

DEPARTMENT OF ECONOMICS
School for Social Sciences,
Babasaheb Bhimrao Ambedkar University,
Lucknow

Structure & Syllabus of Various Courses

<u>Sl. No.</u>	<u>Name of Course</u>	<u>Page Number</u>
01.	M.A. in Economics	01 to 43
02.	M.Phil. in Economics	44 to 57
03.	Ph.D. in Economics	58 to 71

DEPARTMENT OF ECONOMICS
SCHOOL FOR SOCIAL SCIENCES, BBAU, LUCKNOW
M.A. IN ECONOMICS

A. STRUCTURE

There shall be four semesters under this programme. In each semester, there shall be four papers of 6 credits each. Each paper consists of 4 modules. Each module has minimum 10 hours teaching, i.e., minimum of 40 hours per paper and tutorials. Optional paper shall be taught subject to availability of teachers.

Course Code	Course Title Code	Maximum Weightage		Credit
		End Semester	Sessional	
Semester I				
DE 101	Microeconomics I	70	30	6
DE 102	Macroeconomics I	70	30	6
DE 103	Quantitative Methods I	70	30	6
DE 104	Economics of Growth and Development *	70	30	6
MPDC-105	Remedial Language Course**	15	10	1
Semester II				
DE 201	Microeconomics II	70	30	6
DE 202	Macroeconomics II	70	30	6
DE 203	Quantitative Methods II	70	30	6
DE 204	Contemporary Issues in Indian Economics*	70	30	6
MPDC-205	Moral Studies**	15	10	1
Semester III				
DE 301	Public Economics*	70	30	6
DE 302	International Trade or Economics & Law	70	30	6
DE 303	Environmental Economics	70	30	6
DE 304	Basic Econometrics or Economics of Population	70	30	6

MPDC-305	Community Service**	15	10	1
Semester IV				
DE 401	Financial Institutions and Markets or Advanced Mathematical Economics	70	30	6
DE 402	Computer Applications in Economic Analysis* or Industrial Economics	70	30	6
DE 403	Agricultural Economics or History of Economic Thought	70	30	6
DE 404	Advanced Econometrics or Economics of Discrimination or Labour Economics	70	30	6
MPDC-405	Ambedkar Studies**	15	10	1

(*This course is available under choice based credit transfer system). For choice based credit transfer system, 06 to be secured from other departments the students are advised to contact following department.

1. Department of Environmental Science
2. Department of Law
3. Department of Political Science
4. Department of Sociology
5. Department of History
6. Department of Mathematics
7. Department of Statistics
8. Department of Management
9. Department of Biotechnology
10. Department of Microbiology
11. Department of Applied Plant Science
12. Department of Human Right
13. Department of Pharmaceutical Science
14. Department of Computer Science
15. Department of Mass Communication & Journalism
16. Department of Applied Animal Science
17. Department of Applied Physics
18. Department of Applied Chemistry

19. Department of Home Science
20. M.Sc. Programme of Industrial Microbiology
21. M.Sc. Programme of Food Microbiology

** Personality development courses (MPDC) are qualifying papers, therefore students are advised to take between 9.00 am to 10.00 am at the University level.

Evaluation Pattern:

- Mid-term Test:30%
- End-Semester Examination: 70%
- The date of Mid-term test would be announced by the Concerned Teacher
- The date of End-Semester Examination would be as per University Calendar

B. SYLLABUS

DE 101: Microeconomics I

MODULE I

Basic Economic Problem-Choice and Scarcity; Deductive and Inductive Methods of Analysis; Demand Analysis-Elasticity of Demand-Theoretical Aspects and Empirical Estimations; Theories of Demand-Utility; Indifference Curve and their Applications; Revealed Preference Theory; Recent Developments in Demand Analysis, Consumer's Surplus, Elementary Theory of Price Formation-Demand and Supply Equilibrium.

Lect.= 10 hours

MODULE II

Theory of Production and Cost -Law of Variable Proportions and Returns to Scale; Economies of Scale; Multi-Product Firm; Elasticity of Substitution; Euler's Theorem; Technical Progress and Production Function; Cobb-Douglas; Full Cost Pricing Rule; Bain's Limit Price Theory; Sylos-Labini Model; Game Theory Approach.

Lect.= 10 hours

MODULE III

Theory of Market: Price and Output Determination-Marginal Analysis as an Approach to Price and Output Determination; Perfect Competition-Equilibrium of Firm and Industry; Monopoly, Monopolistic Competition- Price Discrimination, Chamberlin Approaches to Equilibrium of Firm and Group with Product Differentiation; Oligopoly Collusive and Non Collusive, Price and Output Determination Under Monopsony.

Lect.= 10 hours

MODULE IV

Theory of Distribution: Marginal Productivity Theory of Distribution, Modern Theory of Factor Pricing, Theory of Rent, Theory of Wages, Theory of Interest and Theory of Profit.

Lect.= 10 hours

Recommended Readings List:

- Baumol. W. J. (1982). Economic theory and Operations Analysis, Prentice Hall of India, New Delhi.
- Koutsoyiannis. A. (1979). Modern Micro Economics, Macmillan Press London.
- Sen. (1999). Micro Economics: Theory and Applications OUP.
- H.A.G. Green. (1971). Consumer Theory, Penguin.
- Da Costa, G.C. (1980). Production Price and Distribution, Tata McGraw hill.
- Henderson, J.M, and R.E. Quandt (2001). Economic Theory T.M.H.

DE-102: Macroeconomics I

MODULE I

Circular Flow of Income in Two, Three and Four-Sector Economy; Different Forms of National Income Accounting – Social Accounting, Input – Output Accounting, Flow of Funds Accounting and Environmental Accounting. Keynes' Psychological Law of Consumption – Implications of the Law; Empirical Evidence on Consumption Function; Short run and Long run Consumption Function – Absolute Income, Relative Income, Permanent Income and Life Cycle Hypotheses

MODULE II

The Marginal Efficiency of Capital Approach; Accelerator-Simple & Flexible; Profit Theory; Financial Theory; The Neoclassical Model

MODULE III

Classical and Keynesian Approach (The Regressive Expectations Model); Post Keynesian Approaches to Demand for Money-Tobin (Portfolio Balance Approach), Baumol (Investment Theoretic Approach) and Friedman (Restatement of Quantity Theory of Money).

MODULE IV

Measures of Money Supply; Instruments of Monetary Control. Mechanism of Monetary Expansion and Contraction (Deterministic and Behavioural Models); Determinations of Money Supply; The Basic IS-LM Model, Extension of IS-LM Model with Government Sector, Labor Market and Variable Price Level.

Recommended Readings List:

- Ackley, G. (1978), *Macroeconomics: Theory and Policy*, Macmillan, New York.
- Dernburg, T.F. and D. M. Mc Dougall, *Macroeconomics*, Mc Graw Hill International Book Company.
- Dornbusch, R. and F. Stanley (1999), *Macroeconomics*, Irwin McGraw hill, New York.
- Frisch, H. (1983), *Theories of Inflation*, Cambridge University Press, Cambridge.
- Lucas, R. (1981), *Studies in business Cycle Theory*, MIT Press, Cambridge Massachusetts.
- Mankiew, N. Gregory (2000), *Macroeconomics*, Macmillan Worth Publishers, 4th Edition.
- Mankiew, N.G. and D. Romer (Eds.) (1991), *New Keynesian Economics*,
- Romer, D.L. (1996), *Advanced Macroeconomics*, McGraw Hill Company Ltd. New York.
- Ruggles R. and N. Ruggles (1956), *National Income Accounts and Income Analysis* Mc Graw Hill, Newyork.
- Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publication, New Delhi.
- Taylor, L. (1983), *Structuralist Macroeconomics*, Basic Books, New Longman.
- Veniers, Y.P. and F.D. Sebold, (1997) *Macroeconomics; Models and Policy* John Wiley and Inc, USA.
- Verma, NMP (2013) *Recession and its Aftermath*, Springer.

DE 103: Quantitative Method I

Module I

Static Analysis: Economic Models, Concept of Matrix- their types, Simple Operations and Matrices, Determinants and their Basic Properties, Solution of Simultaneous Equation through Cramer's Rule, Matrix Inversion and Transpose, Rank of Matrix.

Lect.= 10 hours

Module II

Comparative – Static Analysis: Derivatives- Partial and Total, Rules of differentiation, Economic applications, Marginal and Elastic Concepts, Multivariable Functions, Rules of Partial Differentiations, Implicit Function Theorem, High Order Derivatives and Young's Theorem, Convex and Concave Functions, Properties of Linear Homogenous Functions, Euler's Theorem

Lect.= 10 hours

Module III

Dynamic Analysis: Dynamics and Integration, Definite and Indefinite Integration, Applications – Measuring Consumer and Producer Surplus, Continuous Interest – Discount Calculation, Difference and Differential Equations, Phase Diagrams, Cobweb Model, Multiplier accelerator, Harrod- Domar Model, Other Applications from Economics and Finance.

Lect.= 10 hours

Module IV

Optimization Problems: Unconstrained Optimization, Constrained Optimization with Equality Constraints, Lagrangian Methods; Application- Utility Maximization, Cost Minimization, Profit-Output Maximization; Linear Programming Problems – Constrained Optimization with Inequality and Non-Negativity Constraints; Input and Output Analysis.

Lect.=10 hours

Recommended Readings List:

- Allen, R.G.D. (1967): Mathematical Analysis for Economists, Macmillan.
- Baumol, W.J. (1970): Economic Dynamics, Macmillan, London.
- Baumol, W.J. (1984), Economic Theory and Operational Analysis, Prentice Hall.
- Black, J and J.K. Bradley (1973), Essential Mathematics for Economists, John Wiley and McGraw Hill, NY.
- Budnick, F.S.(1993): Applied Mathematics for Business, Economics and Social Sciences.
- Chiang, A.C. (1986), Fundamental Methods of Mathematical Economic, Megraw Hill, New York.
- Dorfman, Samuelson and Solow (1958): Linear Programming and Economic Analysis, Englewood Cliffs, New Jersey.
- Hadley, GC. (1962), Linear Programming, Addison Wesley Publishing Co. Massachusetts.
- Handry, A.T.(1999); Operation Research, Prentice Hall, ND.

- Henderson (2003): Microeconomic Theory- A Mathematical Approach (3a), McGraw Hill.
- Hoy, Livernois, Mckenna, Rees and Stengos (2004): Mathematics for Economics, Prentice Hall, ND.
- Kothari, C.R. (1992) An Introduction to Mathematical Finance, Cambridge University
- Nicholson, R.H.(1986): Mathematics for Business and Economics, McGraw Hill, NY.
- Samuelson, P.A.(2005): Micro Economics (18e), McGraw Hill, International Edition.
- Simon C.P.and Blunie, L (1994) Mathematics for Economists, W.W.Norton & Company Sons.
- Sydsaeter, Knut and Hammond, Peter J.(1995) Mathematics for Economic Analysis, Pearson Education Asia.
- Taha, H.A. (1998): Operational Research: An Introduction (7e), Prentice Hall, ND.
- Takayama, A. (1974): Mathematical Economics, Dryden Press, Hinsdale, III.
- Vygodsky, G.S.(1971), Mathematical Handbook (Higher Mathematics), Mir Publishers,
- Yamane Taro, (1975), Mathematics for Economists, Prentice Hall of India, New Delhi.

DE 104: Economics of Growth and Development

Module I

Meaning and Objective of Growth, Development and Sustainability – Traditional View and Modern View, Sen's Capabilities Approach, Core Value of Development, Theories of Development – Classical Theory (Smith, Ricardo, Malthus, Mill). Karl Marx and Development of Capitalistic Economy. Crisis in Capitalism – Schumpeter and Capitalistic Development. Myrdal's Backwash and Spread Effects.

Lect. =10 hours

Module II

Approaches to Development : Partial Theories, Vicious Circle of Poverty. Lewis Approach of Unlimited Supply of Labour. Big Push Approach, Balanced Growth Approach, Unbalanced Growth Approach. Critical Minimum Effort Thesis. Nelsons Low Level Equilibrium Trap. The Listian Trap.

Lect. =10 hours

Module III

Growth Theories – Rostow Theory of Stages of Growth, Technology and Economic Growth. Harrod-Domar -Instability of Equilibrium: Neo Classical Growth Models – Solow. Growth Models of Kaldor, Growth Model of Passinetti, Optimal Savings and Ramsay's Rule. Romer Model of Endogenous Growth. Education, Human Capital and Economic Growth- the Schultz Model.

Lect. =10 hours

Module IV

Measuring Development and Development Gap-Per Capita Income, Inequality of Income, HDI and Quality of Life Indices. Theory of Demographic Transition, Population as Limits to Growth and as Ultimate Source. Indicators and Measurement of Poverty. The Concept of Inclusive Growth- With Reference to India. Institutions and Economic Growth, Market Failure and Government Failure.

Lect. =10 hours

Recommended Readings List:

- Barro, Robert J and Xavier Sala-i- Martin, Economic Growth, The MIT Press, Cambridge, Latest Edition.
- Basu, Kaushik, Issues in Economic Theory, part I and II, Oxford University Press, 2010

- Dasgupta, Dipankar: Growth Theory, Oxford University Press, 2007
- Ghatak, S., An Introduction to Development Economics. Allen and Unwin London, latest edition.
- Hayami, Y., Development Economics, Oxford University Press, New York, 2010 (5th Impression)
- Hendrik Van Den Berg, Economic Growth and Development, McGraw-Hill International Edition, 2005
- Mankiw, G, Macroeconomics: Theory and Practices, Harvard Publication (Latest Impression)
- Meier, G.M., Leading Issues in Economics Development, Oxford University Press, New Delhi, Latest edition.
- Ray Debraj, Development Economics, Oxford University Press, Latest Edition.
- Somashekar, NT: Developmental Economics, New Age Publication (Latest edition)
- Thirlwall, A.P., Growth and Development with Special Reference to Developing Economies, Macmillan, UK, 1999.
- Todaro, M.P., Economic Development Pearson, Latest edition.

DE 201: Microeconomics II

Module I

General Equilibrium Models: Interdependency in the Economy, Walrasian System, Existence, Uniqueness, Determinacy and Stability, Graphical Treatment of Two Factors and Two Commodity Equilibrium.

Lect. = 10 hours.

Module II

Consumer Surplus: Marshallian and Hicksian Consumer Surplus, Scope and Application of Consumer Surplus, Welfare Functions: Classical and Neo-Classical Approach such as Adam Smith, Bentham, Pareto, Kaldor and Hicks, Scitovsky Double Criteria, Bergson's and Samuelson Social Welfare Function, Arrow's Impossibility Theorem. Modern Welfare Function and Theory of Social Choice: Nussbaum's Central Capabilities, Sen's Capability Theory.

Lect. = 10 hours.

Module III

Maximization of Social Welfare, Determination of Welfare and Perfect Competition, Critique and Extensions, Cost-Benefit Analysis: Techniques, General and Partial Equilibrium Model, Market Failure: Market Imperfections such as Monopoly, Externality, Public Goods, Pigovian Solutions, Second-Best Solution.

Lect. = 10 hours.

Module IV

Extensive Forms and Normal Forms, Dominant Strategies and Elimination of Dominant Strategies, Nash Equilibrium, Cooperative and Non-cooperative Games, Sequential and Simultaneous Games, Shapely Value, Backward Induction, Sub-game Perfect Equilibrium, Applications with Oligopoly Markets - Cournot, Bertrand and Stackleberg, Product Differentiation, Cartel.

Lect. = 10 hours.

Recommended Reading List:

- Anderson, L.G. and Russell F. Settle (1978), *BCA: A Practical Guide*, Lexington Books, Toronto.
- Cowell, F (2005), *Microeconomics: Principles and Analysis*, Oxford University Press, Oxford.
- Dasgupta, A.K. and Pearce, D.W. (1978), *Cost Benefit Analysis: Theory and Practice*, English Language Book Society and Mac Millan, London.

- Dasgupta, P.; A. K. Sen, and S. Marglin (1972), *Guidelines for Project Appraisal*, UNIDO, United Nations, Washington D.C.
- Dasgupta, P.; A. K. Sen, and S. Marglin (1978), *Guide to the Practical Project Appraisal*, Oxford and IBH Publishing Co., New Delhi.
- Henderson, M. and R.E. Quandt (1980), *Microeconomic Theory: Mathematical Approach*, Mc Graw Hill.
- John M Gowdy, ((2011), *Microeconomic Theory: Old and New*, Orient Black Swan.
- Koutsoyiannis, A. (1990), *Modern Micro Economics*, Macmillan.
- Mas-Colell, A., M.D. Whinston, and J. Green, (1995), *Microeconomic Theory*, Oxford University Press.
- Missan, E. J. (1988), *Cost Benefit Analysis*, Praeger Special Studies, New York.
- Pigou, A.C. (1962), *The Economics of Welfare*, The English Language Book.
- Puttaswamaiah, K. and S. Venu (1984), *Cost Benefit Analysis: A Theoretical and Applied Critique of Alternate Methodologies*, Oxford and IBH Publishing House, New Delhi.
- Salvatore, D (2013), *Micro Economics Theory*, McGraw Hill Education, New Delhi.
- Sen, A. (1999), *Commodities and Capabilities*, Oxford University Press, New Delhi.
- Sen, A. (2008), *Choice, Welfare and Measurement*, Oxford University Press, New Delhi.
- Varian, H. R., *Microeconomic Analysis*, Third Edition, W.W. Norton and Co., 1992.

DE 202: Macroeconomics II

Module I

International Flow of Capital and Goods; Saving and Investment in a Small Open Economy: Exchange Rate-Real and Nominal; Demand and Supply of Foreign Exchange; Balance of Payments - Current and Capital Account; Mundell-Fleming Model Under Fixed and Flexible Exchange Rates.

Lect. = 10 hours.

Module II

Classical, Keynesian and Monetarist Approaches; Structural List Theory of Inflation; Philips Curve Analysis – Short Run and Long Run Philips Curve, Natural Rate of Unemployment Hypothesis; Tobin's Modified Philips Curve.

Lect. = 10 hours.

Module III

Business Cycle-Theories of Schumpeter, Kaldor, Samuelson and Hicks; Control of Business Cycles – Relative Efficiency of Monetary and Fiscal Policies.

Lect. = 10 hours.

Module IV

Targets and Instruments; The Great Depression; Auto-stabilization, Lags in the Effect of Policies; Expectations and Reactions; Uncertainty and Economic Policy; Economic Policy-Rules vs Discretion. The Concept of Rational Expectations; New Classical Macro Economics – Basic Approach and Policy Implication; New Keynesian Economics – Sticky Nominal Prices (Mankiew Model).

Lect. = 10 hours.

Recommended Reading List:

- Ackley, G. (1978) Macroeconomics: Theory and Policy, Macmillan, New York.
- Blackhouse, R and A. Salansi (Eds 2000) Real Macroeconomics and World (2 Vols.) OUP, London.
- Dernburg , T.F. and D.M.Mc Dougall, Macroeconomics, McGraw Hill International Book Company.
- Dornbusch, R. and F. Stanley (1999) Macroeconomics, Irwin McGraw Hill, Inc. New York, 7th Edition
- Frisch,H.(1983),Theories of Inflation, Cambridge University Press, Cambridge.
- Heijdra, BJ and V.P. Frederick (2001), Foundations of Modern Macroeconomics, OUP, New Delhi

- Jha, R. 1991, Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd. New Delhi
- Lucas, R. (1981), Studies in Business Cycle Theory, MIT Press, Cambridge, Masscehusetts.
- Mankiew, N. Greogory (2000), Macroeconomics Macmillan Worth Publisher 4th Edition.
- Mankiew, NG and D. Romer (Eds) 1991, New Keynesian Economics (02Vols), MIT Press, Cambridge.
- Ruggles R. and N. Ruggles (1956), National Income Accounts and Income Analysis Mc Graw Hill, Newyork.
- Shapiro, E. 1996, Macroeconomics Analysis, Galgotia Publication, New Delhi
- Sheffirin , S.M.(1996),Rational Expectations, Cambridge University Press, Cambridge.
- Taylor,L. (1983), Structuralist Macroeconomics, Basic Books, New Longman.
- Turnovsky , S.J. (1977),Macroeconomic Analysis and Stabilization Policy,
- Verma, NMP (2013) Recession and its Aftermath, Springer.

DE203: Quantitative Methods II

Module I

Review of Descriptive Statistics – Central Tendency, Dispersion, Skewness and Kurtosis; Index Number, Correlation Analysis – Karl Pearson's Correlation, Rank Correlation, Partial Correlation, Difference in Correlation and Regression, Regression Analysis – Method of Least Squares

Lect. = 10 Hours

Module II

Probability Theory and Probability Distribution – Basic Terminology, Types of Probability, Approaches - Classical Approach, Relative Frequency & Subjective Probability, Probability Rules- Addition & Multiplication Rule, Probability Distributions– Binomial, Poisson and Normal Distribution.

Lect. = 10 Hours

Module III

Sampling Distribution and Estimation - Census and Sample Survey, Reason to Sample, Sampling Methods- Probability and Non Probability Sampling , Sampling Distribution- Student's t, Chi-Square, F Distribution; Determinants of Sample Size, Sampling Error, Point and Interval Estimation, Properties of Good Estimator

Lect. = 10 Hours

Module IV

Testing of Hypothesis – One Sample Test- Mean & Proportion, two Sample Test- Mean & Proportion (Z & t test), type I and type II errors, Power of a Test, Analysis of Variance, Chi Square and F- Test

Lect. = 10 Hours

Recommended Reading List:

- Boumol, W.J (1984), Economic Theory and Operations Analysis, Prentice Hall, Englewood, Cliffs, Jersey.
- Elhance, D.N.(1996), Fundamental of Statistics, Kitab Mahal, Allahabad
- Ellen RGD (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS,
- Ghou, Y. (1975), Analysis, HOLT, Reinhart and Winston, New York.
- Goon, A.M., M.K. Gupta and B. Dasgupta, (1993), Fundamentals of Statistics, Vol. I & II, The World Press Ltd, Kolkata.
- Gupta, S.C.(1993), Fundamental of applied statistics, Chand & Sons New Delhi
- Hogg, R.V. and A.T. Craig (1970), Introduction to Mathematical Statistics, Macmillan Publishing Co. New York.
- Levin, Richard I. & Rubin, David S.(2005), Statistics for Management, Pearson Education, Singapore

- Lind, Douglas A, Marchal, William G. & Wathen Samuel A.(2005), Statistical Techniques in Business & Economics, McGraw Hill, New York. London.
- Miller, J. (1976), Statistics for Advanced Level, CUP, Cambridge.
- Miller, J.(1996), Statistics for Advanced Level, CUP, Cambridge.
- Monga, G.S. (1972) Mathematics and Statistics for Economist, Vikas Publishing House,
- Nagar, A.L.and R.K.Das (1993), Basic Statistics, Oxford University Press, New Delhi. New Delhi.
- Sukhatme, P.V. and B.V. Sukhatme (1970), Sampling Theory of Survey with Application, IOWA State Univ., Press and Ames.

DE 204: Contemporary Issues in Indian Economy

Module I: India's Development Experience, Agriculture –Food Security Problem; Irrigation and Water Resources, Technological Change in Agriculture, Pricing of Agriculture Inputs and Output; Agricultural Finance Policies, Micro Finance

Lect.= 10 hours

Module II: Industry–Public Sector Enterprise and their Performance, Problem of Sick Units, Liberalization, Privatization and Globalization Disinvestment, Growth and Patterns of Industrialization; Small Scale Industries, Industrial Labour Market; Emerging Industrial Relations.

Lect.= 10 hours

Module III:

Social Infrastructure –Education Primary, Secondary, Higher Technical and Professional Educational Structure and Problems, Educational Infrastructure Health: Public Health, Health Expenditure, Health Infrastructure.

Lect.= 10 hours

Module IV:

Service Sector: Emergence of IT Sector, Private Banking, Insurance, Real Estate, Transport, Corruption Issue in the Economy.

Lect.= 10 hours

Recommended Reading List:

- Ahluwalia, I. J (1985), Industrial Growth in India, OUP, New Delhi.
- Appu, S. (1996), Land Reforms in India, Vikas, and New Delhi.
- Arvind Panagariya: Indian Economy, OUP, 2010
- Bhalla, G.S.: Indian Agriculture and Development, NBT, Delhi
- Bhole, L.M. (2000), Indian Financial System, Chugh Publication, Allahabad.
- Brahmananda, P.R. and V.R. Panchmukhi (Eds) (2001), Development Experience in the Indian Economy; inter State Perspective, Bookwell, Delhi
- Brahmanandha, P.R. and V.R. Panchmukhi (Eds.) (1987), The Development Process of the Indian Economy, Himalaya Publishing Home, Bombay.
- Chakravarty, S. (1987), Development Planning; The Indian Experience, Oxford University Press, New Delhi
- Chatopadhyay, M P Matiti and M. Rakshit (Eds) (1996), Planning and Economy Policy in India – Evaluations and Lessons for the future, Sage Publication, New Delhi.

- CMIE: Various Reports (Latest)
- Debroy, B. (1992), Foreign trade policy changes and devaluation, B.R. Publication Corporation, Delhi.
- Freedrick, H. and A.M. Charles (1970), Education, manpower and Economy Growth.
- Govt. of India: Economics Survey (Latest Edition)
- Govt. of India: Human Development Report (Latest)
- Govt. of India: Infrastructural Report (Latest)
- Jalan, B. (1996), India's Economy Policy – Problem and Prospects, Ashish Publishing House, New Delhi
- Kabra, KN (1997), Development Planning in India, Sage Publication, New Delhi.
- Kapila, Uma (2007), Indian Economy Academic Foundation, Delhi.
- Mookherjee, D. (Ed.) (1997), Indian Industry: Policies and Performance, OUP, New Delhi.
- Narain, D. (1998), Studies on Indian Agriculture, Oxford University Press, New Delhi.
- RBI: Various Reports (Latest)
- Subramaniam, S. (Ed.) (1997), Measurement of Inequality and Poverty, Oxford University Press, Calcutta.
- Veena, M.L. (1995), Internation Trade, Vikas Publication House Pvt. Ltd.
- Verma, N M P (1993): Irrigation in India, M.D. Publishers, New Delhi.
- Verma, NMP (2005): Economic Disparity and Industrial Development, Classical, New Delhi
- Verma, NMP (2010): Contractual Employment in Indian Labour Market, Concept, New Delhi

Module I

Role of Government in Economic Activities- Allocation, Distribution and Stabilisation Functions, Theory of Public Goods and Market Failure, Concept of Private, Mixed and Merit Goods, Externalities: Pigouvian Corrective Taxes & Coasian Bargaining

Lect.= 10 hours

Module II

Public Expenditure: Wagner's Law of Increasing State Activities, Wiseman- Peacock Hypothesis, Expenditure Evaluation - Social Cost Benefit Analysis, Reforms in Expenditure Budgets- Programme Budgeting and Zero base Budgeting, Trend of Public Expenditure in India.

Lect.= 10 hours

Module III

Public Revenue: Sources of the Revenue of the State, Approaches of Taxation: Benefits and Ability to Pay Approach, Theory of Tax Incidences – Alternative Concept of Incidences, Partial and General Equilibrium Incidence Analysis.

Lect.= 10 hours

Module IV

Public Debt – Sources, Effects Burden and its Management; Fiscal Federalism – Theory and Problems; Problems of Centre – State Financial Relations in India; Fiscal Policy and Budgets of the Union Government in India.

Lect.= 10 hours

Recommended Reading List:

- Barro R.J (1997) Macroeconomics, MIT.
- Buchanan , J.M. (1970), The public Finances, Richard D. Irwin, Homewood.
- Chelliah, Raja J. (1971), Fiscal Policy in under- developed countries, George Allen & Unwin, London.
- Durvedy, D.N. (1981): Reading in Indian Public Finance, Chanakya publications, Delhi.
- Ferguson, J.M.(Ed.) 1964, Public Debt and Future Generations, North Carolina University Press, Chapel Hill.
- Houthakker H.S. and Williamson , P.J. (1996) The Economics Financial Markets, Oxford University Press
- Kaldor, N. (1955), An Expenditure Tax, George Allen & Unwin, London.
- Levacic and Rebroan, (1990) Macroeconomic Analysis, Macmillan.
- Mishan, E.J. (1982), Cost Benefit Analysis: An Informal Introduction, George Allen and Unwin, London.
- Mueller, D.C. (1979). Public choice, Cambridge University Press, Cambridge.
- Musgrava, R.A. (1996). Public Finance in Theory & Practice, Mc Graw Hill, Tokyo.
- Pilbeam, K (1994) International Finance, McMillan.
- RBI, Reports on currency and finance, Annual Various Issues.

DE 302: International Trade

MODULE I

Theories of International Trade – The Pure Theory of International Trade – Theory of Absolute Advantage, Comparative Advantage and Opportunity Costs. Theory of Reciprocal Demand – Offer Curve Analysis. Theories of Factor Price Equilibrium. Heckscher Ohlin Theory of the Trade. The Rybczynski Theorem. The Stolper Samuelson Theorem.

Lect. = 10 hours.

MODULE II

Terms of Trade and Economic Development- Concepts of Terms of Trade – their use & Limitations, Hypothesis of Secular Deterioration of Terms of Trade, its Policy Implication for LDCs, Trade as an Engine of Economic Growth, Tariffs, Economic Effects of Tariffs under Partial and General Equilibrium. Effective and Optimum Rates of Tariff-their Measurement. The Political Economy of Non-Tariff Barrier.

Lect. = 10 hours.

MODULE III

Balance of Payments – Meaning and Components of Balance of Payments; Equilibrium and Disequilibrium in the BOP; The Process of Adjustment Under Fixed and Flexible Exchange Rates; Expenditure Reducing and Expenditure Switching Policies and Direct Controls for Adjustment; Foreign Trade Multiplier with and without Foreign Repercussions; Relative Merits and Demerits of Fixed and Flexible Exchange Rates in the Context of Growth and Development in Developing Economies.

Lect. = 10 hours.

MODULE IV

Trade Policies in India - Trade Problems and Trade Policies in India during the last five Decades; Rationale and Impact of Trade Reforms Since 1991 on Balance of Payments, Employment & Growth, International Trade and Financial Institutions; IMF, World Bank and WTO, WTO & World Bank from the Point of View of India. Theory of Regionalism at Global Level.

Lect. = 10 hours.

Recommended Reading List:

- Bhagwati, J. (Ed.)(1981), International Trade: Selected Readings, Cambridge University Press, Mass.
- Charchaliades, M. (1990), The Pure Theory of International Trade; McGraw Hill, Kogakushe, Japan.

- Cherunilam, F. (2006): International Economics, Tata McGraw Hill, ND.
- Gordon, W.M.(1974), Trade Policy and Economic Welfare, Clearendon Press, Oxford.
- Greenway, D.(1983), International Trade Policy, Macmillan Publishers Ltd. London.
- Heller, H. Robert (1968), International Monetary Economics, Prentice Hall, India.

- Heller, H.R(1988):International Trade: Theory and Empirical Evidence, Prentice Hall,ND
- Jackson,J. (1989), The World Trading System, Cambridge University press, Mass.

- Joshi, V and IMD Little (1998), India's Economic Reforms, 1999-2000, Oxford University Press, New Delhi.
- Kenen, P.B. (1989): The International Economy, Prentice Hall, ND.
- Kindleberger, C.P. (1973), International Economics, RD Irwin, Homewood.
- Kindleberger, C.P. (1973), International Economics, RD Irwin, Homewood.

- Kindleberger, C.P. (1977): International Economics, D.B. Taraporevala Sons & Co. Pvt. Ltd., Bombay.
- Krugman, Paul and Obstfeld, (2003) International Economics: Theory and Policy, Addison Wesley.
- Meade, J.E. (1952): A Geometry of International Trade, George Allen and Unwin Ltd., London.

- Roy, P.N. (1986): International Trade: Theory and Practice, Wiley Eastern, ND.
- Salvatore, Dominic (2008) International Economics, Wiley Student Edition.
- Salvatore, Dominic (2008) International Economics, Wiley Student Edition.
- Sodersten, Bo(1991): International Economics, Macmillan, London.
- Verma, M.L. (1995), International Trade Vikas Publishing House Pvt. Ltd, Delhi.
- Yeager, L.B. (1976), International Monetary Relations: Theory, History and Policy, Harper and Row, New York.

DE 303: Environmental Economics

Module I

Introduction to Environmental Economics, Environmental Quality, Extent of Environmental Protection: Individual and Social Choice, Market Failure and Externalities: Hardin's Thesis, Prisoner's Dilemma, Olson Theory of Collective Action, Pigouvian and Coasian Solution, Ostrom's Co-operative Solutions to Common Property Resources.

Lect.=10 hours.

Module II

Biophysical Limits to Economic Growth and Sustainable Development: Malthusian, Neoclassical, Ecological and Modern Economist's Perspectives, Environmental Kuznets Curve; Global Environmental Pollution Problems and Climate Change: Positive and Normative Analysis, Political Issues, Economics of GHGs, Green Accounting and its Feasibility.

Lect.=10 hours.

Module III

Valuing the Environment: Concepts, Introduction to Methods, Valuation Techniques using Market Prices both Direct and Indirect Method– Productivity Change, Defensive Expenditure Method, Travel Cost Method, Hedonic Pricing, Non-Marketing Valuation Methods– Contingent Valuation Methods, Green GDP.

Lect.=10 hours.

Module IV

Trade and Environment: Environment and Trade Linkages, International Environmental Management, International Trade law, Physical and Economic Linkages, Legal and Policy Linkages, Regional and Bilateral Trade Agreements. Poverty and the Environment: Population, Development and Environmental Degradation.

Lect.= 12 hours.

Recommended Reading List:

- A.M. Hussen (2004), Principles of Environmental Economics, Routledge Publications.
- Barbier, E.B (1997), Introduction to EKC: Special Issue, Environment and Development Economics, No.2.
- Bhattacharya, R.N. (2001), Environmental Economics – An Indian Perspective, OUP, New Delhi.
- Coase, R.H. (1960), The Problem of Social Cost, The Journal of Law and Economics, Vol.3.
- Freeman III, A. Myrick (1992), The Measurement of Environmental and Resource Values: Theory and Methods, Resources for the Future, Washington, D.C.
- Gunatilake, Herath (2004), Environmental Valuation: Theory and Applications, SANDEE.
- Hardin, Garrett (1968), The Tragedy of Commons, Science, New Series, Vol.162, No.3859
- IISD, (2005), Environment and Trade: A Hand Book, Second edition.

- Kadekodi, G., (2013), “Is a Green Economy Possible?”, *Economic and Political Weekly*, Vol.48, No.25, June 22.
- Kolstad, Charles D., (2007), *Environmental Economics*, Oxford University Press, New Delhi.
- Kuznet, S. (1945), “Economics Growth and Income Inequality”, *American Economics Review*, Vol.45.
- Mendelsohn, et al., (1994), “The impact of Global Warming on Agriculture: A Ricardian Study”, *American Economic Review*, Vol.84. No.4.
- Nick Hanley, et al, (1997), *Environmental Economics in Theory and Practice*, Macmillan.
- Nordhaus W. (1991), The Economics of The GHGs Effect, *The Economic Journal*, Vol.101.
- Olson, Jr., Mancur (1971), *The Logic of Collective action: Public Goods and the theory of Groups*, Cambridge, Harvard University Press.
- Ostrom Elinor (1993), *Coping with Asymmetries in the Commons*, *Journal of Economic Perspectives*, Vol.7, No.4.
- Ostrom Elinor (1997): *Governing the Commons; The Evolution of Institutions for Collective Action*, Cambridge University Press, Cambridge.
- Pearce D.W. and Jeremy J. Warford (1996), *World without End: Economics, Environment and Sustainable Development*, OUP.
- Pearce, David (1998), *Economics and Environment: Essays on Ecological Economics and Sustainable Development*, Edward Elgar, Cheltenham UK.
- Pigou, A.C. (1962), *The Economics of Welfare*, The English Language Book.
- Praful Bidwai (2013), *The Politics of Climate Change and Global Crisis*, Orient Black Swan, New Delhi.
- Shankar, U. (Ed.) (2001): *Environmental Economics*, OUP.
- Singh Katar and Anil Shisodia (2007), *Environmental Economics: Theory and Applications*, Sage Publications.
- Soroos, Marvin S. (2004), “Global environmental Pollution”, in Hussen, Ahmed, M. (ed.), *Principles of Environmental Economics*, Routledge, London.
- Stern David, I., ((2004), The Rise and Fall of Environmental Kuznets Curve, *World Development*, No.32, Vol.8.
- Tietenberg, Tom (2003), *Environment and Natural Resource Economics*, Addison Wesley.
- Vogler, John (2011), “Environmental Issues” in Buglis, John; Steve Smith; Patricia Owes (eds), *The Globalisation of World Politics: An Introduction to International Relations*, Oxford University Press, New Delhi.

DE 304: Basic Econometrics

Module I

Two Variable Regression Model: Nature, Meaning, Problem of Estimations, Classical Normal Linear Regression Model (CNLRM), Interval Estimation and Hypothesis Testing, Extensions of Two Variables Model.

Lect.=10 hours.

Module II

Multiple Regression Analysis: The Problem of Estimation, Problem of Inference; Relaxing Assumptions of Classical Model: Multicollinearity, Heteroscedasticity, Autocorrelation; Model Specification and Diagnostic Testing: Consequences, Measurement, Nested Vrs. Non-Nested Models, Model Selection Criteria.

Lect.= 10 hours.

Module III

Regressions with Qualitative Independent Variables: Dummy Models, Viz., ANOVA, ANCOVA, Structural Stability, Interaction Effects, Seasonal Analysis, Piecewise Linear Regression; Dummy Variable Regression in Dependent Variable: Linear Probability Model (LPM), LOGIT, PROBIT, TOBIT Model.

Lect.= 10 hours.

Module IV

Dynamic Econometric Model: Autoregressive and Distributed Lag model such as Koyak Approach, (Partial Adjustment and Adaptive Expectations Model), Instrumental Variable, Detecting Auto-Correlation in ARM, Granger Causality Test; Panel Data Regression Models: Fixed Effect Approach, Random Effect Approach.

Lect.= 10 hours.

Recommended Reading List:

- Dougherty, Christopher (2007), Introduction to Econometrics, Oxford University Press, New Delhi.
- Greene, William H. (2003): *Econometric Analysis*, 5th Edition, Pearson Education, Inc., New Jersey.
- Gujarati, D. N. and Sangeetha (2007): *Basic Econometrics*, 4th Edition, Tata McGraw-Hill Publishing Company Ltd., New Delhi.
- Johnston, J. (1991), *Econometric Methods*, Mcgraw Hill Book Co., London.
- Koutsoyiannis (2004), *Theory of Econometrics*, Palgrave.

- Maddala, G.S.(1997), *Econometrics*, McGraw Hill, New York.
- Madnani, G.M.K (2008), *Introduction to Econometrics: Principles and Applications*, Oxford and IBH Publishing Co.Pvt. Ltd., New Delhi.
- Nachane Dilip M. (2010), *Econometrics: Theoretical Foundations and Empirical Perspectives*, Oxford University Press, New Delhi.
- Ramanathan Ramu, (2002), *Introductory Econometrics with Applications*, Thomson, South-Western.

DE 401: Financial Institutions and Markets

Module I

Nature and Role of Financial System, Money and Finance, Money and Near Money, Financial Intermediate and Financial Intermediaries, The Structure of the Financial System, Functions of the Financial sector, Equilibrium in Financial Market, Financial System and Economic Development, Risk and Financial Assets, Types of Risk, Return on Assets, Risk – Return Trade off, Violation of Securities.

Lect. =10 hours.

Module II

Central Bank, Commercial Bank and Monetary Policy, Functions of the Central Bank – The Aims and Objectives of Monetary Policy in Developed and Developing Countries, Instruments of Monetary Policy, Credit Creation and the Control, Profitability and Efficiency of Banks, Development Banks – Role and Functions, Investment and Merchant Banking.

Lect. =10 hours.

Module III

Non Bank Financial Intermediaries - Definition and types of Non Bank Financial Institutions; Their Growth and Impact on India's Economic Development, Measures Taken to Control their Operations.

Lect. =10 hours

Module IV

Financial Markets – Role and Structure of Money and Capital Market; Money Market - Treasury Bill Market, Commercial Bill Market, Discount Market, Government Securities Market, Markets for Derivatives- Futures and Option, Types, uses and Pricing Derivation, Primary and Secondary Market for Securities, SEBI- the Impact on the Working Capital Market in India, IRDA and its Role in Financial Markets.

Lect. =10 hours.

Recommended Reading List:

- Alan A. Rabin(2006), Monetary Theory, Edward Elgar, UK
- Bhatt, R.S.(1996), UTI and Mutual Funds: A study UTI Institute of Capital Market, Mumbai.
- Bhole, L.M. (2000), Indian Financial System – Chung Publications, Allahabad.
- Fisher, D.E. and R.J. Jordan (1992), Security Analysis and Portfolio Management, Eastern Economy Edition, New Delhi.
- Goldsmith, R.W. (1969) Financial Structure and Development, Yale, London.
- Gupta, L.C.(1999 Ed.), India's Financial Markets and Institution, Society for Capital
- Gupta, S.B. (2002), Monetary Economics, S.Chand & Company, New Delhi.
- Gupta, S.B. (2002), Monetary Economics, S.Chand & Company, New Delhi.
- Levi, Maurice D (1996) International Finance: The Markets and Financial Management of Multinational Business Services.
- Sahadevan, K.G. and M.T. Thiripalaraju (1997), Mutual Funds, PHI, New Delhi.

- Sayers,R.J.(1962) Modern Banking, OUP, New Delhi.
- Verma, J.S. (1989); A Manual of Merchant Banking, Bharat Law House, New Delhi.
- Wellia, P.(1992), The Theory of Future Markets, Blackwell, Oxford.

DE 402 (i): Computer Applications in Economic Analysis

Module I

Introduction, Basic Computer Organizations, Processor and Memory, Secondary Storage Devices, Input-Output Devices, Computer Software, Operating Systems, Classifications of Computers and their Applications, Data Communications and Computer Networks.

Lect.=10hours

Module II: Basic Operations and Statistical Techniques

Introduction, Basic Operations and Commands, Data Validation, Error and Correction Strategies. Distributive (crosstab) Tables and Graphs through Tab, Table and Tabstat Command. Use of Advanced Commands such as merge, mmerge, by, Collapse, Reshaping etc.

Lect.= 10 Hours

Module III

Regression Methods and Techniques on Time Series Analysis such as Simple and Multiple Regression Analysis, Double Log and Semi-Log Model, Structural Analysis, Auto Regressive Model and Forecasting. Analysis of Cross Section Data such as Dummy Variable, Logit, Probit, Tobit Model. Testing of Assumptions of Regression Model, Multi-Collinearity, Heteroscedasticity and Auto-Regression etc.

Lect.= 10 hours.

Module IV

Introduction to NSSO Data and Various Rounds, Sample Design and Estimation Procedure, Method on Estimation of Multiplier. Methodological Issues on Poverty Estimation, Distributive Tables and Other Techniques.

Lect.= 10 hours

Recommended Reading List:

- 61st NSSO Report, Planning Commission, Government of India.
- Angus Deaton and Valeri Kozel (eds.), The Great Indian Poverty Debate, Macmillan.
- Bryman, Alan, (2009), Social Research Methods, Oxford University Press, New Delhi.
- Earl Babbie (1989), The Practice of Social Research, Wadsworth Publishing Company, Belmont, California.
- Gujarati, D.N. and Sangeetha (2007), Basic Econometrics, Tata McGraw Hill, New Delhi
- Juul Svend, (2004), Introduction to Stata, University of Aarhus.
- Kothari, C R (2011): Research Methodology, New Age International, New Delhi
- National Account Statistics, Ministry of Statistics and Programme Implementations.
- Rajaraman, V. (2008), Fundamentals of Computers, Prentice Hall of India, New Delhi.

- Sinha, P.K. and Priti Sinha (2008), Computer Fundamentals, BPB, Publications, New Delhi.
- Sophia Rabe-Hesketh and Brian Everitt (2003), A Handbook of Statistical Analysis Using Stata, Third Edition, Chapman and Hall/CRC.
- Sophia Rabe-Hesketh and Brian Everitt (2003), A Handbook of Statistical analysis using Stata, Third Edition, Chapman and Hall/CRC.
- Stata Reference Book “Regression with Stata” all Seven Chapters
- Stata, Version11, Stata Corporation, USA.
- Tacq Jacques (1998), Multivariate Analysis Techniques in Social Science Research, Sage Publications, New Delhi.

DE 402 (ii): Industrial Economics

Module I

Industrial Basics - Firm and Industry- Concept and Interrelationships, Organisation of a Firm - Ownership, Types, Control and Motives, Active and Passive Behaviour of a Firm Market Structure – Forms of a Market, Market Concentration, Product Differentiation, Entry and Exit Conditions Market Conduct – Performance and Workable Competition, Market Structure and Profitability, Market Structure and Innovations – Process, Measurement, Technology and Diffusion.

Lect.=10hours

Module II

Market Conduct – Demand of a Firm, Demand Forecasting Techniques, Theory of Cost and Production Industrial Efficiency – Determinants, Measurement and Efficiency Conditions, Efficiency and Decision Making, Efficiency and Size of a Firm, Growth of a Firm, Diversification, Integration and Merger of Firms.

Lect.=10hours

Module III

Industrial Locations – Approaches and Operations, Financial Ratio Analysis and Break Even Investment Decisions – Types, Time Profiling, Project Evaluation Project Ranking, Appraisal of Public Projects, Risk and Uncertainty in Project, Models of Advertising Behaviour, Pricing Decisions – General Conditions, Pricing Procedures, Pricing in Public Enterprises.

Lect.=10hours

Module IV

Industrial Marketing – Stratification of Industrial Marketing, Technology and Industrial Marketing, Industrial Marketing- Communications, Planning and Implementations Industrial Relations – Labour Productivity determinants and Measurements, Legal Framework, Role of Trade Union and Management, Grievance Redressal Mechanism - Negotiations and Collective Settlements Government Regulations – Need, ways and Means, Social Control over Industries.

Lect.=10hours

Recommended Reading List:

- B. Salanie, The Economics of Contract, The MIT Press 1996.
- Bains, JS, Industrial Organisations, Chellanhum, UK
- Barthwal RR, Industrial Economics, New Age International, New Delhi, Latest Edition.
- C.C. Markides, Diversification Refocusing and Economics Performance, Cambridge the MIT Press, 1996.
- Colin Gilligan and Geoffrey Growther, Advertising Management, New Delhi, Heritage Publisher, 1983.
- D. Hay and D.J. Morris, Industrial Economics: Theory and Evidence, Oxford University Press, London, 1979.
- D. Mueller, Profit in the Long-run, Cambridge University Press.1986.
- Eric, Von Hippel, The Sources of Innovation, Oxford: Oxford University Press, 1988.
- F.M. Scherer and David Ross, Industrial Market Structure and Economics Performance, 3rd Ed. Boston, Houghton Mifflin Co. 1990.
- Ferguson: Industrial Economics (latest edition)
- Gross AC and Corray Raymond, Industrial Marketing: Cases and Concepts, PHI, New Jersey (Latest edition)
- J. Tirole, The Theory of Industrial Organization, The MIT Press, 1988
- Keat, Paul and Philips K Y Young (1996), Managgial Economics, PHI, New Delhi
- Kochan, TA, and Katz Henry, Collective Bargaining and Industrial Relations, Homewood, Illinois (latest edition)
- Kotler, Philips and Roberts, Eduardo, L. (1989) Social Marketing, the Frea Press, New York
- Milgron P and Robert, J. (1992), Economic Organization and Engle Cliffs, New Jersey, PHI
- O. Shy, Industrial Organizations: Theory and Application, N.Y., The MIT Press, 1996.
- O.E. Williamson, Economics Organization: Firms, Markets and Policy Control, wheat sheaf Book, 1986.
- P. Kotler, Marketing Management, Prentice –Hall of India, New Delhi
- P.A. Geroski, Market Dynamics and Entry, Oxford, Basil Blackwell, 1991.
- S. Martin, Advanced Industrial Economics, Oxford Blackwell, 1993.
- S. Martin, Industrial Economics: Economic Analysis and Public Policy, London, Macmillan Pub. Co.,1996.
- Varian, Micro Economics (latest edition)
- Verma, NMP, Economic Disparity and Industrial Development, Classical, New Delhi, 2005
- Webster, FE, Industrial Marketing Strategy, John Wiley, New York (Latest edition)

DE 403: Agricultural Economics

MODULE I– Agriculture and Economic Development --Role of Agriculture in Economic Development; Interdependence between Agriculture and Industry; Structural Problems in Agriculture; Tenancy and Crop Sharing- Land Reform and Economic Development, Labour in Agriculture- Interlocking of Factor Markets.

Lect. = 10 hours.

MODULE II– Theories of Agricultural Development – Schultz, Mellor, Hayami, Ranis-Fei. Institutions and Agricultural Models-Lenin and Kautsky. Farm Size and Productivity Debate; Theoretical and Empirical Findings.

Lect. = 10 hours.

MODULE III – Agricultural Production and Productivity; Production Function Analysis in Agriculture. Green Revolution and its Impact on Production and Distribution, Agricultural Growth and its Regional Dimensions in India. Impact of World Trade Organisation on Indian Agriculture. Food Security and International Trade- Concepts, Threat, Indicators and Mechanism to Food Security.

Lect. = 10 hours.

MODULE IV – Policies for Agricultural Sector; Agricultural Price Policy; Its Rationale, Instruments and Evaluations. Role of Credit in Agricultural Development; Sources of Agricultural Credit- Institutional and Non-Institutional. Cooperative Movement in India- Organisation, Structure and Development of Different Types of Cooperatives in India. Investment and Subsidies in Indian Agriculture; Importance of Rural Infrastructures in Agricultural Development.

Lect. = 10 hours.

Recommended Reading List:

- Bardhan, P. (1984) Land, Labour and Poverty; Essays in Economic Development, OUP, New Delhi.
- Bhaduri, A. (1984), The Economic Structure of Backward Agriculture; Macmillan, Delhi.
- Bhalla, G.S., (2007) Indian Agriculture since Independence, National Book Trust, India
- Bharadwaj, K. (1974), Production Condition in India Agriculture; OUP, Cambridge.
- Black, J.D, (1953) Introduction to Economics for Agriculture, Macmillan.
- Dantawala, M.L. et al. (1991): Indian Agricultural Development since Independence, Oxford & IBH, New Delhi.
- Dhawan B.D., (1993), Trends and New Tendencies in Irrigated Agriculture, Common Wealth Publishers, New Delhi.

- Dutta, B.K. (2003): Theories of Sharecropping, Mittal Publications New Delhi.
- Ghatak, S and K. Ingerscant (1984), Agriculture and Economic Development; Select Books, New Delhi.
- Ghatak, S and K. Ingerscant (1984), Agriculture and Economic Development; Select books, New Delhi.
- Ghatak, S. and K. Ingerscant (1984), Agriculture and Economic Development, Select Books, New Delhi.
- Griffin, K.(1973): Political Economy of Agrarian Change.
- Gulati, A. and T. Kelly (1999): Trade Liberalization and Indian Agriculture, OUP, New Delhi..
- Kahlon and Tyagi (1983): Agricultural Price Policy in India, Allied Publishers, New Delhi.
- Khusro, A.M.(1973), The Economics of Land Reforms and Farm Size in India, MacMillan.
- Meier, G.M. (1995), Leading Issues in Economic Development; OUP, New Delhi.
- Mellor, J.W., The Economics of Agricultural Development, Vora and Co., Bombay, 1964.
- Raghavan and L. Sarkar (Eds.) (1996), Poverty and Employment: New Delhi.
- Raj, K.N. et.al. (1988), Essays in the Commercialization of Indian Agriculture; OUP, New Delhi.
- Rao, CHH (1993) Agricultural Growth, Rural Poverty and Environmental Degradation in India, OUP, New Delhi.
- Rao, CHH (1993) Agricultural Growth, Rural Poverty and Environmental Degradation in India, OUP, New Delhi.
- Rao, CHH, (1975), Technological Change and Distribution of Gains in Indian Agriculture, MacMillan.
- Rudra, A. (1982), India Agriculture Economics; Myths and Reality: Allied Publishers, New, Delhi.
- Sarap Kailash (1991), Interlinked Agrarian Markets in Rural India, Sage Publication, New Delhi.
- Schultz, T.W. (1964), Transforming Traditional Agriculture, Yale University Press.
- Taylor, H.C., (1949), Outlines of Agricultural Economics, MacMillan.
- Verma, N.M.P. (1990), Irrigation Change and Agricultural Development, Uppal, New Delhi.
- Visarioa, B and R. Basant (1994), Non-Agricultural Employment in India, Trends and Prospects,Sage Publication, New Delhi.
- Wanmali S. and C. Ramasamy (Eds.) (1995). Developing Rural Infrastructure; Macmillan, New Delhi.

DE 403 (ii): History of Economic Thought

MODULE I

Ancient Economic Thought; Plato and Aristotle. The Scholastics Medieval Thinkers; St. Thomas Aquinas; Main Characteristics of Mercantilism, Features of Physiocracy – Economic Ideas of David Hume.

Lect.= 10 hours.

MODULE II

Adam Smith – Theory of value and Distribution; David Ricardo – *Theory of Value and Distribution.*; Thomas R. Malthus – Theory of Population; Malthus on Market Gluts; View's of J.S. Mill on value and Distributions. Karl Marx – Dialectical and Historical Materialism; Theory of Surplus Value and Crisis of Capitalism.

Lect.= 10 hours.

MODULE III

The Marginalist Revolution – W.S. Jevons and Leon Walrus. Alferd Marshall – Role of Time Element in Price Determination, Consumer Surplus and Elasticities; Pigou – Welfare Development, Beyond Marginalist – Contribution of J.M. Keynes in Economics and Post Keynesian Development.

Lect.=10 hours.

MODULE IV

Indian Economic Thinkers- Dadabhai Naoroji, Mahatma Gandhi, B.R. Ambedkar Jawaharlal Nehru and Amartya Sen.

Lect.= 10 hours.

Recommended Reading List:

- Barber, William J, (1967), A History of Economic Thought, Penguin Books.
- Bhusan, Sudhansu (1996), Classical Economic Theory, Rawat Publication.
- Blackhouse, R. (1985), A History of Modern Economic Analysis. Basil Blackwell, Oxford.
- Blaug, M (1997), Economic Theory in Retrospect: A History of Economic Thought from Adam Smith to J.M. Keynes, (5th Edition), Cambridge Press, Cambridge.
- Dasgupta, A.K. (1985), Epochs of Economics Theory, Oxford University Press, New Delhi.
- Gandhi, M.K. (1947) India of My Dreams, Navajivan Publishing House, Ahmedabad.
- Ganguli, B.N. (1997), Indian Economic Thought: A 19th Century Perspective, Tata Mcgraw Hill, New Delhi.
- Gide, C.and G. Rist (1956), A History of Economic Doctrine, (2nd Edition), George Harrop & Co. London.

- Grey, A. and A.E. Thompson (1980), The Development Of Economic Doctrine, (2nd Edition), Longman Group, London.
- Hunt E.K. (2004), History of Economic Thought, Spring Books, Gurgaon.
- Kautilya (1992), The Arthashastra, Edition, Rearranged, Translated and Introduced by L.N. Rangarajan, Penguin Books, New Delhi.
- Koot, G.M. (1988), English Historical Economics: 1850-1926, Cambridge University Press, Cambridge.
- Rao, M.N. (1964) ,Memoirs, Allied Publishing Bombay.
- Raphael, D.D, Donald Winch, Robert Skidelsky (1997), Three Great Economists Smith, Malthus and Keynes, Oxford University Press
- Roll, E. (1973), A History of Economic Thought, Faber, London.
- Schumpeter, J.A. (1951), Ten Great Economists, Oxford University Press, New York.
- Schumpeter, J.A.(1954), History of Economic Analysis, Oxford University Press ,New York.
- Seshadri , G.B.(1997), Economic Doctrines ,B.R. Publishing Corporation ,Delhi.
- Shionya, Y. (1997), Schumpeter and the Idea of Social Science, Cambridge University Press, Cambridge.
- Staley, Charles, E (1991), A History of Economic Thought- Fro Aristotle to Arrow, Blackwell Publisher, USA.
- Thorat, S.K. (1998), Ambedkar's Role in Water Resource Development, New Delhi.
- Verma, N.M.P (1998), Economic Thought of Ambedkar, Bharat, Lucknow.

DE 404 (i) Advanced Econometrics

Module I

Simultaneous Equation Models: Introduction and Examples, Simultaneous Equation Bias and Inconsistency of OLS Estimators; The Identification Problem; Rules of Identification- Order and Rank Conditions; Methods of Estimating Simultaneous Equation System, Macro Economic Model.

Lect.= 10 hours.

Module II

Econometrics Modelling: Model Specification and Diagnostic Testing, Panel Data Regression Models, Dynamic Econometric Model: Autoregressive and Distributed Lag Models.

Lect.=10 hours

Module III

Stationary, Unit Roots, Co-Integration, Approaches to Economic Forecasting, AR, MA, ARIMA, Box-Jenkins Methodology; Problems with VAR Modelling.

Lect.=10 hours.

Module IV

Multivariate Analysis: Factor Analysis, Principal Component Analysis, Canonical Correlation Analysis, Discriminant Analysis.

Lect.=10 hours.

Recommended Reading List

- Chatfield C. and A.J. Collins, (1980), Introduction to Multivariate Analysis, Chapman and Hall, London.
- Chaw, G.C. (1983), Econometrics, McGraw Hill, New York.
- Francies, P.H. (1998), Time Series Modules for Business and Economic Forecasting Cambridge University Press, Cambridge.
- Greene, William H. (2003): *Econometric Analysis*, 5th Edition, Pearson Education, Inc., New Jersey.
- Gujarati, D. N. and Sangeetha (2007): *Basic Econometrics*, 4th Edition, Tata McGraw-Hill Publishing Company Ltd., New Delhi.
- Harvey, A.C.(1981), Econometric Analysis of time series, Philip Allen, London.
- Intriligator, M.D. (1978), Econometrics Methods, Techniques and Applications, Prentice Hall, Englewood Cliffs, New Jersey.
- Jacques Tacq (1998), Multivariate Analysis Techniques in Social Science Research, Sage Publications.
- Johnston, J. (1991), Econometric Methods, McGraw Hill Book Co., London.
- Kmenta,J. (1997): Elements of Econometrics, Univ. of Michigan Press, New York.

- Koutsoyiannis, A. (1977): Theory of Econometrics (2e), Macmillan, London
- Maddala, G.S., (1997), Econometrics, McGraw Hill, New York.
- Nachane Dilip M. (2010), Econometrics: Theoretical Foundations and Empirical Perspectives, Oxford University Press, New Delhi.
- Pindyck, R.S. and D.L. Rubinfeld (1976). Econometric Models and Econometric Models and Economic Forecasts, McGraw Hill, Kogakusha, Tokyo.
- Ramanathan Ramu, (2002), Introductory Econometrics with Applications, Thomson, South-Western.

MODULE I

Paradigms of Labour Market Analysis – Classical, Neoclassical and Dualistic Economy. The Dualistic Model in Indian Context. The Nature and Characteristics of Labour Markets in Developing Countries like India. Globalisation and Labour Market. Labour Market Institutions- The Aspects of Labour Market Rigidities and Labour Market Flexibilities and other Factors Influencing Employment. Labour Market Policies- The Role and Significance of active Labour Market Policies in Employment Generations.

Lect.=10 hours.

MODULE II

Employment and development Relationship –Unemployment and Poverty – Concepts, Types and Measurement, Particularly in India. The Changing Pattern of Labour Force and Workforce Participation in India. Employment Trends in India-The Growth Employment Interaction during pre and Post Economic Reforms. The Analysis of Education and Employment-Human Capital base of India's Labour Force. Employment Generation Programme in India with Special Emphasis on present day wage Employment and Self-Employment Programme.

Lect.=10 hours.

MODULE III

Wage Determination – Classical and Neo-Classical Theories of Wage Determination. Wage Determination under Imperfect Labour Market such as Monopsony. The Theory of Collective Bargaining of Wage Determination. The Structural Change of Economy and Trade Unionism. Wage Determination in the Rural Sector. National Wage Policy; Concepts of Minimum Wage, Living wage and Fair Wage. Mobility and Productivity of Labour. Productivity and wage Relationship.

Lect.=10 hours.

MODULE IV

The Informal Sector and Indian Economy. Trends and Structure of Employment in Informal Sector. The Changing Pattern of Rural Labour. The Concept of Social Security and its Evolution. Support Led and Growth Mediated Social Security. Social Protection of Workers under Increasing Labour Market Flexibility. Special Problems of Labour ; Child Labour, Discrimination and Gender bias in Treatment of Labour.

Lect.=10 hours.

Recommended Reading List:

- Behera, Deepak Kumar and R.V. Ramanamurthy (2103) Sectoral Occupational Transformation in India, New Directions and Old Concerns, Indian Journal of Labour Economics, Vol.56, No,3.
- Brempong, Kwabena Gyimah, Dualistic Development Models and Urban Unemployment in LDCs, Theory and Evidence from Tropical Africa, Journal of Economic Development, Volume 15, No.1, June 1990.
- Bulter, A.D. (1972): Labor Economics and Institutions, American Publishing Company, ND.
- Campbell, R.M .and S.L. Brue (1995): Contemporary Labour Economics, McGraw Hill, NY.
- Datt, G. (1996), Bargaining power Wages and Employment; An Analysis of Agricultural labour markets in India, Sage Publications, New Delhi.
- Deshpande, L.K., P.R. Brahmananda, E.A.G. Robinson (Eds) (1983) , Employment policy in a Developing Economy, Vol. 1 &2, Macmillan, London.
- Despande, L.K. and J.C. Sandersara, (Eds.) (1970), Wage Policy and Wage Determination in India, Bombay University Press, Bombay.
- Employment and Unemployment Situations in India, National Sample Survey Organisation, Ministry of Statistics and Programme Implementation, Government of India, Various Issues.
- George, J.B. (1996): Labor Economics McGraw Hill, NY.
- Ghosh Jayati (1995), Employment and labour under Structural Adjustment in India since 1991, Indian Journal of Labour Economics, Vol. 38, No.4, October-December.
- Ghosh Jayati (2013), The Strange Case of the Jobs that did not Appear: Structural Change, Employment and Social Pattern in India, Presidential Address at the Indian Society of Labour Economics, 55th Annual Conference, 16-18 December, New Delhi.
- Ghosh Jayati, Macroeconomic Reforms and Labour Policy Framework for India, Employment Strategy Paper, ILO, Geneva, 2004
- Hanseman, S. (1991), Industrial Restructuring with Job Security, Harvard University Press, Cambridge, Mass.
- Hirway, Indira, NREGA After Four Years: Building on Experiences to Move Ahead, Indian Journal of Labour Economics, Vol. 53, No. 1, 2010.
- Jha, Praveen, the Well being of Labour in Contemporary Indian Economy; What Active Labour Market Policy got to do with it? Employment Working Paper No. 39, ILO, Geneva, 2009.
- Kannan, K.P (2013), The Growth Employment Interaction in India since the Advent of Economic Reform: Is there a Virtuous Circle, Indian Journal of Labour Economics, Vol. 56, No.1.
- Krishnamurty. A, Mangain Rajendra P (Ed), Growth, Employment and Labour Markets, Perspectives in the Era of Globalisation in India, Daanish Books, 2009.
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- Mahendra Dev, S (2002), Growth Mediated and Support led Social Security in the Unorganised Sector in India, Indian Journal of Labour Economics, Vol.45, No.2, April-June.
- Mazumdar Dipak and Sarkar Sandip, The Employment Problem in India and the Phenomenon of the 'Missing Middle', Indian Journal of Labour Economics, Vol. 52, No.1, 2009.
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- Prakash, B.S., and Surendra Meher (2006), Employment and Productivity Trends in Unorganized manufacturing Sector: 1985-2001, Manpower Journal, Vol. 41, No. 1, January-March.
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- Report of the Group to Review the Methodology for Estimation of Poverty, Government of India, Planning Commission, November, 2009.
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- Sharma, Alekh Narayan, Flexibility, Employment and Labour Market Reforms in India, Economic and Political Weekly, May 27, 2006.
- Sharma, R.K., M. Satish Kumar and Surendra Meher (2002), Education, Skills and the Labor Market in a Globalised World: A Case of India Indian Journal of Labour Economics, Vol.45, No.4 October-December.
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- Solow, R.M. (1990), Labour Market as an Institution, Blackwell, London.
- Srivastava, Ravi (2012), Social Protection for Workers in India: Struggling for Basic Rights under Increasing Labour Market Flexibility, Indian Journal of Labour Economics, Vol.55, No. April-June.
- Venkata Ratnani, C.S.(2001), Globalization and Labour – Manangement Relations:Dynamics of change, Sage Publications/ Response Books, New Delhi.
- Verma , N.M.P. (2002), Missing Relevance of Social Security in Information Sector under the Liberalized Era, Indian Journal of Public Administration, New Delhi, No. 1.
- Verma N.M.P. and Resma Bano (1998) : Female Participation Rate: Some Recent Controversies, Indian Journal of Industrial Relations, New Delhi.
- Verma, N.M.P. (1988): Employment and Wage Structure in Drought Prone Agriculture, Manpower Journal, No.2.
- Verma, N.M.P. (2008), Indentured Indian Labour Market Deptt. Of Economics,BBAU, Lucknow.

DE 404 (iii) Economics of Discrimination

MODULE I- Meaning and Scope of Economic Discrimination, Economic discrimination-Growth and Income Distribution-Theories of Economic Discrimination-Discrimination in Product and Factor Market-Cumulative Causation Critic, Neoclassical Approach to Economic Discrimination-Alternative Approaches-Critics of Neo Classical-Radicals and Marxian Application Discrimination, Price Discrimination.

Lecture = 10 hours

MODULE II-Caste and Economic Theory-Akerlof, Scoville, Deepak Lal and Romer. Marxian Concept on Caste, Empirical studies on Caste and Discrimination in India with Reference to Land, Labour, Education, Social Service, Dalits, Gender and Religion

Lecture = 10 hours

MODULE III-Measurement of Economic Discrimination-Indirect Methods of Testing Presence of Discrimination-Direct Method of Testing the Presence of Economic Discrimination-Empirical Studies on Discrimination in Developed and Developing Countries.

Lecture = 10 hours

MODULE IV- Planning and Policy- Ways to Control Economic Discrimination, Empowerment, Reservation Policy, Re-distribution Policy: Welfare-Redistribution Trade Off.

Lecture = 10 hours

Recommended Reading List:

- Ajit Roy “Caste and Class: An Interlinked View” EPW, Annual No. Feb 1979.
- Ajit Roy “Caste and Class: An Interlinked View” EPW, Annual No. Feb 1979.
- Akerlof, George (1976). “The Economics of Caste and of Rat Race and Other Woeful Tales”, Quarterly Journal of Economic, XC.04. Nov.1976.
- Akerlof, George (1976). “The Economics of Caste and of Rat Race and Other Woeful Tales”, Quarterly Journal of Economic, XC.04. Nov.1976.
- Akerlof, George (1980). “The Theory of Social Customs, of which Unemployment may be one consequences”, Quarterly journal of Economics” XCIV-04, June 1980.
- Akerlof, George (1980). “The Theory of Social Customs, of which Unemployment may be one consequences”, Quarterly journal of Economics” XCIV-04, June 1980.
- Ambedkar B.R. (first published 1987). “The Hindu Social Order- Its Essential Features” in Vasant Moon (Edit), “Dr. Babasaheb Ambedkar writings and Speeches”, Vol.03, Page 95-115, Deptt.of Education, Govt. of Maharashtra, Bombay.
- Ambedkar, B. R. (first published 1987). “The Hindu Social Order-Its Unique Features” in Vasant Moon (Edit), “Dr. Babasaheb Ambedkar writings and Speeches” Vol.03, Page 116-129, Deptt. Of Education, Govt. of Maharashtra.
- Ambedkar, B.R. (1936). “Annihilation of caste” Delhi also included in Vasant Moon (Edit) (1979). “Dr. Babasaheb Ambedkar Writings and Speeches” Vol. I. Education Deptt Govt. of Maharashtra, Bombay.

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- Ambedkar, B.R. (1936). “Annihilation of caste” Delhi also included in Vasant Moon (Edit) (1979). “Dr. Babasaheb Ambedkar Writings and Speeches” Vol. I. Education Deptt Govt. of Maharashtra, Bombay.
- Ambedkar, B.R. (first published 1987). “Philosophy of Hinduism” Vasant Moon (Edit) “Dr. Babasaheb Ambedkar writings and Speeches” Vol. 03, Page 1-94.
- Anno O Kruger (1963). ‘The Economics of Discrimination’. Journal of Political Economy, LXXI (5), October 481-06.
- Anno O Kruger (1963). ‘The Economics of Discrimination’. Journal of Political Economy, LXXI (5), October 481-06.
- B.T. Randive “Caste, Class and Property Relations EPW, Annual No. Feb.1997.
- Banerjee, Biswajeet et al. (1985), Caste Discrimination in the Indian Urban Labour Market, Journal of Development Economics, Vol. 17, April.
- Bardhan, Pranab (1989). “Alternative Approaches to the Theory of Institution in Economic Development” in The Economic Theory of Agrarian Institutes, 1989, Clarendon, Oxford.
- Beeker Gray S. (1964). Human Capital: A Theoretical And Empirical Analysis, National Bureau of Economic Research New York.
- Darity, William A et al. (1985). Peddlers Forever: Culture, Competition And Discrimination, American Economic Review Vol. 75, No.02.
- David Romer (1984). “The Theory of Social Custom: A Modification and some Extension” in Quarterly Journal of Economics.
- Derity, William A Jr (1982). The Human Capital Approach to Black-White Earnings Inequality Journal of Human Resource Vol. 17, No.01.
- Dr. K. B. RatanaKumari (2007), Economic Discrimination Against Women, Abhijeet Publication, New Delhi.
- Dr. K. B. RatanaKumari (2007), Economic Discrimination Against Women, Abhijeet Publication, New Delhi.
- Dr.L.C.Mallaiah, Karunykar & Ratnakumari(2007), Dalits and Human Development, Abhijeet Publication, New Delhi
- E.M.S. Namboodripad, “Caste, Classes and Parties in Modern Political Development” in Social Scientist, Nov. 1977.
- Edward Montgomery (1996). “Alternative Action and Reservations in the American and Indian Labour Markets: They Really that Bad? “Centre for Institutional Reform and Informal Sector” Deptt. of Economics, University of Maryland , Paper present in “Seminar” Indian Economic Reform Januray,1996.
- Gary S. Beeker (1957). ‘Market Discrimination’. The Economics of Discrimination chapter 6, Chicago: University of Chicago Press 84-100.
- George K. Lieten (1979). “Caste in Class Politics” EPW Annual No. Feb 1979.
- Gray S Becker (1957). ‘ The Economics of Discrimination, University of Chicago Press.
- Gray S Becker (1957). ‘ The Forces Determining Discrimination in the Market Place’. The Economics of Discrimination, Chapter 1 Chicago: University of Chicago Press. 13-18.
- Gray S Becker (1957). ‘ The Forces Determining Discrimination in the Market Place’. The Economics of Discrimination, Chapter 1 Chicago: University of Chicago Press. 13-18.

- Gunnar Myrdal (1944). 'Facets of the Negro Problem', An American Dilemma: The Negro Problem and Modern Democracy, Chapter 3, New York and London Harper & Brothers, 75-08 and notes 1185-7.
- Gunnar Myrdal (1944). 'The Mechanics of Economic Discrimination as a Practical and Modern Democracy, Chapter 17, New York and London: Harper & Brothers, 380-06 and notes 1292-95.
- Joseph E Stiglitz (1973). 'Approaches to the Economics of Discrimination', American Economic Review, 63 (2), May.
- Joseph E Stiglitz (1973). 'Approaches to the Economics of Discrimination', American Economic Review, 63 (2), May, 287-95.
- L.C.Mallaiah & Ratnakumari(2007) Economic Development and Dalit Agricultural Workers, Abhijeet Publication, New Delhi
- L.C.Mallaiah & Viswantha (2008), Dalits and Globalisation, Abhijeet Publication, New Delhi
- Lawrence M. Khan (1991). 'Customer Discrimination and Affirmative Action', Economic Inquiry, XXIX, July, 555-71
- Lawrence M. Khan (1991). 'Customer Discrimination and Affirmative Action', Economic Inquiry, XXIX, July, 555-71.
- Lester C. Thurow (1975). 'Discrimination and Theories of Income Discrimination'. In Generating Inequality: Mechanisms of Distribution in the U.S. Economy. Chapter 7, New York: Basic Books, 155-81 and notes 246-07.
- Mason, Patrick (1992). The Divide and Conquer and Employer Employee Models of Discrimination: Neo Classical Competition as Familial Defeat, Review of Black Political Economy, Vol. 20, No.04.
- Me Intosh, Neil et.al (1974). The Extent of Racial Discrimination, Vol. 11.
- Oliver Cromwell Cox (1970). 'American Dilemma: A Mystical Approach to the study of Race Relations'. In Oliver Cromwell Cox (ed.) Caste, Class and Race, A Study in Social Dynamics, Chapter 23, New York, Modern Reader, Second Edition, 509-38 and references.
- Romer, John E (1979). Divide and Conquer: Micro- foundations of a Marxian Theory of Wage Discrimination , Bell Journal of Economics, Vol. 10, No.02.
- Smith, James (1984). Race and Human Capital, American Economic Review, Vol. 74, No.04.
- Thomas Sowell (1971). 'Economics and Black People'. Review of Black Political Economy Winter / Spring , 03-21.
- Thorat, S.K. et al. (1998). Caste System and Economic Inequality: Theory and Evidence, Paper Presented at a Seminar on Ambedkar in Retrospect, JNU, New Delhi.
- Thorat, S.K. et al. (1998). Caste System and Economic Inequality: Theory and Evidence, Paper Presented at a Seminar on Ambedkar in Retrospect, JNU, New Delhi.
- Williams Rhonda M. (1987). Capital, Competition and Discrimination, Review of Radical Political Economics Vol. 19, No. 02.

(M.Phil. in Economics)

Structure

There shall be one semesters under this programme for course work. In this semester, there shall be four papers of 4 credits each. Each paper consists of 4 modules. Each module has minimum 10 hours teaching, i.e., minimum of 40 hours per paper with tutorials.

Paper Code	Paper Name	Credits
Semester I		
MDE 101	Research Methodology	4
MDE 102	Social Accounting and Data Base	4
MDE 103	Any Two of the Following	8
MDE 103	1.Contemporary Macro Economic Issues in Indian Economy 2.Contemporary Environmental Economics 3.Monetary Theory, Institutions & Policy 4. Labor Economics 5.Advanced Economic Theory	
	Total Credit	16
Semester II		
	Dissertation Work	16

Total Credit = 32

MDE 101: Research Methodology

Module I

Research Methodology: Social Research Strategies, Research Design, Research Approaches, Methods and Methodology, Formulation, Criteria in Social Research, Defining a Problem, Developing a Research Plan, Formulating Research Questions, Reviewing the Literature, Quantitative and Qualitative Research.

Module II

Methods of Sampling and Sampling Design: Sampling Design, Types of Sampling, Criteria and Characteristics of a Good Sample, Sampling Techniques, Content Analysis, Methods of Data Collection: Primary and Secondary Data, Case Study Method, Participating Rural Appraisal/ Focus Group Discussion, Formulation and Testing of inferences.

Module III

Econometric Research Analysis: Simple and Multiple Regression (Double Log and Semi-Log Model, Structural Analysis, Auto Regressive Model and Forecasting), Qualitative Methods (Dummy Variable, Logit,), Testing of Assumptions (Multi-Collinearity, Heteroscedasticity and Auto-Correlation) and Interpretations of Regression Model and Time Series Analysis

Module IV

Computer Assisted Data Analysis: Using Stata or SPSS in Windows for the above mentioned models in Module III.

Recommended Readings List

- Adams John et al., (2010), Research Method, Sage Publications, Singapore.
- Bryman, Alan (2008), Social Research Methods, Oxford University Press, New Delhi.
- Gerard Guthrie (2010), Basic Research Methods, Sage Publications New Delhi.
- Gujarati, D.N. and Sangeetha (2007), Basic Econometrics, Tata McGraw Hill, New Delhi.
- Juul Svend, (2004), Introduction to Stata, University of Aarhus
- Kothari, C R (2011): Research Methodology, New Age International, New Delhi.
- Koutsyannis A. (2004): Theory of Econometrics, Palgrave, New Delhi
- Rajaraman, V. (2008), Fundamentals of Computers, Prentice Hall of India, New Delhi.
- Ram Ahuja 2007, Research Methods, Rawat Publications, Jaipur.
- Sinha, P.K. and Priti Sinha (2008), Computer Fundamentals, BPB, Publications, New Delhi.
- Stata, Version 11, Stata Corporation, USA.
- Sophia Rabe-Hesketh and Brian Everitt (2003), A Handbook of Statistical Analysis Using Stata, Third Edition, Chapman and Hall/CRC.
- EH Carr: What is History, Penguin Books.

- Immanuel Wallerstein et al: Open The Social Sciences: Report of the Gulbenkian Commission on Restructuring of the Social Sciences, Vistaar Publications, 1998
- Krishna Bhardwaj: On Some Issues of Method in the Analysis of Social Change, University of Mysore, 1980
- Goode WJ and Hatt PK: Methods in Social Research, Mc Graw-Hill Book Company, USA, 1952 and reprinted by Surjeet Publishers Delhi, 2006.

MDE 102: Social Accounting and Data Base

Module 1

Concepts of Social Accounting and their Limitations, Economic Growth and Measurement, Methods of Measuring at Constant and Current Prices. National Income Accounting in India

Module II

Changing Structure of the Economy, GDP and its Components, Consumption, Saving Investment, Govt Expenditure, Tax, Subsidy, Regional Distribution of National Income, Shares of Factor Incomes in NI, Total Factor Productivity and Growth.

Module III

Leontief Input-Output Framework, Preparation of Input-Output Table, Least Cost Combination of Input, the Expansion Path, Homothetic Function, Elasticity of Substitution, CES and Cobb Douglas Production Function, Linear Programming and its Mathematical Treatments

Module IV

Indian Statistical System: NSA, NSSO, CSO, Census, RBI, Ministries, Indicators and Measures of Social Wellbeing –PQLI, HDI and Others.

Recommended Readings List

- Bansal (2002): Agricultural Statistics in India, CBS Publishers; New Delhi.
- Basanth.K.Pradhan (Latest): Social Accounting Matrix for India; Concepts, Constructions, Sage Publications; New Delhi.
- CSO (1989) and (1999): Guide to Official Statistics, Ministry of Planning and Program Implementation.
- CSO (1989), (1999) and 2007: National Accounts and Statistics; Sources and Methods, Ministry of Planning & CSO.
- International Institute for Population Sciences (1992-93, 1998-99): National Family and Health Surveys, Ministry of Health and Family Welfare & IIPS; Mumbai.
- Leontief, Wassily (1968): Input-Output Economics , Oxford University Press; New York
- Rao.V.K.R.V (1983): India's National Income 1950-1980, Sage;New Delhi
- Scott. James, C. (1998): Seeing Like a State; How Certain Schemes to Improve the Human Condition Have Failed, Yale University Press; London.
- Shukla Rajesh (2010): How India Earns, Spends and Saves; Unmasking the Real India, Sage Publication; New Delhi.
- Stigitz Joseph.E (et.al) (2011): Mis-measuring Our Lives; Why GDP Does Not Add Up , Bookwell Publications; New Delhi.
- Verma, NMP (1992) Leontief Input-Output Technique: Problems of Application in India, Indian Economic Journal.

MDE 103: Optional Papers

MDE 103 (i): Contemporary Macro Economic Issues of India

Course Supervisor: Prof. NMP Verma

About the Course:

In the 21 century Macro issues have emerged as a local concern in the country the academicians, planners and scholars are compelled to re-think the dominant development paradigm from macro perspective so that the goal of faster development can be accomplished. In this background, the course will address the linkages between the contemporary issues. Pedagogy will be a combination of Lectures. Interactive sessions and augmentation of Participatory Aptitude among the students so that they can be able to critically examine the existing macro development paradigm and policy and to comprehend and formulate alternatives.

OBJECTIVE OF THE COURSE:

1. To familiarize students with the major perspectives of Macroeconomic development.
2. To sensitize Scholars with the nature and magnitude of the main contemporary issues in development at national level.
3. To acquaint them with the Indian development challenges and enable them to development a sound understanding and problem solving exposure.

Module: I

Consumption- Food Deficit, Consumption Deficit, Household Consumption, Government Consumption, Firms Consumption.

Module: II

Saving and Investment – Optimal Saving, Saving – Investment linkage, Multinationals investment, FDI. Tax, Grants, Foreign Exchange, Export, Foreign Aid.

Module: III

Interest Rate, Inflation and Employment – Interest rate variations, Interest –income relation, Cost and Demand effects on Inflation, Inflation and Unemployment.

Module IV

Macroeconomic Policies in India: Formulations and Implementations, Monetary and Fiscal Policies

Recommended Readings List

- 13th Plan Documents Government of India and Government, Planning Commission, Government of India.
- Adolpho, David: Macro Economic Theory and Policy(2nd edition), Wharton Reprint, 3620,locus Walk, USA
- Barro & Sala –i-Martin: Growth Economics, PHI
- Case, Karl E and Ray , Fair: Principles of Macro Economics, Prentice Hall, 7th edition
- Census as Govt. of India 2011.
- Economic Survey of India, Planning Commission, Govt. Of India
- Government of India and Government of Uttar Pradesh, Ministry of Home Affairs. All the census Reports including 2011.
- India Development Reports, India Gandhi Institute for Research and Development Mumbai.
- Mankiew: Micro Economics
- Manpower year Books.
- Miller, Roger Le Roy and others: Macro Economics : Theories, Policies and International Applications, South Western College, USA
- National Account Statistics of CSO, Ministry of Statistics and Programme Implementation, New Delhi.
- NSS Reports: Latest Round, ministry of Statistical and Programme Implementation, New Delhi.
- Patnaik, Prabhat (ed) Macro Economics, Oxford, Delhi, 1999
- RBI Occasional Paper, RBI, Mumbai.
- RBI Reports on Currency and Finance, RBI, Mumbai.
- RBI Reports on Trend and Progress of Banking, RBI, Mumbai.
- Roger Farmer: Macro Economics with Macro Tools, South Western College Publisher USA, (latest edition)
- Samuelson, Paul: Macro economics, Mc Graw Hill, 1992
- Sarvekshaksana, Ministry of Statistics and Programme Implementation, New Delhi.
- Statistical Abstract of India and Uttar Pradesh, Ministry of Statistics and Programmes Implementation.
- Stiglitz, JE: Principles of Macro Economics, Norton, New York, 2002.
- Kaushik Basu: The Oxford Companion to Economics in India, OUP, Delhi
- Arun Kumar: Indian Economy Since Independence: Persisting Colonial Prospects, OUP New Delhi, 2012
- Pulapre Balakrishnan: Economic Growth in India; History and Prospects, OUP New Delhi, 2012
- Jean Dreze & Amartya Sen: An Uncertain Glory: India its Contradictions, Allen Lane and Penguin Books, 2013

MDE-103(ii): Contemporary Environmental Economics

Course Supervisor: Dr. Sanatan Nayak

Objective

This course is meant to give the student an exposure to different debates and approaches in environmental economics. It provides the student for understanding the diverse frameworks, national and global environmental problems, analytical tools, institutional and regulatory mechanisms etc.

By the end of the course, the student should be able:

- To become familiar with various methods of measurement of environmental resources
- To understand the Global Environmental Issues and Development
- To understand the linkage of Environment and Health.
- To understand the linkage of Environment and Trade

MODULE I: ENVIRONMENTAL VALUATION

Environmental valuation from market information including prices, productivity change method, substitution cost method, illness costs, human capital. Revealed preference models of valuation: basic theory; Hedonic pricing method: property market and labor market; travel cost method: individual model and zonal model; defensive cost method: defensive costs of decreased drinking water quality; applications. Contingent valuation method: bias, experimental markets; choice modelling: choice experiment, contingent comparison, contingent scoring, pair comparison; applications; benefit transfer approaches: value transfer in theory and practice.

MODULE II: ECONOMICS OF GLOBAL CLIMATE CHANGE

Science of climate change; physical impacts of climate change – agriculture, sea level rise, health, extreme events; policy debate. Efficiency, public goods, externalities; environmental policy instruments – emissions trading, carbon tax, emission trading *versus* tax; stock pollutants and discounting; decisions under risk and uncertainty. Climate change impact assessment – applications for agriculture, sea level rise and health; vulnerability assessment; economics of adaptation; measurement of adaptation cost; issues in financing adaptation; case studies. Earth Summit– social, economic and environmental pillars for sustainable development; UN Millennium Development goals – environment and health linkages; national environmental and health action plans – case studies from developing countries in Africa and Asia.

MODULE III: ENVIRONMENT AND HEALTH

Health production function; exposure, dose and response; indoor and outdoor air pollution; effects of air pollution on children, adults; effects of climate variability and climate change on mortality and morbidity; environmental toxicology; environmental carcinogenesis; water-borne diseases; municipal, industrial and hazardous waste – health implications. Adverse selection in insurance markets; moral hazards, externalities, and other market failures in health care;

problems of risk and uncertainty; unequal information; imperfect competition; equality in health care.

MODULE IV: TRADE AND ENVIRONMENT

Equilibrium pollution and Environmental Kuznet's curve; pollution havens models of international trade; free trade *versus* environment: case studies. Tradable permits for emission reduction – theory; sulphur trading and the US experience; carbon markets – the European and the US experience; Regional agreements; international trade regimes – WTO; leading issues in the WTO negotiations; dispute settlement mechanisms; trade and foreign direct investment. Evolution of environmental policy in India; Air and Water Acts; fiscal incentives; enforcement and implementation issues; emerging options – eco-taxes and eco-subsidies; case studies on pollution control in India.

Recommended Reading List

- Barbier, E.B (1997), Introduction to EKC: Special Issue, Environment and Development Economics, No.2.
- Bateman, Ian J. et al.: Economic Valuation with Stated Preference Techniques: A Manual, Edward Elgar, 2002.
- Bhattacharya, R.N. (2001), Environmental Economics – An Indian Perspective, OUP, New Delhi.
- Callan, Scott J. and Janet M. Thomas (1996), *Environmental Economics and Management: Theory, Policy and Applications*, IRWIN, Chicago.
- Coase, R.H. (1960), The Problem of Social Cost, The Journal of Law and Economics, Vol.3.
- Copeland, B.R. and M.S. Taylor, *Trade and the Environment: Theory and Evidence*, Princeton University Press, 2005.
- *Environment and Trade: A Handbook*, Second Edition. International Institute for Sustainable Development, 2005.
- Freeman III, A. Myrick (1992), The Measurement of Environmental and Resource Values: Theory and Methods, Resources for the Future, Washington, D.C.
- Freeman, A. M.: The Measurement of Environmental and Resource Values, 2nd Edition, Resources for the Future, 2003.
- Gunatilake, Herath (2004), Environmental Valuation: Theory and Applications, SANDEE.
- Hardin, Garrett (1968), The Tragedy of Commons, Science, New Series, Vol.162, No.3859
- Holgate, S.T., Maynard, R.L. and Koren, H.S., *Air Pollution and Health*, Academic Press, 1999.
- Hunter, D., J. Salzman, and D. Zaelke, *International Environmental Law and Policy*, Foundation Press, 2006
- IISD, (2005), Environment and Trade: A Hand Book, Second edition.
- Intergovernmental Panel on Climate Change – Fourth Assessment Report, 2007
- Johansson, P.-O.: Cost-benefit analysis of environmental change, Cambridge University Press, 1993.
- Kolstad, Charles D., (2007), Environmental Economics, Oxford University Press, New Delhi.
- Nadakavukaren, A. *Our Global Environment: A Health Perspective*, Waveland Press, 2005.
- Nick Hanley, et al, (1997), Environmental Economics in Theory and Practice, Macmillan.

- Nordhaus, W. and J. Boyer, *Warming the World: Economic Models of Global Warming*, MIT Press, 2003.
- Nordhaus, W.D., *Managing the Global Commons: The Economics of Climate Change*, MIT Press, 1994.
- Olson, Jr., Mancur (1971), *The Logic of Collective action: Public Goods and the theory of Groups*, Cambridge, Harvard University Press.
- Ostrom Elinor (1997): *Governing the Commons; The Evolution of Institutions for Collective Action*, Cambridge University Press, Cambridge.
- Pearce D.W. and Jeremy J. Warford (1996), *World without End: Economics, Environment and Sustainable Development*, OUP.
- Pearce, David (1998), *Economics and Environment: Essays on Ecological Economics and Sustainable Development*, Edward Elgar, Cheltenham UK.
- Phelps, C. *Health Economics*, 4th edition, Pearson Education, 2009
- Pigou, A.C. (1962), *The Economics of Welfare*, The English Language Book.
- Reeve, R., *Policing International Trade in Endangered Species: The CITES Treaty and Compliance*, Royal Institute of International Affairs, 2004
- Shankar, U. (Ed.) (2001): *Environmental Economics*, OUP.
- Singh Katar and Anil Shisodia (2007), *Environmental Economics: Theory and Applications*, Sage Publications.
- Stern David, I., ((2004), *The Rise and Fall of Environmental Kuznets Curve*, World development, No.32, Vol.8.
- Stern, N., *The economics of climate change – The Stern Review*, Cambridge University Press, 2006.
- Tietenberg, Tom (2003), *Environment and Natural Resource Economics*, Addison Wesley.
- Toman, M.A., U. Chakravorty, and S. Gupta, *India and Global Climate Change: Perspectives on Economics and Policy from a Developing Country*, RFF Press, 2003.
- Yassi, A., T. Kiellstrom, T. de Kok, and T.L. Guidotti, *Basic Environmental Health*, Oxford University Press, 2001

MDE -103(iii): MONEY: THEORY, INSTITUTIONS & POLICY

Course Supervisor: Dr. Devendra Kumar Yadav

MODULE I – Theory

Theories of the money demand – Classical, Keynesian, Monetarist, new classical and new Keynesian views , Theories of the money supply – H theory, Theories of inflation – Monetarist view, Theories of interest rate, Theories of exchange rate determination – monetary approach, asset market model & ISLM approach; Transmission mechanism of monetary policy – interest rate, exchange rate, price and output

MODULE II - Financial Institutions

Central Bank- Reserve Bank of India, Commercial Banks – structure, classification, and evaluation, Cooperative banks – structure, classification and evaluation, Development Banks – concept and relevance, Non-Bank Financial Intermediaries - Definition and types of non bank financial institutions; their growth and impact on India's economic development, measures taken to control their operations, Microfinance Institutions (MFIs) – development, prospectus and problems.

MODULE III- Financial Markets

Financial markets – Role and structure of money and capital; Market – money market; Treasury bill market, commercial bill market, discount market – Government securities market. Markets for derivatives, futures and option, types, uses and pricing derivation – Primary and Secondary market for securities; SEBI; The impact on the working capital market in India; IRDA and its role in financial markets, Informal credit market – trend, structure and relevance

MODULE IV – Monetary Policy

Monetary Policy –the aims and objectives of monetary policy in developed and developing countries, Instruments of Monetary policy – efficiency and effectiveness in developed and developing countries, Monetary and credit policy of the Reserve Bank of India – effectiveness and evaluation.

Recommended Readings List

- Bhatt, R.S.(1996), UTI and Mutual Funds: A study UTI Institute of Capital Market, Mumbai.
- Fisher, D.E. and R.J. Jordan (1992), Security Analysis and Portfolio Management, Eastern Publications.
- Gupta, L.C. (1999 Ed.), India's Financial Markets and Institution, Society for Capital.
- Levi, Maurice D (1996) International Finance: The Markets and Financial Management of Multinational Business Services.
- Sahadevan, K.G. and M.T. Thiripalaraju (1997), Mutual Funds, PHI, New Delhi.
- Wellia, P. (1992), The Theory of Future Markets, Blackwell, Oxford.
- Alan A. Rabin (2006), Monetary Theory, Edward Elgar, UK
- Bhole, L.M. (2000), Indian Financial System – Chung Publications, Allahabad.
- Goldsmith, R.W. (1969) Financial Structure and Development, Yale, London.
- Gupta, S.B. (2002), Monetary Economics, S. Chand & Company, New Delhi.
- Gupta, S.B. (2002), Monetary Economics, S. Chand & Company, New Delhi.
- Sayers, R.J.(1962) Modern Banking, OUP, New Delhi.
- Verma, J.S. (1989); A Manual of Merchant Banking, Bharat Law House, New Delhi.

MDE- 103(iv) Labour Economics

Course Supervisor: Dr. Surendra Meher

Module I

Theories of Labour Market: Classical and Neoclassical; Marxian Conceptualisation; Commodity Production and Creation of Surplus Value. Economic Dualism and Development with Surplus Labour; Lewis, Fei and Ranis. Understanding rural labour dynamics; feudal and tenancy systems, interlinked factor markets.

Module II

Concepts and measurement of Employment and Unemployment and poverty; their types and measurement in Indian context. Analysis of education and employment. The human capital theories of labour and employment, human capital base in Indian labour market.

Module III

Theories of wage determination; classical and neoclassical view points. Wage determination under imperfect competition such as monopsony. The theory of collective bargaining of wage determination. Wage determination in the agricultural sector and in the unorganised manufacturing sector.

Module IV

Globalisation and Indian Labour Market; Labour market flexibility and labour market rigidities in India context. Labour and informal sector in India; employment growth and quality of employment in informal sector. Labour Market Policies in India. Policies for employment generations in India and their evaluations. State and social security of labour. The dimension of caste, class and gender and its implication on labour market.

Recommended Readings List

- Borjas, George (2007), *Labor Economics* (4th edition), McGraw-Hill.
- Bhardwaj, Krishna (1992), *Labour Markets, Employment Policies and Dynamics of Development*, Bangladesh Institute of Development Studies.
- Brempong, Kwabena Gyimah, *Dualistic Development Models and Urban Unemployment in LDCs, Theory and Evidence from Tropical Africa*, Journal of Economic Development, Volume 15, No.1, June 1990.
- Campbell, R.M .and S.L. Brue (1995): *Contemporary Labour Economics*, McGraw Hill, NY.
- Dass, N. (1960), *Unemployment, Full Employment and India*, Asia Publishing House, Bombay.
- Datt, G. (1996), *Bargaining power, Wages and Employment; An Analysis of Agricultural labour markets in India*, Sage Publications, New Delhi.
- Deshpande, L.K., P.R. Brahmananda, E.A.G. Robinson (Eds) (1983) , *Employment policy in a Developing Economy*, Vol. 1 &2, Macmillan, London.
- Deshpande, L.K. and J.C. Sandersara, (Eds.) (1970), *Wage Policy and Wage Determination in India*, Bombay University Press, Bombay.

- Employment and Unemployment Situations in India, National Sample Survey Organisation, Ministry of Statistics and Programme Implementation, Government of India, Various Issues.
- Ghosh Jayati, Macroeconomic Reforms and Labour Policy Framework for India, Employment Strategy Paper, ILO, Geneva, 2004
- Hirway, Indira, NREGA after Four Years: Building on Experiences to Move Ahead, Indian Journal of Labour Economics, Vol. 53, No. 1, 2010.
- Jha, Praveen, the Well being of Labour in Contemporary Indian Economy; What Active Labour Market Policy got to do with it? Employment Working Paper No. 39, ILO, Geneva, 2009.
- Krishnamurty. A, Mamgain Rajendra P (Ed), Growth, Employment and Labour Markets, Perspectives in the Era of Globalisation in India, Daanish Books, 2009.
- Mazumdar Dipak and Sarkar Sandip, The Employment Problem in India and the Phenomenon of the 'Missing Middle', Indian Journal of Labour Economics, Vol. 52, No.1, 2009.
- Papola, T.S., P.P. Ghose and A.N. Sharma (Eds.) (1993), Labour Employment and Industrial Relations in India, B.R. Publishing Corporation, New Delhi.
- Report of the Group to Review the Methodology for Estimation of Poverty, Government of India, Planning Commission, November, 2009.
- Sen, A.K.(1975): Employment, Technology and Development, OUP, New Delhi.
- Sharma, Alekh Narayan, Flexibility, Employment and Labour Market Reforms in India, Economic and Political Weekly, May 27, 2006.
- Sidhu, H.S, "Wage Determination in the Rural Labour Market: The Case of Punjab and Haryana, Economic and Political Weekly, Vol. 23, No. 52/53, December, 1988.
- Solow, R.M. (1990), Labour Market as an Institution, Blackwell, London.
- Verma , N.M.P. (2002), Missing Relevance of Social Security in Information Sector under the Liberalized Era, Indian Journal of Public Administration, New Delhi, No. 1.

MDE 103(vi): Advanced Economic Theory

Module 1

New Institutional Economics: Transaction Costs, Information Asymmetry, Contract Theory, Experimental Economics, Rethinking Rational Behaviour, Evolutionary Economics.

Module II

Advanced Marxian Political Economy, SRAFFA and Recent Advances, Neo Classical Political Economy.

Theme III

New Keynesian Macro Economic Theory, Post Keynesian Macroeconomics, Recent Global Financial Crisis and Macro Theory, Economic Growth: Recent Advances in Growth Theories.

Theme IV

Trade-led Growth, International Trade and Developments, Dual Gap Analysis, Balance of Payment, Approaches of Correcting Disequilibrium in Balance of Payment, .

Recommended Readings List

- Microeconomics: Behavior, Institutions and Evolution, Samuel Bowles, ISBN: 9780691126388, Russell Sage Foundation.
- Handbook of Contemporary Behavioral Economics: Foundations and Developments”, Edited by Morris Altman, Prentice-Hall of India Pvt. Ltd., 2007.

(Ph.D. in Economics)

The Ph.D. ordinance of BBAU amended in 2013 has approved structure of the course work for Ph.D. students as follows.

1. Research Methodology	4 credits
2. Optional Paper	4 credits
3. Review of Literature	4 credits
4. Preparation and Presentation of Synopsis	4 credits
Total Credit for Course work	16 credits

PDE 101: Research Methodology

Module I

Research Methodology: Social Research Strategies, Research Design, Research Approaches, Methods and Methodology, Formulation, Criteria in Social Research, Defining a Problem, Developing a Research Plan, Formulating Research Questions, Reviewing the Literature, Quantitative and Qualitative Research.

Module II

Methods of Sampling and Sampling Design: Sampling Design, Types of Sampling, Criteria and Characteristics of a Good Sample, Sampling Techniques, Content Analysis, Methods of Data Collection: Primary and Secondary Data, Case Study Method, Participating Rural Appraisal/ Focus Group Discussion, Formulation and Testing of inferences.

Module III

Econometric Research Analysis: Simple and Multiple Regression (Double Log and Semi-Log Model, Structural Analysis, Auto Regressive Model and Forecasting), Qualitative Methods (Dummy Variable, Logit,), Testing of Assumptions (Multi-Collinearity, Heteroscedasticity and Auto-Correlation) and Interpretations of Regression Model and Time Series Analysis

Module IV

Computer Assisted Data Analysis: Using Stata or SPSS in Windows for the above mentioned models in Module III.

Recommended Readings List

- Adams John et al., (2010), Research Method, Sage Publications, Singapore.
- Bryman, Alan (2008), Social Research Methods, Oxford University Press, New Delhi.
- Gerard Guthrie (2010), Basic Research Methods, Sage Publications New Delhi.
- Gujarati, D.N. and Sangeetha (2007), Basic Econometrics, Tata McGraw Hill, New Delhi.
- Juul Svend, (2004), Introduction to Stata, University of Aarhus
- Kothari, C R (2011): Research Methodology, New Age International, New Delhi.
- Koutsyannis A. (2004): Theory of Econometrics, Palgrave, New Delhi
- Rajaraman, V. (2008), Fundamentals of Computers, Prentice Hall of India, New Delhi.
- Ram Ahuja 2007, Research Methods, Rawat Publications, Jaipur.
- Sinha, P.K. and Priti Sinha (2008), Computer Fundamentals, BPB, Publications, New Delhi.
- Stata, Version11, Stata Corporation, USA.
- Sophia Rabe-Hesketh and Brian Everitt (2003), A Handbook of Statistical Analysis Using Stata, Third Edition, Chapman and Hall/CRC.
- EH Carr: What is History, Penguin Books.

- Immanuel Wallerstein et al: Open The Social Sciences: Report of the Gulbenkian Commission on Restructuring of the Social Sciences, Vistaar Publications, 1998
- Krishna Bhardwaj: On Some Issues of Method in the Analysis of Social Change, University of Mysore, 1980
- Moser, CA and Kalton G: Survey Methods in Social Investigation
- Goode WJ and Hatt PK: Methods in Social Research, Mc Graw-Hill Book Company, USA, 1952 and reprinted by Surjeet Publishers Delhi, 2006.

PDE- 102: Optional Papers

PDE- 102 (i): Economics of Marginal People

Supervisor: Dr. L.C. Mallaiah

Module I

Caste and Economic Theory-Akerlof, Scoville, Deepak Lal and Romer, Mark and Ambedkar on Caste, Theories of Economic Discrimination- Discrimination in Product and Factor Market, Neoclassical Approach to Economic Discrimination Marxian and Ambedkar approach to discrimination.

Module II

Marginal people and Agricultural Development, land reforms, farming system, Labor, agricultural credit agriculture marketing, food processing Empirical studies on Caste and discrimination in india with reference to land, labor, Education , Social service and rural industries, Dalits , Gender and Minorities.

Module III

Globalization, Privatization and Liberalization and Indian Economic development, Empirical Studies on discrimination in developed and developing countries, Ambedkar Economic views on Indian agricultural, Industrialization.

Module IV

Planning and Policy interventions to control Economics inequality, Empowerment, Reservation Policy, Redistribution Policy: Welfare –Redistribution.

Recommended Reading List:

- Ajit Roy, Caste and Class: An Interlinked View, EPW, Annual No. 1979.
- Akerlof , George (1976). “ The Economics of Caste and of Rat Race and Other Woeful Tales” , Quarterly Journal of Economics, XC. 04, Nov., 1976
- Akerlof, George (1980), “The theory of Social Customs of which Unemployment may be one consequences, Quarterly journal of Economics” VCIV-04, June 1980.
- Ambedkar, B.R. (1936). “Annihilation of Caste” Delhi also included in Vasant Moon (Edit), 1979. “Dr. Babas
- Anno O Kruger (1963) .” The Economics of Discrimination Journal of Political Economy ,LXXXI (5), October 481-06.

- Dr. K. B. Ratana Kumari (2007) , Economic Discrimination against Women, Abhijeet publication, New Delhi.
- Gray S Becker (1957). 'The Forces Determining Discrimination in the Market Place'. The Economics of Discrimination, Chapter 1 Chicago: University of Chicago Press. 13-18.
- Gray S. Becker (1957), 'The Economics of Discrimination University of Chicago Press'.
- Joseph E. Stiglitz (1973), 'Approaches to the Economics of Discrimination', American Economic Review, 63 (2), May.
- Lawrence M. Khan (1991). "Customer Discrimination and affirmative Action ", Economics Inquiry , xxix , July , 555-71
- Lester C. Thurow (1975). 'Discrimination and Theories of Income Discrimination.' In Generating Inequality: Mechanisms of distribution in the U.S. Economy. Chapter 7 , New York: Basic Books, 155-81 and notes 246-07.
- Thorat (2008), Modern Economics of Discrimination,
- Thorat (2008), Modern Economics of Discrimination,
- Thorat, S.K. et al. (1998). Caste System and Economic inequality: Theory and Evidence, Paper Presented at a seminar on Ambedkar in Retrospect, JNU, New Delhi.

PDE-102(ii): Contemporary Environmental Economics

Course Supervisor: Dr. Sanatan Nayak

Objective

This course is meant to give the student an exposure to different debates and approaches in environmental economics. It provides the student for understanding the diverse frameworks, national and global environmental problems, analytical tools, institutional and regulatory mechanisms etc.

By the end of the course, the student should be able:

- To become familiar with various methods of measurement of environmental resources
- To understand the Global Environmental Issues and Development.
- To understand the linkage of Environment and Health.
- To understand the linkage of Environment and Trade

MODULE I: ENVIRONMENTAL VALUATION

Environmental valuation from market information including prices, productivity change method, substitution cost method, illness costs, human capital. Revealed preference models of valuation: basic theory; Hedonic pricing method: property market and labor market; travel cost method: individual model and zonal model; defensive cost method: defensive costs of decreased drinking water quality; applications. Contingent valuation method: bias, experimental markets; choice modelling: choice experiment, contingent comparison, contingent scoring, pair comparison; applications; benefit transfer approaches: value transfer in theory and practice.

MODULE II: ECONOMICS OF GLOBAL CLIMATE CHANGE

Science of climate change; physical impacts of climate change – agriculture, sea level rise, health, extreme events; policy debate. Efficiency, public goods, externalities; environmental policy instruments – emissions trading, carbon tax, emission trading *versus* tax; stock pollutants and discounting; decisions under risk and uncertainty. Climate change impact assessment – applications for agriculture, sea level rise and health; vulnerability assessment; economics of adaptation; measurement of adaptation cost; issues in financing adaptation; case studies. Earth Summit– social, economic and environmental pillars for sustainable development; UN Millennium Development goals – environment and health linkages; national environmental and health action plans – case studies from developing countries in Africa and Asia.

MODULE III: ENVIRONMENT AND HEALTH

Health production function; exposure, doses and response; indoor and outdoor air pollution; effects of air pollution on children, adults; effects of climate variability and climate change on mortality and morbidity; environmental toxicology; environmental carcinogenesis; water-borne diseases; municipal, industrial and hazardous waste – health implications. Adverse selection in insurance markets; moral hazards, externalities, and other market failures in health care; problems of risk and uncertainty; unequal information; imperfect competition; equality in health care.

MODULE IV: TRADE AND ENVIRONMENT

Equilibrium pollution and Environmental Kuznet's curve; pollution havens models of international trade; free trade *versus* environment: case studies. Tradable permits for emission reduction – theory; sulphur trading and the US experience; carbon markets – the European and the US experience; Regional agreements; international trade regimes – WTO; leading issues in the WTO negotiations; dispute settlement mechanisms; trade and foreign direct investment. Evolution of environmental policy in India; Air and Water Acts; fiscal incentives; enforcement and implementation issues; emerging options – eco-taxes and eco-subsidies; case studies on pollution control in India.

Recommended Reading List:

- Barbier, E.B (1997), Introduction to EKC: Special Issue, Environment and Development Economics, No.2.
- Bateman, Ian J. et al.: *Economic Valuation with Stated Preference Techniques: A Manual*, Edward Elgar, 2002.
- Bhattacharya, R.N. (2001), *Environmental Economics – An Indian Perspective*, OUP, New Delhi.
- Callan, Scott J. and Janet M. Thomas (1996), *Environmental Economics and Management: Theory, Policy and Applications*, IRWIN, Chicago.
- Coase, R.H. (1960), The Problem of Social Cost, *The Journal of Law and Economics*, Vol.3.
- Copeland, B.R. and M.S. Taylor, *Trade and the Environment: Theory and Evidence*, Princeton University Press, 2005.
- *Environment and Trade: A Handbook*, Second Edition. International Institute for Sustainable Development, 2005.
- Freeman III, A. Myrick (1992), *The Measurement of Environmental and Resource Values: Theory and Methods*, Resources for the Future, Washington, D.C.
- Freeman, A. M.: *The Measurement of Environmental and Resource Values*, 2nd Edition, Resources for the Future, 2003.
- Gunatilake, Herath (2004), *Environmental Valuation: Theory and Applications*, SANDEE.
- Hardin, Garrett (1968), *The Tragedy of Commons*, Science, New Series, Vol.162, No.3859
- Holgate, S.T., Maynard, R.L. and Koren, H.S., *Air Pollution and Health*, Academic Press, 1999.
- Hunter, D., J. Salzman, and D. Zaelke, *International Environmental Law and Policy*, Foundation Press, 2006
- IISD, (2005), *Environment and Trade: A Hand Book*, Second edition.

- Intergovernmental Panel on Climate Change – Fourth Assessment Report, 2007
- Johansson, P.-O.: *Cost-benefit analysis of environmental change*, Cambridge University Press, 1993.
- Kolstad, Charles D., (2007), *Environmental Economics*, Oxford University Press, New Delhi.
- Nadakavukaren, A. *Our Global Environment: A Health Perspective*, Waveland Press, 2005.
- Nick Hanley, et al, (1997), *Environmental Economics in Theory and Practice*, Macmillan.
- Nordhaus, W. and J. Boyer, *Warming the World: Economic Models of Global Warming*, MIT Press, 2003.
- Nordhaus, W.D., *Managing the Global Commons: The Economics of Climate Change*, MIT Press, 1994.
- Olson, Jr., Mancur (1971), *The Logic of Collective action: Public Goods and the theory of Groups*, Cambridge, Harvard University Press.
- Ostrom Elinor (1997): *Governing the Commons; The Evolution of Institutions for Collective Action*, Cambridge University Press, Cambridge.
- Pearce D.W. and Jeremy J. Warford (1996), *World without End: Economics, Environment and Sustainable Development*, OUP.
- Pearce, David (1998), *Economics and Environment: Essays on Ecological Economics and Sustainable Development*, Edward Elgar, Cheltenham UK.
- Phelps, C. *Health Economics*, 4th edition, Pearson Education, 2009
- Pigou, A.C. (1962), *The Economics of Welfare*, The English Language Book.
- Reeve, R., *Policing International Trade in Endangered Species: The CITES Treaty and Compliance*, Royal Institute of International Affairs, 2004
- Shankar, U. (Ed.) (2001): *Environmental Economics*, OUP.
- Singh Katar and Anil Shisodia (2007), *Environmental Economics: Theory and Applications*, Sage Publications.
- Stern David, I., ((2004), *The Rise and Fall of Environmental Kuznets Curve*, *World development*, No.32, Vol.8.
- Stern, N., *The economics of climate change – The Stern Review*, Cambridge University Press, 2006.
- Tietenberg, Tom (2003), *Environment and Natural Resource Economics*, Addison Wesley.
- Toman, M.A., U. Chakravorty, and S. Gupta, *India and Global Climate Change: Perspectives on Economics and Policy from a Developing Country*, RFF Press, 2003.
- Yassi, A., T. Kiellstrom, T. de Kok, and T.L. Guidotti, *Basic Environmental Health*, Oxford University Press, 2001

PDE 102 (iii): Contemporary Macro Economic Issues of India

Course Supervisor: Prof. NMP Verma

About the Course:

In the 21 century Macro issues have emerged as a local concern in the country the academicians, planners and scholars are compelled to re-think the dominant development paradigm from macro perspective so that the goal of faster development can be accomplished. In this background, the course will address the linkages between the contemporary issues. Pedagogy will be a combination of Lectures. Interactive sessions and augmentation of Participatory Aptitude among the students so that they can be able to critically examine the existing macro development paradigm and policy and to comprehend and formulate alternatives.

OBJECTIVE OF THE COURSE:

4. To familiarize students with the major perspectives of Macroeconomic development.
5. To sensitize Scholars with the nature and magnitude of the main contemporary issues in development at national level.
6. To acquaint them with the Indian development challenges and enable them to development a sound understanding and problem solving exposure.

Module: I

Consumption- Food Deficit, Consumption Deficit, Household Consumption, Government Consumption, Firms Consumption.

Module: II

Saving and Investment – Optimal Saving, Saving – Investment linkage, Multinationals investment, FDI. Tax, Grants, Foreign Exchange, Export, Foreign Aid.

Module: III

Interest Rate, Inflation and Employment – Interest rate variations, Interest –income relation, Cost and Demand effects on Inflation, Inflation and Unemployment.

Module IV

Macroeconomic Policies in India: Formulations and Implementations, Monetary and Fiscal Policies

Recommended Readings List

- 13th Plan Documents Government of India and Government, Planning Commission, Government of India.
- Adolpho, David: Macro Economic Theory and Policy(2nd edition), Wharton Reprographics, 3620,locus Walk, USA

- Barro & Sala –i-Martin: Growth Economics, PHI
- Case, Karl E and Ray , Fair: Principles of Macro Economics, Prentice Hall, 7th edition
- Census as Govt. of India 2011.
- Economic Survey of India, Planning Commission, Govt. Of India
- Government of India and Government of Uttar Pradesh, Ministry of Home Affairs. All the census Reports including 2011.
- India Development Reports, India Gandhi Institute for Research and Development Mumbai.
- Mankiew: Micro Economics
- Manpower year Books.
- Miller, Roger Le Roy and others: Macro Economics : Theories, Policies and International Applications, South Western College, USA
- National Account Statistics of CSO, Ministry of Statistics and Programme Implementation, New Delhi.
- NSS Reports: Latest Round, ministry of Statistical and Programme Implementation, New Delhi.
- Patnaik, Prabhat (ed) Macro Economics, Oxford, Delhi, 1999
- RBI Occasional Paper, RBI, Mumbai.
- RBI Reports on Currency and Finance, RBI, Mumbai.
- RBI Reports on Trend and Progress of Banking, RBI, Mumbai.
- Roger Farmer: Macro Economics with Macro Tools, South Western College Publisher USA, (latest edition)
- Samuelson, Paul: Macro economics, Mc Graw Hill, 1992
- Sarvekshaksana, Ministry of Statistics and Programme Implementation, New Delhi.
- Statistical Abstract of India and Uttar Pradesh, Ministry of Statistics and Programmes Implementation.
- Stiglitz, JE: Principles of Macro Economics, Norton, New York, 2002.
- Kaushik Basu: The Oxford Companion to Economics in India, OUP, Delhi
- Arun Kumar: Indian Economy Since Independence: Persisting Colonial Prospects, OUP New Delhi, 2012
- Pulapre Balakrishnan: Economic Growth in India; History and Prospects, OUP New Delhi, 2012
- Jean Dreze & Amartya Sen: An Uncertain Glory: India its Contradictions, Allen Lane and Penguin Books, 2013

PDE 102(iv): Money: Theory, Institutions and Policy

Course Supervisor: Dr. Devendra Kumar Yadav

MODULE I – Theory

Theories of the money demand – Classical, Keynesian, Monetarist, new classical and new Keynesian views , Theories of the money supply – H theory, Theories of inflation – Monetarist view, Theories of interest rate, Theories of exchange rate determination – monetary approach, asset market model & ISLM approach; Transmission mechanism of monetary policy – interest rate, exchange rate, price and output

MODULE II - Financial Institutions

Central Bank- Reserve Bank of India, Commercial Banks – structure, classification, and evaluation, Cooperative banks – structure, classification and evaluation, Development Banks – concept and relevance, Non-Bank Financial Intermediaries - Definition and types of non bank financial institutions; their growth and impact on India's economic development, measures taken to control their operations, Microfinance Institutions (MFIs) – development, prospectus and problems.

MODULE III- Financial Markets

Financial markets – Role and structure of money and capital; Market – money market; Treasury bill market, commercial bill market, discount market – Government securities market. Markets for derivatives, futures and option, types, uses and pricing derivation – Primary and Secondary market for securities; SEBI; The impact on the working capital market in India; IRDA and its role in financial markets, Informal credit market – trend, structure and relevance

MODULE IV – Monetary Policy

Monetary Policy –the aims and objectives of monetary policy in developed and developing countries, Instruments of Monetary policy – efficiency and effectiveness in developed and developing countries, Monetary and credit policy of the Reserve Bank of India – effectiveness and evaluation.

Recommended Readings List

- Bhatt, R.S.(1996), UTI and Mutual Funds: A study UTI Institute of Capital Market, Mumbai.
- Fisher, D.E. and R.J. Jordan (1992), Security Analysis and Portfolio Management, Eastern Publications.
- Gupta, L.C. (1999 Ed.), India's Financial Markets and Institution, Society for Capital.
- Levi, Maurice D (1996) International Finance: The Markets and Financial Management of Multinational Business Services.
- Sahadevan, K.G. and M.T. Thiripalaraju (1997), Mutual Funds, PHI, New Delhi.
- Wellia, P. (1992), The Theory of Future Markets, Blackwell, Oxford.
- Alan A. Rabin (2006), Monetary Theory, Edward Elgar, UK
- Bhole, L.M. (2000), Indian Financial System – Chung Publications, Allahabad.
- Goldsmith, R.W. (1969) Financial Structure and Development, Yale, London.
- Gupta, S.B. (2002), Monetary Economics, S. Chand & Company, New Delhi.
- Gupta, S.B. (2002), Monetary Economics, S. Chand & Company, New Delhi.
- Sayers, R.J.(1962) Modern Banking, OUP, New Delhi.
- Verma, J.S. (1989); A Manual of Merchant Banking, Bharat Law House, New Delhi.

PDE 102(v): Labour Economics

Course Supervisor: Dr. Surendra Meher

Module I

Theories of Labour Market: Classical and Neoclassical; Marxian Conceptualisation; Commodity Production and Creation of Surplus Value. Economic Dualism and Development with Surplus Labour; Lewis, Fei and Ranis. Understanding rural labour dynamics; feudal and tenancy systems, interlinked factor markets.

Module II

Concepts and measurement of Employment and Unemployment and poverty; their types and measurement in Indian context. Analysis of education and employment. The human capital theories of labour and employment, human capital base in Indian labour market.

Module III

Theories of wage determination; classical and neoclassical view points. Wage determination under imperfect competition such as monopsony. The theory of collective bargaining of wage determination. Wage determination in the agricultural sector and in the unorganised manufacturing sector.

Module IV

Globalisation and Indian Labour Market; Labour market flexibility and labour market rigidities in India context. Labour and informal sector in India; employment growth and quality of employment in informal sector. Labour Market Policies in India. Policies for employment generations in India and their evaluations. State and social security of labour. The dimension of caste, class and gender and its implication on labour market.

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- Brempong, Kwabena Gyimah, *Dualistic Development Models and Urban Unemployment in LDCs, Theory and Evidence from Tropical Africa*, Journal of Economic Development, Volume 15, No.1, June 1990.
- Campbell, R.M .and S.L. Brue (1995): *Contemporary Labour Economics*, McGraw Hill, NY.
- Dass, N. (1960), *Unemployment, Full Employment and India*, Asia Publishing House, Bombay.
- Datt, G. (1996), *Bargaining power, Wages and Employment; An Analysis of Agricultural labour markets in India*, Sage Publications, New Delhi.
- Deshpande, L.K., P.R. Brahmananda, E.A.G. Robinson (Eds) (1983) , *Employment policy in a Developing Economy*, Vol. 1 &2, Macmillan, London.
- Deshpande, L.K. and J.C. Sandersara, (Eds.) (1970), *Wage Policy and Wage Determination in India*, Bombay University Press, Bombay.

- Employment and Unemployment Situations in India, National Sample Survey Organisation, Ministry of Statistics and Programme Implementation, Government of India, Various Issues.
- Ghosh Jayati, Macroeconomic Reforms and Labour Policy Framework for India, Employment Strategy Paper, ILO, Geneva, 2004
- Hirway, Indira, NREGA after Four Years: Building on Experiences to Move Ahead, Indian Journal of Labour Economics, Vol. 53, No. 1, 2010.
- Jha, Praveen, the Well being of Labour in Contemporary Indian Economy; What Active Labour Market Policy got to do with it? Employment Working Paper No. 39, ILO, Geneva, 2009.
- Krishnamurty. A, Mamgain Rajendra P (Ed), Growth, Employment and Labour Markets, Perspectives in the Era of Globalisation in India, Daanish Books, 2009.
- Mazumdar Dipak and Sarkar Sandip, The Employment Problem in India and the Phenomenon of the 'Missing Middle', Indian Journal of Labour Economics, Vol. 52, No.1, 2009.
- Papola, T.S., P.P. Ghose and A.N. Sharma (Eds.) (1993), Labour Employment and Industrial Relations in India, B.R. Publishing Corporation, New Delhi.
- Report of the Group to Review the Methodology for Estimation of Poverty, Government of India, Planning Commission, November, 2009.
- Sen, A.K.(1975): Employment, Technology and Development, OUP, New Delhi.
- Sharma, Alekh Narayan, Flexibility, Employment and Labour Market Reforms in India, Economic and Political Weekly, May 27, 2006.
- Sidhu, H.S, "Wage Determination in the Rural Labour Market: The Case of Punjab and Haryana, Economic and Political Weekly, Vol. 23, No. 52/53, December, 1988.
- Solow, R.M. (1990), Labour Market as an Institution, Blackwell, London.
- Verma , N.M.P. (2002), Missing Relevance of Social Security in Information Sector under the Liberalized Era, Indian Journal of Public Administration, New Delhi, No. 1.