper on Research Methodology, this will be in the form of Computer Practical and Assignment.
- The performance of a candidate in a Term Paper & Presentation will be assessed for 50 (25+25) marks based on assessment of the Review submitted during end of semester and Presentation.
- In case of any difference between the clauses cited here and University Regulations, the University Regulations shall prevail.

Framework of the Syllabus

	<i>Name of Paper</i>	<i>Type</i>	<i>Credit</i>		<i>Pattern</i>			
				Marks	L	T	P	
First Year	<u>First Semester</u> [<i>Students have to choose 1 core course, 1 Elective and 1 Term Paper. They may opt for ONE Non-departmental Elective paper subject to prior approval</i>]							
	• Research Methodology-I (ECN 101)	Core Compulsory	4	50	2	0	2	
	• Advanced Econometrics-I (ECN 102A) [@]	Optional	4	50	3	0	1	
	• Resource Economics and Sustainable Development (ECN 102B) [@]	Optional	4	50	4	0	0	
	• Agricultural Economics (ECN 102C) [@]	Optional	4	50	4	0	0	
	• Labour Economics (ECN 102D) [@]	Optional	4	50	4	0	0	
	• Advanced Econometrics-II (ECN 102E) [@]	Optional	4	50	3	0	1	
	• Advanced Financial Economics (ECN 102F) [@]	Optional	4	50	4	0	0	
	• Term Paper & Seminar Presentation-I (ECN 103)*	Core Compulsory	4	25+25 =50	0	0	4	
	Sub-total			12	150			
	<i>*This term paper is mainly based on literature survey.</i>							
	<u>Second Semester</u> [<i>Term Paper & Seminar Presentation is compulsory & + Students have to opt for TWO Optional – one from 201A/B/C and one from 202A/B/C</i>]							
		<i>Name of Paper</i>	<i>Type</i>	<i>Credit</i>		<i>Pattern</i>		
					Marks	L	T	P
		• Advanced Economic Theory (ECN 201A) ⁺	Advanced Optional-I	4	50	4	0	0
	• Regional Development in India (ECN 201B) ⁺	Advanced Optional-I	4	50	4	0	0	
	• Political Economy of Development (ECN 201C) ⁺	Advanced Optional-I	4	50	4	0	0	
	• Social Choice Theory (ECN 202A) ⁺	Advanced Optional-II	4	50	4	0	0	
	• Economics of Infrastructure & Development (ECN 202B) ⁺	Advanced Optional-II	4	50	4	0	0	
	• Game Theory (ECN 202C) ⁺	Advanced Optional-II	4	50	4	0	0	
	• Term Paper & Seminar Presentation-II (ECN 203)	Compulsory	4	25+25 =50	0	0	4	
	Sub-Total			12	150			

Second Year	Third and Fourth Semesters				
	<i>Course Title</i>	<i>Type</i>	<i>Credit</i>	<i>Marks</i>	
	Dissertation (ECN 301)	Dissertation(ECN 301A)	<i>Core Compulsory</i>	12	150
		Viva Voce (ECN 301B)	<i>Core Compulsory</i>	4	50
<i>Sub Total</i>		16	200		
Grand Total			40	500	

Question Pattern

1. In each paper of 50 marks (4 credits) the End-semester examination shall be of 40 marks. There shall be 8 questions of 10 marks each from which 4 questions are to be answered by the candidates (Time 2 hours).
2. In each paper of 50 marks (4 credits) which has two groups within it, the End-semester examination shall be of 40 marks. There shall be 4 questions of 10 marks from each group. Candidates are to answer 4 questions taking 2 from each group. (Time 2 hours).
3. Paper ECN 103 (Term Paper on Literature Review) shall be in the form of an assignment which the candidate shall have to submit within a stipulated date fixed by the Doctoral Committee and thereafter has to present it in the form of a seminar.
4. Paper ECN 203 (Term paper & Seminar Presentation) shall be in the form of an assignment which the candidate shall have to submit within a stipulated date fixed by the Doctoral Committee/PGBS/RAC and thereafter has to present it in the form of a seminar.
5. Title and Subject of the M.Phil Dissertation will be chosen by the candidate in consultation with the supervisor concerned.

DETAILED SYLLABUS

**[Any Elective paper will be offered only if a minimum
number of students opt for it]**

First Semester
Compulsory Paper
ECN 101
Research Methodology-I
Full Marks: 50
Lecture Hours: 64

This paper has three groups A, B and C. Group C is Compulsory. Additionally Candidates are required to opt for either Group A or Group B. However, both Group A, Group B may not be offered in a given year.

Group A
Methodology for Empirical Research

- 1. Practical Issues in Testing of Hypothesis (20 Lecture Hours)**
One sample parametric tests - One sample mean test, ANOVA - One sample variance test; Two sample parametric tests - Two independent sample mean test, Paired means test, Two samples variance test; Test of significance for large and small samples – Student’s ‘t’ test and Z-test; tests for Mean and difference between means and difference between proportions; Non Parametric tests - Chi-square test; Mann-Whitney Test; Wilcoxon Signed Rank Test
- 2. Field Survey Techniques (20 Lecture Hours)**
Overview of the survey process; Sources of survey error; Sample design; Question design; Question testing; Methods of data collection; Psychology of survey response; Accounting for non-response; Use of survey weights; Post-Collection Data Adjustments; Legal/Ethical Issues in Survey Research

Group B
Methodology for Theoretical Research

- 1. Basic Mathematical Foundations (20 Lecture Hours)**
 - a. Linear algebra;
 - b. Differential calculus of functions of several variables,
 - c. Elementary real analysis;
- 2. Optimisation Techniques; (20 Lecture Hours)**
 - a. Unconstrained and constrained classical optimization
 - b. Static Optimisation
 - c. Dynamic Optimisation;

Group C
(Compulsory Part: Computer Applications)

- 1. Computer Usage – Basics (2 Lecture Hours)**
- 2. Programs for Document Preparation and Presentation (4 Lecture Hours)**
- 3. Spreadsheet Solutions (6 Lecture Hours)**
- 4. Using Cross-sectional data estimation programs (12 Lecture Hours)**

Data visualisation & Descriptive statistics; Hypothesis testing (one- and two-sample); Tests of association for Nominal and Categorical data; Multiple linear regression and solution of associated problems; Analysis of variance (ANOVA)

References

- Allen, R. G. D. (1974) *Mathematical Analysis for Economists*, Macmillan Press and ELBS. London
- Angrist, Joshua D. and Jorn-Steffen Pischke (2008), *Mostly Harmless Econometrics: An Empiricist's Companion* [PB], Princeton University Press
- Apostol, T.M. (1974) – “*Mathematical Economics*”, 2nd edition, Addison Wesley
- Archibald, G.C. & R.G. Lipsey (1976) – “*An Introduction to Mathematical Economics--Methods and Applications*”, Harper and Row.
- Avellaneda, Marco (ed) (2001) – “*Quantitative Analysis in Financial Markets*”, Vol. I, Vol. II and Vol. III, World Scientific.
- Baumol, W. J. (1984) *Economic Theory and Operations Analysis*, Prentice Hall, Englewood Cliffs, New Jersey.
- Chiang, A. C. (1992) – “*Elements of Dynamic Optimization*”, McGraw Hill.
- Chiang, A. C. and K Wainwright (2005) – “*Fundamental Methods of Mathematical Economics*”, McGraw Hill, New York.
- Dixit, A.K. (1990) – “*Optimization in Economic Theory*”, Oxford University Press.
- Dixit, A.K. and Susan Skeath (1999) – “*Games of Strategy*”, W. W. Norton & Company
- Dorfman, R., P.A. Samuelson and R.M. Solow (1958) - *Linear Programming and Economic Analysis*”, McGraw Hill
- Fudenberg, D., and J. Tirole (1991) – “*Game Theory*”, MIT Press
- Gibbons, Robert (1992) – “*Game Theory for Applied Economists*”, Princeton University Press
- Goodle William J. Hatt Paul K.: *Methods in Social Research*, McGraw-Hill Book Company.
- Gravelle, H. and R. Rees (2004) – “*Microeconomics*”, 3rd Edition, Prentice Hall
- Gujarati, D (Latest Edition) - *Basic Econometrics*, Tata McGraw Hill;
- Hadley, G. (1962) *Linear Programming*, Addison Wesley, Publishing Co. Massachusetts.
- Hardle, W. (1990), *Applied Nonparametric Regression*, Econometric Society Monographs, Cambridge
- J.C. Hull (2002) – “*Options, Futures & Other Derivatives*”, Prentice-Hall of India : New Delhi.
- J.Y. Campbell, A.W. Lo and A.C. Mackinlay (1997) – “*The Econometrics of Financial Markets*”, Princeton University Press : New Jersey, 1997.
- Ken Binmore (1991) – “*Fun and Games: A Text on Game Theory*”, D. C. Heath and Company
- Kothari, C. R. (1992) – “*An Introduction to Operations Research*”, Vikas Publishing House, New Delhi.
- Kurien, CT (ed.), *A Guide to Research in Economics*, Sangam Publishers, Madras, 1973.
- Lancaster, K. (1975) – “*Mathematical Economics*”,.
- Mustafi, C. K. (1992) – “*Operations Research Methods and Practice*”, Wiley Eastern, New Delhi.
- Rosenlicht, Maxwell (1985) – “*Introduction to Analysis*”, Paperback, Dover Publications
- Scotter A Miller 2007 *Developmental Research Methods*, Sage Publication
- Shy, Oz (1996) – “*Industrial Organization: Theory and Applications*”, MIT Press
- Silberberg, E. (2000) – “*The Structure of Economics: A Mathematical Analysis*”, McGraw Hill
- Vygodsku, G. S. (1971) *Mathematical Handbook (Higher Mathematics)* Mir Publishers, Moscow.
- Yuh-Dauh Lyuu : *Financial Engineering and Computation*, Cambridge University Press.

Optional Papers

ECN 102A

Advanced Econometrics - I

(Time Series Econometrics)

Full Marks: 50

Lecture Hours: 64

- 1. ARIMA Modelling (10 Lecture Hours)**
Testing for Stationarity – Stationary, TSP and DSP;
Determining Order of Integration - Checking for Cointegration;
Box-Jenkins methodology of Identification, Estimation and Diagnostic Checking of ARIMA Models;
- 2. Causality Tests and Vector Auto Regression (10 Lecture Hours)**
Granger Causality
Vector Auto Regression (VAR) – Strength of Causality – Impulse Response Function – Variance Decomposition;
- 3. Long Run Relationships (10 Lecture Hours)**
Vector Error Correction (VEC) Models – Long Run Multipliers – Impact Factors
Spline Function and Dynamics of Relationship.
- 4. Working with Panel Data (16 Lecture Hours)**
General definitions – Balance and Unbalanced Panel; Pooled Regression
- 3. Using Time Series data estimation programs (10 Lecture Hours)**
- 4. Using Panel data estimation programs (8 Lecture Hours)**

References

- Amisano, Gianni and Carlo Giannini (1997) - Topics in Structural VAR Econometrics, 2nd ed, Springer
- Angrist, Joshua D. and Jorn-Steffen Pischke (2008), Mostly Harmless Econometrics: An Empiricist's Companion [PB], Princeton University Press
- Enders, Walter – Applied Time Series Econometrics.
- Gujarati (2008) - Basic Econometrics, Tata McGraw Hill;
- Johnston and Dinardo, (1997), Econometrics Methods, 4th edition, McGraw Hill International Edition.
- Judge, George G., W. E. Griffiths, R. Carter Hill, Helmut Lütkepohl, and Tsoung-Chao Lee (1985). The Theory and Practice of Econometrics, 2nd edition, John Wiley & Sons.
- Lütkepohl, Helmut (1991). Introduction to Multiple Time Series Analysis, Springer-Verlag.
- Mills, T.C. (1991) - Time Series Techniques for Economists, CUP

ECN 102B

Resource Economics & Sustainable Development

Full Marks: 50

Lecture Hours: 64

- 1. Environment asset as pure public good (6 lectures)**
Public vs Private Goods; Market failure and public good, optional allocation of resources for public good.
- 2. Optional extraction of resources (10 lectures)**
Exploration and extraction of exhaustible resources, common property resources; Methods, Rules, Theorems
- 3. Conservation versus Exploitation (10 lectures)**
Trade-off between exploitation of environment for development and environmental conservation; Modelling environmental preservation and development.
- 4. Sustainable Development (6 lectures)**
Concept of sustainable development, Environmental accounting and green NNP, The concept of green NNE as linearised Hamiltonian.
- 5. Climate Change (16 lectures)**
What is Climate Change; Modelling of the economics of green house effect and climate-change. Global warming problem – Causes and Consequences; Climate change and Economic Policies; Development & Climate Change
- 6. International Treaty on Environment (16 lectures)**
UNPCC; Montreal Protocol : Statement and explanation, Modelling of the benefits of Co-operative treaty compared to non-co-operation; Paris Declaration;

References

1. D Pearce and RK Turner: Economic of Natural Resources and the Environmen, Prentice.
2. N. Hanley, J. Shogren and B. White : Environmental Economics in Theory and Practice, Macmillan.
3. R.N. Bhattacharyya (Ed.) : Environmental Economics, OUP
4. J.M. Conrad and C. Clark : Natural Resource Economics, CUP
5. J.M. Conrad : Resource Economics, Cambridge University Press.
6. Phillip Neter : Natural Resource Economics.
7. Anthony Fisher : Environmental and Resource Economics, Edward Elgar
8. Kanchan Chopra, Purnamita Dasgupta “Natural Resource Dependence on Common Pool Resources : An Empirical Study EPW Feb 23-29, 2008.
9. D. Browley (Ed.) The Handbook of Environmental Economics, Blacked

ECN 102C
Agricultural Economics
Full Marks: 50
Lecture Hours: 64

- 1. Importance of Agricultural Economics (8 Lectures)**
Agriculture and Economic Development; Future Role of Agriculture; Main Feature of Indian Agriculture and Agricultural Policy; Soil Erosion, Conservation, and Sustainable Agriculture.
- 2. Land Use (8 Lectures)**
Land Utilization & Cropping Pattern; Forest and Social Forestry; Operational Holdings Fragmentation and Sub Division of Holdings; Land Reforms
- 3. Agricultural Marketing and Pricing (20 Lectures)**
Agricultural Price and Policy; Role of CACP; MSP and its impact; Agricultural Commodity Futures and Options; Nature and Principles of Future Markets; Participants in Future Markets; Trading in the Presence of Risk Aversions and Transaction Costs, Future Prices as Forecasts; Impact of Futures Trading; Agro-processing as Marketing Strategy; Specificities of Agro-processing, Developmental Role of Agro-processing Industries, Selection and Evolution Options; Food Processing Policy of India, 2005.
- 4. Recent Issues in India Agriculture (16 Lectures)**
Mechanization in Agriculture; Sources of Irrigation; Impact of Irrigation; Agricultural Finance: Agency Relationship, Adverse Selection, Moral Hazards and Enforcement Problem; Segmented Rural Credit Markets; Resolving Information and Incentive Problems; Managing Borrowers' Credit Risks, Agribusiness and Trade Financing and Role of Social Capital; Taxation on Agricultural Income; Role of NABARD;
- 5. Farm Management (6 Lectures)**
Farm Organization; Farm Planning & Budgeting; Co-operative farming
- 6. Political Economy of Global Agricultural Economics (8 Lectures)**
Protection across countries and sectors; Influence of global financial and political institutions; Collective actions of lobbying groups; Use of inefficient instruments and rent seeking; Public investment in agricultural research and TRIPS.

References

- Agrawal, A.N. : Indian Agriculture
- Bruce L. Gardner and Gordon C. Rausser (2002): Handbook of Agricultural Economics, Vol-1A,1B, 2A, 2B and 3; North-Holland, Amsterdam
- Eicher, C.K. and L.W. Witt: Agriculture in Economic Development
- Government of India (2004): State of the Indian Farmer : A Millennium Study, Academic Foundation and Ministry of Agriculture, New Delhi, (Vol. 1-27)
- Government of India (2005): Food Processing Policy, Ministry of Food Processing, New Delhi.

- James G. Brown and Deloitte and Touche (1994): Agro-industrial Investment and Operations, Washington, The World Bank.
- Khusro, A.M. : Reading in Agricultural Development
- Khusro, A.M. and A.N. Agrawal - The Problem of Co-operative Farming in India
- Khusro, A.M.- The Economic of Land Reforms and Farm size
- Radhakrishna R, S. K. Rao, S. Mahendra Dev and K Subbarao (2006): India in a Globalising World: Some Aspects of Macroeconomy, Agriculture and Poverty, Academic foundation, New Delhi.
- Sadhu & Singh : Agricultural Economics
- T.W.Schultz (1981): Investing in Peoples: The Economics of Population Quality, University of California, Berkley.
- Tygi, B.P. - Agricultural Economics & Rural Development

ECN 102D
Labour Economics
Full Marks: 50
Lecture Hours: 64

- 1. Labour Markets: (16 lectures)**
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.
- 2. Wage Determination: (16 lectures)**
Concepts of minimum wage, living wage and fair wage; Productivity inflation and wage relationship.
- 3. Industrial Relations: (16 lectures)**
Trade Union's objectives and functions ; Collective bargaining ; types and theories; Trade Unions in India. Industrial Disputes in India Dispute Settlement Machinery in India.
- 4. State & Labour: (16 lectures)**
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.

References

- Dobb, Maurice: Wages
Dunlop, J. T.(ed.): Industrial Relations System
Dunlop, J. T.(ed.): Wage Determination under Trade Unionism.
Giri, V.V.: Labour Problems in Indian Industry.
Mitra, A.: Share of Wages in National Income.
Papola, T.S.: Principles of Wage Determination.
Rama Swami E.A.: Industry and Labour.
Reynolds, L.G. : Labour Economics and Labour Relations.
Rothchild : Theory of wages.
Saxena, S.R.and Saxena, R.C. : Labour Problems and Social Welfare.
Government of India : Indian Labour Year Book (Various Issues)
Government of India : Labour Investigation Reports (Main Reports)
Government of India : Report on National Commission on Labour, 1969.
Government of India : Economics Surveys.
I.L.O. : Annual Reports and Yearbooks
ILO Approaches to Social Security.

ECN 102E

Advanced Econometrics - II

Full Marks: 50

Lecture Hours: 64

Group A (25 marks)

Qualitative Regression Methodologies

- 1. Multiple Discrete Choice Models (16 Lecture Hours)**
Ordered Probit / Logit; Sequential Probit / Logit; Methods of estimation; Multinomial Logit (MNL); the Independence of Irrelevant Alternatives (IIA) assumption; Multinomial Probit models; Measuring Goodness of Fit; Testing assumptions; Application of Multinomial Logit Models.
- 2. Using Software for Qualitative Regression (16 Lecture Hours)**

Group B (25 marks)

Efficiency Estimation

- 1. Concepts of Efficiency Estimation (16 Lecture Hours)**
Definitions of technical and scale inefficiency;
Input and output orientations (using functional relationships); Use of production & distance functions (graphical, mathematical, programming specifications)
Efficiency Indicators and Indexes: Farrell's Approach
Deterministic Frontier Models: (a) Linear and Quadratic Programming Method (b) COLS (c) MOLS
- 2. Software for Efficiency Estimation (16 Lecture Hours)**

References

- Angrist, Joshua D. and Jorn-Steffen Pischke (2008), Mostly Harmless Econometrics: An Empiricist's Companion [PB], Princeton University Press
- Coelli T.J., Estache A., Perelman S. and Trujillo L. (2003), A Primer on Efficiency Measurement for Utilities and Transport Regulators, World Bank Publications, Washington.
- Cooper, W.W., L. M. Seiford, and K. Tone, Data Envelopment Analysis: A Comprehensive Text with Models, Applications, References and DEA-Solver Software, Kluwer Academic Press, 2000.
- Daraio, C. and L. Simar, Advanced Robust and Nonparametric Methods in Efficiency Analysis: Methodology and Applications, Springer, New York, 2007.
- Gujarati (2008) - Basic Econometrics, Tata McGraw Hill;
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- M. Farrell, 'The Measurement of Productive Efficiency,' Journal of the Royal Statistical Society, Series A, 1957, 120(3):253-290.
- Maddala, G.S (1983), Limited-Dependent and Qualitative Variables in Econometrics, Econometric Society Monographs, Cambridge
- R. Färe and S. Grosskopf, New Directions: Efficiency and Productivity, Springer Verlag, 2005.
- Stock, James H. and Mark W. Watson (2007), Introduction to Econometrics, 2/E, Pearson
- T. Coelli, D.S. Prasado Rao, Christopher O'Donnell, G. E. Battese, An Introduction to Efficiency and Productivity Analysis, second edition, Springer Science & Business Media, New York, 2005.

ECN 102F
Advanced Financial Economics

Full Marks: 50
Lecture Hours: 64

1. Index Models, CAPM & APT: Models of asset returns, single index model, multi index model, estimation of beta; arbitrage pricing theory.
2. Fixed Income Securities: Introduction, measure of price sensitivity and hedging, portfolio performance evaluation.
3. Pricing of Option, Futures and other Derivative Assets: Pricing of futures & forward, Option Pricing models: Black & Shocks Model, real option pricing, Pricing of American Options, pricing of other derivatives.
4. Event Study Methodology and Volatility Measures: Various approaches to event study methodology, measurement of risk and returns & use of test statistics. Measures of asset price volatility.
5. Behavioral Finance: Basic premises of behavioral Finance, Revisiting Efficient Market Hypothesis and financial market anomalies, theories of behavioral finance.

Reference:

- i. Compbell, J.Y.Lo.A.W. and Mackinloy ,A.C.: The Econometrics of financial Markets,Princeton University Press, 1997
- ii. Dubotsky, D.A. and Miller, Thi Derivatines: Valuation and Risk Management, Oxford University Press, 2003
- iii. Bodie, Z,A kare and A.J. Marcus: Investments, Irwin McGraw-Hill. 2005
- iv. Fabozzi,F: Bond Market, Analysis and Strategies, prentice Hall, 2004
- v. Tuckmon, B: Fixed Income Securities, Willey Finance, 2002
- vi. Hull , J: Options, Futures and other Derivatives, fifth edition, Prentice Hall, 2002.
- vii. Elton, E.J. and M.J. Gruber: Modern Portfolio Theory & Investment Analysis ,(4th edition), John Wiley & Sons. 1991.
- viii. M.M. Sulphey Behavioral Finance, P.H.I., 2014.

ECN 103

Term Paper & Seminar Presentation-I

Full Marks: 50

25 on Term Paper + 25 on Presentation

This paper shall be in the form of a Term Paper which the candidate shall have to submit within a stipulated date fixed by the RAC and thereafter present it.

Frame work of guide lines for writing the Term Paper

- I. Preliminary Section (of 500-750 words) providing Concept of literature review, Objectives of literature review, Importance of literature review, Methods/ procedure /steps in literature review, Types of literature review (classification), Sources of literature, Planning of the review work etc.
- II. Main Review (of 3000-5000 words) with subsections on - Issue / Topic of Research and Motivation; Review of Existing Literature – International and National; Identification of research gaps and researchable issues; Proper Bibliography of the reviewed items (Books, Journals articles, Reports and documents, Working papers, Case Studies, Monographs, Edited volumes, Citations, Websites, Encyclopedias, Year books, Seminar reports and conference proceedings, Micro forms: Audio visual types, micro card, micro films, Research abstracts, University news, Unpublished thesis and other works Etc.)

The above guidelines are common to all the candidates. However depending on the research topic, the candidate and supervisor have the freedom to work out the micro details of the literature review.

Second Semester
Advanced Optional Papers
ECN 201A
Advanced Economic Theory -I

Full Marks: 50
Lecture Hours: 64

- 1. Adverse selection, Signalling and Screening (12 Lectures)**
Introduction - Informational Asymmetries and Adverse Selection – Signaling - Screening.
- 2. The Principal Agent Problem (12 Lectures)**
Introduction - Hidden action (Moral Hazard) - Hidden Information (and Monopolistic Screening) - Hidden actions and Hidden Informatins (Hybrid Models)
- 3. Social Choice Theory (12 Lectures)**
Need for community decisions and its dilemma - Axiomatic treatment of Individual preferences - Different definitions of Rationality - Choice sets, Maximal sets and other related mathematical concepts - importance of morality - “Rational Fools” - Pareto rules and its extensions - normative evaluations of the existing public choice mechanisms - Arrow’s impossibility and its extensions - Rights and justice - interest, well-being and advantage
- 4. Axiomatic Bargaining Theory (12 Lectures)**
The Axiomatic Bargaining Approach - Nash Solution - Kalai-Smorodinsky solution - Coalitional Bargaining and Shapley value.
- 5. Dynamic Issues in Economics (12 Lectures)**
Intertemporal Choice - Intertemporal Production - Overlapping Generations - Tâtonnement and Learning - Introduction to chaos theory - Some economic models with chaos

References

Barro and Salai-Martin: Growth Theory
Bose, Rakshit and Sinha (eds): Issues in economic Theory and Public Policy
Mascollel, Whinston, Green: Microeconomic Theory
Mueller: Public Choice
Romer: Advanced Macro-economics
Ronald Shone: Economic Dynamics
Sen: Choice, welfare and Measurement
Sen: Collective Choice and social welfare
Varian: Microeconomics

ECN 201B
Regional Development in India

Full Marks: 50
Lecture Hours: 64

- 1. Significance of Regional Disparities** (6 Lectures)
Theories of Divergence and Convergence
Measures of Divergence and Convergence
Regional Disparities in Colonial India
- 2. Regional Disparities in post-independence India** (10 Lectures)
Trends in Regional Disparities in Income & Consumption
Sectoral Income and Employment Pattern across regions
- 3. Regional Distribution of Industrial Development** (10 Lectures)
Industrial Locational Theories
Dispersal of Industries to Backward Areas under Licensing Regime
Spatial Concentration of Industries in Liberalised Regime
Regional Differences in Industrial Wages
- 4. Regional Disparities in Agricultural Growth and Productivity** (10 Lectures)
Trends in regional agro production and productivity
Role of Public Spending
- 5. Regional Distribution of Infrastructure** (12 Lectures)
Trends in regional disparities in Infrastructure
Association with Regional Disparities in Development
- 6. Current Economic Policies and Regional Disparity** (12 Lectures)
- 7. Regional Economic Blocks** (4 Lectures)

References

- Adelman, I. and C.T. Morris (1973) – Economic Growth and Social Equity in Developing Countries, Stanford, USA
- Ahluwalia, M. (1976) – “Inequality, Poverty, and Development”, Journal of Development Economics, Vol. 6
- Anand, S. and R. Kanbur (1993) – “The Kuznets Process and the Inequality-Development Relationship”, Journal of Development Economics, Vol. 40
- Anand, S. and R. Kanbur (1993a) – “Inequality and Development: A Critique”, Journal of Development Economics, Vol. 41
- Kuznets, S. (1955) – “Economic Growth and Economic Inequality, *American Economic Review*, Vol. 45,
- Kuznets, S. (1963) – “Quantitative Aspects of Economic Growth of Nations: VIII, Distribution of Income by Size”, *Economic Development and Cultural Change*, Vol. 12.
- Mathur, Ashok (2000), National and Regional Growth Performance in the Indian Economy, in Reform and Employment, New Delhi, IAMR and Concept Publishers.
- Shand, Ric and S. Bhide (2000), “Sources of Economic Growth: Regional Dimensions of Reforms,” Economic and Political Weekly, Vol. 35, No. 42, October 14.

ECN 201C

Political Economy of Development

Full Marks: 50

Lecture Hours: 64

- 1. Economic Distance between Nations – Historical Theories** (14 Lectures)
Convergence- Divergence Hypothesis
Stages of Development
Dualistic Theories
Critical appraisal of Metropole-Periphery theories
- 2. Recent Patterns of International Growth and Development** (14 Lectures)
Growth Experience
Perpetuating Underdevelopment
Poverty and Inequality in New World
Role of Trade, Financial Flows and State
- 3. Political Economy of New Regime** (12 Lectures)
Background and Implications of Structural Adjustment Programme
Financial Liberalisation and its Impacts
- 4. Political Economy of Privatisation** (12 Lectures)
Impact on Redistribution
Impact on Social Sector Development
Implications for Human Development
- 5. Reclaiming Development** (12 Lectures)

References

- Bardhan, Pranab - The political economy of development in India
- Chang, Ha-Joon (ed) (2003) - Rethinking development economics, Anthem Press.
- Chang, Ha-Joon and Ilene Grabel (2004) - Reclaiming Development: An Economic Policy Handbook For Activists And Policymakers
- Giovanni Arrighi, Beverly J. Silver and Benjamin D. Brewer (2003) - Industrial convergence, globalization, and the persistence of the North-South divide, Studies in Comparative International Development, Volume 38, Number 1 / March, 2003
- Meier, Gerald M. and Joseph E. Stiglitz (2001) - Frontiers of development economics: The Future in Perspective, Oxford University Press
- Toye, John (1993) - Dilemmas of Development: Reflections on the Counter-Revolution in Development Theory and Policy, First Edition, Blackwell, Oxford, UK and Cambridge, USA, 1987, Second Edition, 1993
- Toye, John (1995) - Structural Adjustment and Employment Policy: Issues and Experience, International Labour Organisation, Geneva, 1995.
- Rudolph and Rudolph - In Pursuit of Laxmi

ECN 202A
Social Choice Theory

Full Marks: 50
Lecture Hours: 64

- 1. Relevance of Social choice Theory (12 Lectures)**
Need for community decisions and its dilemma – evaluations of policies or projects that would affect welfare of the community; Implications for the mainstream economic thinking – Some examples (provision of health care, education, losers and gainers in economic growth process, gender issues, various forms of social and non-economic discriminations, environmental perspectives etc.)
- 2. Axioms of Individual Choice-The Basis of Social Choice theory (12 Lectures)**
Axiomatic treatment of Individual preferences – Different definitions of Rationality - Choice sets, Maximal sets and other related mathematical concepts; Importance of morality - “Rational Fools”
- 3. Positive Social Choice (12 Lectures)**
Public choice in a direct democracy-Basic concepts of preference revelations; Public Choice in a representative democracy – Exit, voice and loyalty; Government and Bureaucracy
- 4. Normative Social Choice (12 Lectures)**
Pareto rules and its extensions – Normative evaluations of the existing public choice mechanisms; Arrow’s impossibility and its extensions – Rights and justice; Interest, well-being and advantage
- 5. Some applications of the Social Choice Theory (16 Lectures)**
Famine and entitlement – Study of some famines or famine like situations; Poverty and Inequality; Development as freedom – Evaluation of globalization and reform policies; Labour market as a social phenomenon – Social choice theoretic interpretation of unemployment; Development as Choice – basic incompleteness in the welfare theoretic evaluations

References

Basu K. and Foster J.E. On measuring literacy
Bose, Rakshit and Sinha (eds): Issues in economic Theory and Public policy
Mascollel and Greene: Microeconomics
Mueller: Public Choice
Sen and Dreze (eds): Hunger and Public action
Sen: Choice, Freedom and welfare
Sen: Choice, welfare and Measurement
Sen: Collective Choice and social welfare
Sen: Development as freedom
Sen: Poverty and famines: An essay on Entitlement and Deprivation.
Stiglitz: Public Economics
Suzumara and Pattnaik (eds): Essays in honour of Amartya Sen

ECN 202B
Economics of Infrastructure and Development

Full Marks: 50

Lecture Hours: 64

- 1. Infrastructure and Economic Development – Concepts (6 Lectures)**
Definition, Meaning, Classification of infrastructure (Social and Economic Infrastructure); Urban and Rural Infrastructure schemes in India – PURA; Growth of infrastructure under plans; Spatial aspects of development and linkages with infrastructure; Impact of Physical and Social Infrastructure on Development
- 2. Physical Infrastructure – I (Energy and Power) (10 Lectures)**
Energy: Sources of Energy – Sources of Commercial and Non Commercial Energy Resources – Growth and Present Status – Energy Crisis in India.; Power: Growth and Present Status – Rural Electrification in India – Problem of Power Shortage in India – Problem of SEBs in India.
- 3. Physical Infrastructure – II (Transport & Communication) (10 Lectures)**
Significance of Transport Infrastructure; Factors affecting Transport Network - Growth and Present status of Transport System in India; Impact of Transport Development on location of economic activities; Transport Sector Reforms in India; Postal and Telegraph. Telecommunication and Information Technology; Major issues in IT – Growth and present status of IT industry in India; Implications for Regional Development
- 4. Physical Infrastructure – III (Irrigation) (8 Lectures)**
Water Resource and Irrigation Types; Impact of Irrigation on Agriculture; Role of Public Provisioning
- 5. Social Infrastructure (14 Lectures)**
Growth and present status of Social Infrastructure – Education, Health, Housing and Banking & Insurance; Impact of Social Infrastructure on Human and Economic Development
- 6. Infrastructure Demand & Financing (16 Lectures)**
Demand Simulation for Infrastructure; Financing Needs; Infrastructure Financing in Plan Period; Infrastructure Financing in Recent Times; Privatisation of Infrastructure and PPP Models; Implications for Infrastructural Development

References

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- Becker, G.S. (1974), Human Capital (2nd Edition), National Bureau of Economic Research, New York.
- Berman, P. and M.E. Khan (1993), Paying for India's Health Care, Sage Publications, New Delhi.
- Centre for Monitoring Indian Economy (1996), India : Energy Sector, CMIE, Mumbai.
- Crew, M.A. and P.R. Kleindorfer (1979), Public Utility Economics, Macmillan, London.
- Indian Council of Social Sciences Research (ICSSR) (1976), Economics of Infrastructure Vol. VI, New Delhi.
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- Parikh, J. (Ed.) (1997), Energy Models for 2000 and Beyond, Tata McGraw-Hill, New Delhi.
- Parikh, K.S. (Ed.) India Development Report Various Years, Oxford, New Delhi

ECN 202C
Game Theory
Full Marks: 50
Lecture Hours: 64

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| 1. Static Game with complete information | (14 Lecture Hours) |
| 2. Dynamic Game with complete information | (14 Lecture Hours) |
| 3. Static Game with incomplete information | (14 Lecture Hours) |
| 4. Dynamic Game with incomplete information | (14 Lecture Hours) |
| 5. Using Software for solving Games | (8 Lecture Hours) |

References

- Allen, R. G. D. (1974) *Mathematical Analysis for Economists*, Macmillan Press and ELBS, London
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- Dorfman, R., P.A. Samuelson and R.M. Solow (1958) - *Linear Programming and Economic Analysis*”, McGraw Hill
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ECN 203

Term Paper & Seminar Presentation-II

(compulsory)

Full Marks: 50

25 on Term Paper + 25 on Presentation

This paper shall be in the form of a Term Paper which the candidate shall have to submit within a stipulated date fixed by the RAC and thereafter present it.

Frame work of guide lines for writing the Term Paper

- III. Preliminary Section (of 500-750 words) providing Concept of literature review, Objectives of literature review, Importance of literature review, Methods/ procedure /steps in literature review, Types of literature review (classification), Sources of literature, Planning of the review work etc.
- IV. Main Review (of 3000-5000 words) with subsections on - Issue / Topic of Research and Motivation; Review of Existing Literature – International and National; Identification of research gaps and researchable issues; Proper Bibliography of the reviewed items (Books, Journals articles, Reports and documents, Working papers, Case Studies, Monographs, Edited volumes, Citations, Websites, Encyclopedias, Year books, Seminar reports and conference proceedings, Micro forms: Audio visual types, micro card, micro films, Research abstracts, University news, Unpublished thesis and other works Etc.)

The above guidelines are common to all the candidates. However depending on the research topic, the candidate and supervisor have the freedom to work out the micro details of the literature review.