

Letter No.: /DE/BBAU/2019 Date:

The revised course structure and syllabus for MA. in Economics has been prepared with through discussion and approval of various meeting of faculties, BPGS & Academic Council (AC) of BBAU, Lucknow. This revised structure and syllabus shall be implemented from 2019-20 batch & onwards.

Head

Department of Economics

Copy to: All Faculties, Deptt. of Econoimcs, BBAU

Head

Department of Economics

Course Structure & Syllabus

DEPARTMENT OF ECONOMICS School for Economics & Commerce (SEC) Babasaheb Bhimrao Ambedkar University Lucknow-25

December, 2018

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DEPARTMENT OF ECONOMICS SCHOOL FOR AMBEDKAR STUDIES, 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. Optional paper shall be taught subject to availability of teachers. The total duration of lectures, tutorials and contact hours will be 60 hours for each paper.

CourseCourse Title CodeMaximum WeCode(in perce)			0 0	Credit	t Core/ Elective		
		End Semester	Sessional				
Semester I							
DE 101	Microeconomics I	70	30	6	Core		
DE 102	Macroeconomics I	70	30	6	Core		
DE 103	Quantitative Methods I	70	30	6	Core		
DE 104	Economics of Growth and Development (CBCS) *	70	30	6	Elective		
MPDC- 105	Remedial Language Course	15	10	1	Foundation		
Semester II							
DE 201	Microeconomics II	70	30	6	Core		
DE 202	Macroeconomics II	70	30	6	Core		
DE 203	Quantitative Methods II	70	30	6	Core		
DE 204	Contemporary Issues in Indian Economy (CBCS)*	70	30	6	Elective		
MPDC-205	Moral Studies	15	10	1	Foundation		
Semester III							
DE 301	Public Economics	70	30	6	Core		
DE 302(i)	International Trade or	70	30	6	Elective		
DE 302(ii)	Economics & Law						
DE 303	Environmental Economics	70	30	6	Core		
DE 304(i) DE	Basic Econometrics (CBCS)* or Economics of Population	70	30	6	Elective		
304(ii)							
MPDC- 305	Community Service	15	10	1	Foundation		
	Semester IV						
DE 401(i)	Monetary Theory, Institutions and Policy or	70	30	6	Elective		

DE 401 (ii)	Advanced Mathematical Economics				
DE 402 (i)	Computer Applications in	70	30	6	Elective
	Economic Analysis (CBCS)*				
	or				
DE 402 (ii)	Industrial Economics**				
DE 403 (i)	Agricultural Economics	70	30	6	Elective
	or				
DE 403 (ii)	History of Economic Thought				
DE 404 (i)	Advanced Econometrics	70	30	6	Elective
	or				
DE 404 (ii)	Economics of Discrimination				
	or				
DE 404 (iii)	Labour Economics				
MPDC-405	Ambedkar Studies	15	10	1	Foundation

*CBCS refers to choice based credit system. For choice based credit system,_06 credits to be secured from other departments or other department students to be secured 06 credits from economics department. Therefore, 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

****** for DE-402(ii), Industrial Economics, one project work of 30 marks shall be done by the students for Industrial expose, which shall be part of mid-semester examination. The detail structure of the project shall be based on particular theme and the schedule to be developed by the concerned faculty.

B. SYLLABUS

DE 101: Microeconomics I

Objectives: The objective of the paper is to understand the economic behaviour of individuals, firms and markets. It is mainly to equip the students in a rigorous and comprehensive understanding with the various aspects of consumer behaviour and demand analysis, production theory and behaviour of costs, the theory of traditional markets and equilibrium of firm.

No. of Lectures, tutorials, contact hours: $15 \times 4 = 60$ hours

Module I

Subject matter of Micro Economics, Basic Economic Problem-Choice and Scarcity; 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: Pragmatic Approach, Linear Expenditure Approach, Consumer's Surplus, Elementary Theory of Price Formation-Demand and Supply Equilibrium.

Module II

Theory of Production and Cost -Law of Variable Proportions and Returns to Scale; Economies of Scale; Multi-Product Firm; Elasticity of Substitution; Technical Progress and Production Function; Cobb-Douglas; CES function, Traditional and modern theories of costs — Empirical evidence; Derivation of cost functions from production functions,

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, Price Discrimination, Monopolistic Competition-, Chamberlin Approaches to Equilibrium of Firm, Product Differentiation; Oligopoly Collusive and Non Collusive, Game Theory Approach, Full Cost Pricing Rule; Bain's Limit Price Theory; Sylos-Labini Model.

Module IV

Theory of Distribution: Marginal Productivity theory of Distribution, Modern Theory of Factor Pricing, Theory of Rent: Recardian theory, Modern theory, Quasi rent. Theory of Wages: Subsistence theory, Standard of living theory, Wage fund theory marginal Productive theory and Modern theory of wages, Theory of Interest: Classical, Keynsian, Neo Classical, Austrian and Fisher's theories and Theory of Profit: JB Clark's, Hawley's Knight, Schumpeter theories.

Major Reference Books

- 1. Kreps, David M. (1990), A Course in Microeconomic Theory, Princeton University Press, Princeton.
- 2. Koutsoyiannis, A. (1979), Modern Microeconomics, (2nd Edition), Macmillan Press, London.
- 3. Layard, P.R.G. and A.W. Walters (1978), Microeconomic Theory, McGraw Hill, New York.
- 4. Sen, A. (1999), Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
- 5. Stigler, G. (1996), Theory of Price, (4th Edition), Prentice Hall of India, New Delhi
- 6. Varian, H. (2000), Microeconomic Analysis, W.W. Norton, New York
- 7. Tandon, Pankaj (2015), A textbook of Microeconomic Theory, Sage Publications, New Delhi.

Module wise Reading List

Module 1

- 1. Baumol, W.J. (1982), Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.
- 2. Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.
- 3. Green, H.A.G. (1971), Consumer Theory, Penguin, Harmondsworth.

Module 2

- 1. Henderson, J.M. and R.E. Quandt (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
- 2. Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.
- 3. Da Costa, G.C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.
- 4. Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.
- 5. Baumol, W.J. (1982), Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.

Module 3

- 1. Da Costa, G.C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.
- 2. Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.
- 3. Archibald, G.C. (Ed.) (1971), Theory of the Firm, Penguin, Harmondsworth.
- 4. Bain, J. (1958), Barriers to New Competition, Harvard University Press, Harvard.
- 5. Archibald, G.C. (Ed.) (1971), Theory of the Firm, Penguin, Harmondsworth.

Module 4

- 1. Bronfenbrenner, M. (1979), Income Distribution Theory, Macmillan, London.
- 2. Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.

DE 102: Macroeconomics I

Objectives: Macro Economics-I paper provides elementary theoretical foundation of key issues and policies. The paper attempts to discuss the functional relationships between aggregates. It helps understand the overall structure of the economy in a theoretical and contemporary perspectives for Ist semester post graduate students.

No. of Lectures, tutorials, contact hours:

15 x 4 = 60 hours

Module I Macro Economics: Nature, Concepts, Basic terms and Issues, Closed and Open Economy, Measuring Performance of the Economy, Income of Nation and Accounting: Circular Flow of Income in two, three and four-sector economy; different forms of national income accounting – social accounting, input – output accounting, and environmental accounting, Three Methods of GDP Measurement, Determination of Equilibrium level of Output and Employment-Classical and Keynesian and post Keynesian.

Module II Consumption and Investment function: Keynes' psychological law of consumption – MPC and MPI, implications of the law; Empirical evidence on consumption function; short run and long run consumption function, Approaches of Consumption – absolute income, relative income, permanent income and life cycle hypotheses

Investment Function: Working and Effects of Multiplier and Accelerator, The Marginal Efficiency of Capital: Theory of Investment: Profit Theory; Financial Theory; The Neoclassical Model

Module III Money: Definition, Types and Functions of Money M_1, M_2, M_3 , Fiat Money, High Powered Money and Money Multiplier, Quantity Theory of Money-Fisher, Cambridge, Approaches of Keynes (The Regressive Expectations Model); and Friedman (Restatement of quantity theory of money)

Supply of Money: Measures of money supply; Instruments of Monetary control. Mechanism of Monetary expansion and contraction (deterministic and behavioural models);

Demonetization of Currency; Meaning, Purpose, strategy and theoretical and empirical Effects Determinations of money supply; Neo- Classical and Keynesian Synthesis:

Module IV Determination/Derivation of IS Curve, Determination/Derivation of LM curve, Interaction of Basic IS-LM curve geometrical and algebraical derivations, extension of IS-LM model - Government sector, Labour market and Flexible price.

Basic Reading List:-

- Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
- Dornbusch, R. and F. Stanley (1999), Macroeconomics, Irwrin McGraw hill, New York
- Mankiew, N.G. and D. Romer (Eds.) (1991), New Keynesian Economics, (2 Vols). MIT Press Cambridge
- Mankiew, N. Gregory (2000), Macroeconomics, Macmillan Worth Publishers,4th Edition
- Nelson, Goodwin and Harris, Macroeconomics in Context, Routledge, U.S.
- Romer, D.L. (1996), Advanced Macroeconomics, McGraw Hill Company ltd. New York.
- Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publication, New Delhi

Additional Reading List:-

- Branko Milanovic: Global Inequality: A New approach for the Age of Globalisation, Harvard University Press
- Ben Fine (2016): Microeconomics: A Critical Companion, Pluto Press
- Dernburg, T.F. and D. M.Mc Dougall, Macroeconomics, Mc Graw Hill International Book Company.
- Dolly Singh and NMP Verma (2016), Trade-off Between Inflation and Unemployment in the Short Run: A Case Study of the Indian Economy, International Finance and Banking, Vol. 3, No. 1, USA
- Dimitris Milonakis and Ben Fine (2009): From Political Economy to Economics: Method, the social and the historical in the evolution of economic theory, Routledge.
- Frisch, H. (1983), Theories of Inflation, Cambridge University Press, Cambridge
- Hausman: The Philosophy of Economics
- Ha-Joon-Chang(2014): Economics: The User's Guide, Pelican, Penguin Books

• Lucas, R. (1981), Studies in business Cycle Theory, MIT Press, Cambridge Massacechusetts.

- Mixin Pei: China's Crony Capitalism: The Dynamics of Regime Decay
- Paul Sweezy: Theory of Capitalist Developent, Aakar, Delhi.
- Ruggles R. and N. Ruggules (1956), National Income Accounts and Income Analysis Mc Graw hill, Newyork
- Robert J. Gordon: The Rise and Fall of American Growth: The US standard of living since the Civil War The Princeton Economic History of the Western World.
- 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

Note: Other journal papers/reports may be referred in classes.

DE 103: Quantitative Method I

Objectives: Objective of this paper is to develop mathematical approach in analysis of economic problems. It mainly focuses on those mathematical techniques which are directly useful in economic analysis. All the techniques are explained with examples of economics.

No. of Lectures, tutorials, contact hours: $15 \ge 4 = 60$ hours

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.

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

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.

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.

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

Objectives: The paper provides fundamental foundation of basic growth and development issues, approaches and models. The paper attempts to discuss the structure and change in variables. It helps understand the overall static and dynamic perspectives of the economy in a purely theoretical perspective.

No. of Lectures, tutorials, contact hours: $15 \ge 4 = 60$ hours

Module I

Meaning and Objective of Growth, Development and Sustainability – Traditional View and Modern view, Factors in Economic Development- Natural Resources, Population, Capital, HRD and Infrastructure. Explanations of Cross Country Differitials. Theories of Development – Classical Theory (Smith, Ricardo, Malthus), Karl Marx, Crisis in Capitalism – Schumpeter and Capitalistic Development, Rostow's Theory of Stages of Growth Myrdal's Backwash and Spread Effects.

Module II

Approaches to Development: Partial Theories, Vicious Circle of Poverty (Nurkse). Dependency Theory of Development. Lewis approach of Unlimited Supply of Labour. Big Push Approach, Balanced Growth Approach, Unbalanced Growth Approach. Critical Minimum Effort Thesis. Nelson's Low Level Equilibrium Trap. The Listian Trap.

Module III

Growth Models –,Harrod-Domar -Instability of Equilibrium, Technical Progress and Economic Growth, Neo Classical Growth Models – Solow. Growth and Distribution Model of Kaldor, Corrected Model of Passineti, Optimal Savings and Ramsay's Rule. Romer Model of Endogenous Growth, Growth Models of John Robinson, Schultz Model- Education, Human Capital and Economic Growth.

Module IV

Measuring Development and Development Gap - Conventional, Inequality of Income, HDI and Quality of Life Indices. Theory of Demographic Transition, Population and Economic Development. Indicators and Measurement of Poverty. The Concept of Inclusive Growthwith Reference to India. Institutions and Economic Growth, Techniques of Planning-Planning in a Socialist and Capitalist Economy Market failure and government failure.

Reading List:

- 1. Ghatak, S: An Introduction to Development Economics. Allen and Unwin London, latest edition.
- 2. Meier, G.M: Leading issues in Economics Development, OUP, New Delhi, Latest edition
- 3. Todaro, M.P.: Economic Development Parson, 2009.
- 4. Thirlwal, A.P. Growth and Development, Macmillan, UK, 1999.
- 5. Hayami, Y. Development Economics, Oxford University Press, New York, 2010 (5th Impression)
- 6. Somasekher, NT: Developmental Economics, New Age Publication (Latest edition)
- 7. Mankiew, G: Macro Economics: Theory and Practices, Harvard Publication (Latest Impression)

Reference Books:-

- 1. Das Gupta, Depankar: Growth Theory, OUP, 2007
- 2. Basu, Kaushik, Issues in Economic Theory, part I and II, OUP, 2010

DE 201 Micro Economics II

Objectives: The objective of the paper is to analyse the economic behaviour of individuals, firms and markets. It is mainly to equip the students in a rigorous and comprehensive understanding with the various aspects of consumer behaviour and Economic Welfare, Firms behaviour and the theory of imperfect markets and equilibrium in different conditions.

No. of Lectures, tutorials, contact hours: $15 \times 4 = 60$ hours

Module I

General and Partial Equilibrium, Walrasian excess demand and input-output approaches to general equilibrium, Existence, Stability and Uniqueness of equilibrium and General equilibrium, Monopolies; Production without consumption: one sector model, homogeneous functions, income distribution; Production without consumption: two sector model.

Module II

Consumer Surplus: Marshallian and Hickisian Consumer Surplus, Scope and Application of Consumer Surplus, Welfare Economics, Pigovian welfare economics; Pareto optimal conditions; Value judgement; Social welfare function; Compensation principle; Inability to obtain optimum welfare — Imperfections, uncertainty and non-existent and incomplete markets; Arrow's impossibility theorem; Rawl's theory of justice, equity-efficiency trade off. Modern Welfare Function and Theory of Social Choice: Nussbaum's Central Capabilities, Sen's Capability Theory.

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 Monopoly, Externality, Public Goods, Pigovian Solutions, Second-Best Solution and Akerlof's Model of lemons.

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, Economics of Uncertainty, Individual behaviour towards risk, expected utility and certainty equivalence approaches, optimal consumption under uncertainty, competitive firm under uncertainty, factor demand under price uncertainty and the economics of information.

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.
- Nayak, Sanatan (2005), Irrigation and Economic Development, Abhijeet Publications, New Delhi.
- 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.
- Sen, A. (2000), Development as Freedom, Oxford University Press, New Delhi.
- Sen, A. (2010), The Idea of Justice, Oxford University Press, New Delhi.
- Varian, H. R., Microeconomic Analysis, Third Edition, W.W. Norton and Co., 1992.

DE 202: Macro Economics II

Objectives: Macro Economics paper provides theoretical foundation of some advanced issues and policies. The paper attempts to discuss the functional relationships between economic aggregates. It helps understand the overall structure of the economy in a theoretical perspective at higher level.

No. of Lectures, tutorials, contact hours: $15 \ge 4 = 60$ hours

Module I

Open Macro Economics: Global Connections, Major Policy Tools, Patterns of Trade and Finance, and Controversies. Free Trade- Ricardian Theory and Other Arguments, PPT, Monetary policy in an open economy. International flow of capital and goods; saving and investment in a small open economy: Mundell-Fleming open economy, Model under fixed and flexible exchange rates.

Module II

Theory of Inflation: Concept, CPI and WPI, Price Determination(AS-AD Curve Analysis), Classical, Keynesian and Monetarist approaches; Structuralist theory of inflation; Philips curve analysis – short run and long run Philips Curve, Extensions of Philips Curve and its critique, Natural Rate of Unemployment hypothesis; Tobin's modified Philips curve.

Module III

Theory of Business Cycles and Control: Business Cycle- Theories of Schumpeter, Kaldor, Samuelson and Hicks; Control of Business cycles – relative efficiency of monetary and fiscal policies.

Module IV

Macro Economics Policies: Targets and instruments; The Great Depression; Autostabilization, Lags in the effect of policies; Expectations and Reactions; Uncertainty and Economic Policy; Economic Policy- Rules vs Discretion. Monetary Policies-Central Banking Role and Policies, Fiscal Policies- Neutral and Compensatory and Functional Finance, Fiscal Federalism-Theory and Problems.

Recent Development: The Concept of Rational Expectations; New Classical Macro Economics – basic approach and policy implication; New Keynesian Economics – Sticky Nominal prices (Mankiew Model)

Basic 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
- $\bullet\,$ Dornbusch, R. and F. Stanley (1999) Macroeconomics, Irwin McGraw Hill, Inc. New York, 7^{th} Edition
- 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
- Shapiro, E. 1996, Macroeconomics Analysis, Galgotia Publication, New Delhi

Additional Reading List:

- Mankiew, NG and D. Romer (Eds) 1991, New Keynesian Economics (02Vols) MIT Press Cambridge
- Mankiew, N. Greogory (2000), Macroeconomics Macmillan Worth Publisher 4th Edition
- Frisch,H.(1983),Theories of Inflation, Cambridge University Press, Cambridge.
- Sheffirin , S.M.(1996), Rational Expectations, Cambridge University Press, Cambridge.
- Lucas, R. (1981), Studies in Business Cycle Theory, MIT Press, Cambridge, Masscechusetts.
- Taylor,L.(1983), Structuralist Macroeconomics, Basic Books, New Longman.
- Turnovsky ,S.J. (1977), Macroeconomic Analysis and Stabilization Policy,
- Cambridge University Press, Cambridge.
- Ruggles R. and N. Ruggles (1956), National Income Accounts and Income Analysis Mc Graw Hill, Newyork.
- Dernburg , T.F. and D.M.Mc Dougall, Macroeconomics, McGraw Hill International Book Company.
- Verma, NMP (2013) Recession and its Aftermath, Springer

Note: Other journal papers/reports may be referred in classes

DE 203: Quantitative Methods II

Objective: Paper aims to familiarise the students with basic statistical techniques. Whole syllabus is divided in to two parts; descriptive and inferential statistics, with major emphasis on inferential statistics. Statistical techniques are discussed with examples from economics.

No. of Lectures, tutorials, contact hours: 15 x 4 = 60 hours

Module I

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

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, Poission and Normal Distribution.

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

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

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

Objectives: Contemporary Issues in Indian Economy shall provide basic knowledge on national income accountings, various issues involved in agricultural, industrial, financial, trade sectors, public institutions and finally human resources development.

No. of Lectures, tutorials, contact hours: $15 \times 4 = 60$ hours

Module I

Basic Economic indicators – National Income, Performance of different sectors; Institution and Technology, Aspects of Agriculture: Land Reforms, Green Revolution, Price Policy, Finance and Marketing Policies, Production and Productivity Trends, Food Security Act, New Agricultural Policy.

Module II

New Industrial Policy, Public Sector Enterprise and their Performance, Liberalization, Privatization and Globalization, Disinvestment, Growth and Patterns of Industrialization; Small Scale Industries, Industrial Labour Relations, SEZ and Land Acquisition, Social Security

Module III

Concepts of Money Supply, Inflation; Trends in Prices and Money Supply, NPA of Banks Monetary Policy and Financial Sector Reforms; Public Finance: Trends in Revenue and Expenditures of the Centre and State; 13th and 14th Finance Commission and Devolution of Grants and Aid, Foreign Trade: Trends, Balance of Payments and Trade Reforms.

Module IV

Human Resource Development: Indicators, Importance, Education: Trends and Policy Health and Nutrition, NRHM; Physical Infrastructure, Demography and Development; Poverty, Unemployment, Migration, Environment, Corruption.

Recommended Reading List:

- Balakrishnan, Pulapre (2011), Economic Reforms and Growth in India, Orient Black Swan, New Delhi.
- Basu, Koushik (2010), The Concise Oxford Companion to Economics in India, Oxford University press, New Delhi.
- Bhagabati, J. and Arvind Pangoria ((2012), India Tryst with Destine, Collins Business, Noida, India.
- Brahmananda, P.R. and V.R. Panchmukhi (Eds) (2001), Development Experience in the Indian Economy; inter State Perspective, Bookwell, 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.
- Dreze, Jean & Amartya Sen (2013), An Uncertain Glory: India and Its Contradictions, Penguin Book, New Delhi.
- 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 (2014), Indian Economy since Independence, Academic Foundation, Delhi.
- Kumar Arun (latest), India Economy since Independence persisting colonial Disruption, Vision Book, New 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.
- Nayar Deepak (1993), Economics Liberalisation in India: Analytical Experience and Lessons, Orient Black Swan, New Delhi.
- RBI: Various Reports (Latest).
- Subramaniam, S. (Ed.) (1997), Measurement of Inequality and Poverty, Oxford University Press, Calcutta.
- Various Issues of Economic and Political Weekly

DE 301: Public Economics

Objective: Considering the increasing role of Government in economy, this course aims to generate theoretical and empirical understanding of students about different aspect of Governmental activities and their rationality. It covers fundamental concepts of public economics, public expenditure, public revenue, and public debt with special reference of Indian economy.

No. of Lectures, tutorials, contact hours: $15 \times 4 = 60$ hours

Module I

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

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.

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.

Module IV

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

Recommended Reading List:

- J. Stiglitz, Economics of Public Sector(3rd Edition), W W Norton & Company
- Dr. S K Singh, Public Finance In Theory and Practice (6th Edition), S. Chand Publication.
- Barro R.J (1997) Macroeconomics, MIT.
- Buchanan , J.M. (1970), The public Finances, Rchard D. Irwin, Homewood.
- Chelliah, Raja J. (1971), Fiscal Policy in under- developed countries, George Allen & Unwin, London.
- Dwivedi, 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.
- RBI, Reports on currency and finance, Annual Various Issues.
- Srivastava, Asha (2015) Fiscal Imbalances and Grants -- in -- Aid, Research India Publications, New Delhi

DE 302: International Trade

Objectives: To provide strong theoretical background to the students on the subject of international trade. It also help understands the empirical aspects such as trade reforms and their impact on India economy.

No. of Lectures, tutorials, contact hours: $15 \times 4 = 60$ hours

Module I

Theories of International Trade – The Pure Theory of International Trade – Theory of Absolute Advantage, Comparative Cost Advantage and Opportunity Cost Theory. Theory of Reciprocal Demand – Offer Curve Analysis. Factor Price Equalization Theory. Heckscher Ohlin Theory of Trade. The Rybczynski Theorem. The Stopler-Samuelson Theorem.

Module II

Terms of Trade and Economic Development- Concepts of Terms of Trade – their uses and Limitations. Hypothesis of Secular Deterioration of Terms of Trade, its Policy Implications for LDCs. Trade as an Engine of Economic Growth. Impact of Tariffs, Partial and General Equilibrium Analysis. The Political Economy of Non-Tariff Barriers.

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. Traditional, Absorption and Monetary Approaches for Adjustment in the Balance of Payments. Direct Controls for Adjustment in the BOP. Foreign Trade Multiplier with and without Foreign Repercussions.

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. Theory of Regionalism at Global Level. Collapse of Bretton-Wood System- Recent Monetary Reforms.

BASIC READING LIST :

1. Charchaliades, M. (1990), The Pure Theory of International Trade; McGraw Hill, Kogakushe, Japan.

2. Kindleberger, C.P. (1973), International Economics, RD Irwin, Homewood.

3. Krugman, Paul and Obstfeld, (2003) International Economics: Theory and Policy, Addison Wesley.

- 4. Salvatore, Dominic (2008) International Economics, Wiley Student Edition.
- 5. Sodersten, Bo(1991): International Economics, Macmillan, London.

RECOMMENDED READINGS:

Module –I

- Bhagwati, J. (Ed.)(1981), International Trade: Selected Readings, Cambridge University Press, Mass.
- Greenway, D.(1983), International Trade Policy, Macmillan Publishers Ltd. London.
- Kindleberger, C.P. (1973), International Economics, RD Irwin, Homewood.
- Cherunilam, F. (2006): International Economics, Tata McGraw Hill, ND.

Module –II

- Gorden, W.M.(1974), Trade Policy and Economic Welfare, Clearendon Press, Oxford.
- Jackson, J. (1989), The World Trading System, Cambridge University press, Mass.
- Salvatore, Dominic (2008) International Economics, Wiley Student Edition.

Module –III

- Heller, H. Robert (1968), International Monetary Economics, Prentice Hall, India.
- Yeager, L.B. (1976), International Monetary Relations: Theory, History and Policy, Harper and Row, New York.
- Meade, J.E. (1952): A Geometry of International Trade, George Allen and Unwin Ltd., London.

Module –IV

- Verma, M.L. (1995), International Trade Vikas Publishing House Pvt. Ltd, Delhi.
- Joshi, V and IMD Little (1998), India's Economic Reforms, 1999-2000, Oxford University Press, New Delhi.

ADDITIONAL READING LIST :

- Heller, H.R(1988):International Trade: Theory and Empirical Evidence, Prentice Hall,ND
- Kenen, P.B. (1989): The International Economy, Prentice Hall, ND.
- Kindleberger, C.P. (1977): International Economics, D.B. Taraporevala Sons & Co. Pvt. Ltd., Bombay.
- Roy, P.N. (1986): International Trade: Theory and Practice, Wiley Eastern, ND.

DE 303: Environmental Economics

Course Teacher: Dr. Sanatan Nayak

Objective

This course is meant to provide students an exposure to different debates and approaches in environmental economics. It also provides theoretical and applied understanding on diverse frameworks of national and global environmental problems, analytical tools, institutional and regulatory mechanisms etc.

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

- To become familiar with the debates on approaches on linkage between Natural Environment and Human Economy.
- To understand the linkages between Environmental Degradation and Economic Development.
- To become familiar with contemporary Environmental Problems
- To become familiar with various methods of measurement of Environmental Resources

No of Lectures, Tutorials and Contact Hours: 15X4=60 hours

Module I

The Natural Environment and the Human Economy: Introduction; The Neoclassical Economic Perspective; the Ecological Perspective; Tradeoffs: Economic Activity versus Environmental Quality.

Module II

Biophysical Limits to Economic Growth: Malthusian Perspectives; The Neoclassical Perspective; The Economics of Sustainability; Green Accounting and Alternative Indicators of Sustainability.

Module III

Global Environmental Pollution Problems and Climate Change: The Economics Theory of Pollution Control: The Optimal Level of Pollution; The Economics of Environmental Regulations I: Emission Standards and Effluent Charges; The Economics of Environmental Regulations II: Transferable Emission Credits and the Macroeconomic Effects of Environmental Regulations; Economics of Climate Change.

Module IV

Economics Valuation of Environmental Goods and Services: Revealed Preference Methods: Productivity Change, Defensive Expenditure Method, Travel Cost Method, Hedonic Pricing, Health Cost Measurement, Stated Preference Valuation Methods: Contingent Valuation Methods.

Recommended Books

- A.M. Hussen (2013), *Principles of Environmental Economics and Sustainability*, Routlege Publications, USA.
- Freeman III, A.M., Joseph A. Herriges and Catherine L. Kline (2014), *The Measurement of Environmental and Resources Values: Theory and Methods*, Routlege Publications, USA.
- Gunatilake, Herath M. (2003), *Environmental Valuation: Theory and Applications*, SANDEE.
- Kolstad, Charles D., (2007), *Environmental Economics*, Oxford University Press, New Delhi.
- Nick Hanley, et al, (1997), *Environmental Economics in Theory and Practice*, Macmillan, New Delhi.
- Singh Katar and Anil Shisodia (2007), *Environmental Economics: Theory and Applications*, Sage Publications.

DE 304: Basic Econometrics

Objective

This is a course in linear regression analysis. It deals with the application of statistical tools for estimating economic relationships, testing economic hypotheses and forecasting.

By the end of the course, the student will be able to :

- estimate and interpret the parameters of multiple regression
- test for mis-specification and parameter restrictions
- work out solutions for violations of classical assumptions
- suggest methods for choosing between models
- specify dummy variables to reflect shifts and links in relationships

No. of Lectures, tutorials, contact hours: $15 \ge 4 = 60$ hours

Module I

Two Variable Regression Model: Nature – Regression vs. Causation and Regression vs. correlation, Meaning - Population and sample regression function, Problem of Estimations – The Method of Ordinary Least Square – The Underlying Assumptions and their Rationality, Properties of Least square estimators.

Module II

The Normality Assumptions of Classical Normal Linear Regression Model (CNLRM) – the probability distribution of disturbance term u_i and its normality assumptions, Properties of OLS Estimators under normality assumption, Interval Estimation and Hypothesis Testing, Extensions of Two Variables Model.

Module III

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.

Module IV

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.

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(i): Monetary Theory, Institutions and Policy

Objective: Taking in to account to the fast development of Indian financial sector and increasing role of monetary policy, paper aims to generate theoretical and applied understanding of monetary economics. Whole syllabus is divided in to three parts. First two modules cover the advanced economic theories and rest two covers financial institutions and monetary policy, respectively.

No. of Lectures, tutorials, contact hours: $15 \times 4 = 60$ hours

Module I

Evolution of monetary theories, Theories of the money demand – Portfolio demand for money, Theories of the money supply – H theory; Transmission mechanism of monetary policy – interest rate, exchange rate, price and output

Module II

Theories of inflation determination – Analysis of structural rigidities and monetary factors, Theories of interest rate determination– assessment of real vs. monetary factors, Theories of exchange rate determination – monetary approach

Module III

Commercial Banks – structure, classification, and evaluation, Cooperative banks – structure, classification and evaluation, Non-Bank Financial Intermediaries - Definition and types of non-bank financial institutions; Financial markets – Role and structure of money and capital market, money market- call money market, Treasury bill market, commercial bill market; Government securities market – development of primary and secondary market; Markets for derivatives - futures and option, SEBI; The impact on the working capital market in India, Foreign Exchange Market.

Module IV

Functions of the Central Bank – RBI, The Aims and objectives of monetary policy in developed and developing countries, Instruments of Monetary policy – Credit creation and the control; Monetary- credit policy of the Reserve Bank of India

Reading List:

Module –I

- 1. Bhole, L.M. (2000), Indian Financial System Chung Publications, Allahabad.
- 2. Goldsmith, R.W. (1969) Financial Structure and Development, Yale, London.
- 3. Alan A. Rabin(2006), Monetary Theory, Edward Elgar, UK
- 4. Gupta, S.B. (2002), Monetary Economics, S.Chand & Company, New Delhi.

Module –II

- 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.

Module –III

• Bhatt, R.S.(1996), UTI and Mutual Funds: A study UTI Institute of Capital Market, Mumbai.

• Sahadevan, K.G. and M.T. Thiripalaraju (1997), Mutual Funds, PHI, New Delhi.

Module –IV

• Fisher, D.E. and R.J. Jordan (1992), Security Analysis and Portfolio Management, Estern Economy Edition, New Delhi.

• Wellia, P.(1992), The Theory of Future Markets, Blackwell, Oxford.

• Gupta, L.C.(1999 Ed.), India's Financial Markets and Institution, Society for Capital Research and Development, Delhi.

• Levi, Maurice D (1996) International Finance: The Markets and Financial Management of Multinational Business Services.

DE 402 (i): Computer Applications in Economic Analysis

Objectives: This is a course for computer application in economic analysis. It deals with basic knowledge on computer, data, and estimation of statistical tools by using software and analyzing the results of economic relationships, testing economic hypotheses and forecasting.

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

- To become familiar with basic knowledge on computer
- To become familiar with a statistical software
- To draw distributive tables, graphs, trend lines
- To estimate the parameters of multiple regressions with the help of software and interpret it
- To use unit level data of large samples, viz., NSSO various rounds
- To estimate weights, distributive tables, regression and any other relevant techniques by using variables of NSSO data

No. of Lectures, tutorials, contact hours: $15 \times 4 = 60$ hours

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 Commutations and Computer Networks.

Module II

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.

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-Colinearity, Heteroscedasticity and Auto-Regression etc.

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.

Recommended Reading List:

- 61st NSSO Report, Planning Commission, Government of India.
- Angus Deaton and Valeri Kozel (eds.), The Great Indian Poverty Debate, Macmillon.
- 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

Objectives: This is a course for Industrial economics deals with basic concepts of industry, market product, industrial locations and industrial marketing.

No. of Lectures, tutorials, contact hours: $15 \ge 4 = 60$ hours

Module 1

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.

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.

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.

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.

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.
- Fergusion: 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 (i): Agricultural Economics

Objectives: The paper makes students aware of different theories on agricultural development to cement their skills in undertaking research in the field of agricultural economics. It provides details views of the process of agricultural development in the country since independence.

No. of Lectures, tutorials, contact hours: $15 \times 4 = 60$ hours

Module 1

Agriculture and Economic Development --Role of agriculture in economic development and from the Point of View of Indian Economy. Interrelationship between Agriculture and Industry; Structural Problems in Agriculture; Tenancy and Crop Sharing- Land Reform and Economic Development, Labour in Agriculture- Interlocking of Factor Markets.

Module II

Theories of Agricultural Development – Transformation of Traditional Agriculture T.W. Schultz, Mellor's Model of Agriculture Development, Induced Innovation Model by Ruttan and Hayami, Labour Transformation Model- Ranis-Fei. Institutions and Agricultural Models-Lenin and Kautsky. Farm size and productivity debate; Theoretical and Empirical Findings.

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. WTO and Indian Agriculture. International Trade and Food Security.

Module IV

Agricultural Price Policy; Its Rationale, Instruments and Evaluations. Agricultural Marketing and Credit. Sources of Agricultural Credit- Cooperative movement in India- Organisation, Structure and Development of Different Types of Cooperatives in India. Capital Formation in the Rural Sector-Savings, Assets and Credits. Strategies for Rural Development- Rural Infrastructure and Agricultural Development.

BASIC READING LIST :

Bhaduri, A. (1984), The Economic Structure of Backward Agriculture; Macmillan, Delhi. Bhalla, G.S., (2007) Indian Agriculture since Independence, National Book Trust, India Rudra, A. (1982), India Agriculture Economics; Myths and Reality: Allied Publishers, New Delhi.

Rao, CHH (1993) Agricultural Growth, Rural Poverty and Environmental Degradation in India, OUP, New Delhi.

Ghatak, S and K. Ingerscant (1984), Agriculture and Economic Development; Select books, New Delhi.

RECOMMENDED READINGS

Module –I

Bardhan, P. (1984) Land, Labour and Poverty; Essays in Economic Development, OUP, New Delhi.

Ghatak, S and K. Ingerscant (1984), Agriculture and Economic Development; Select books, New Delhi.

Meier, G.M. (1995), Leading Issues in Economic Development; OUP, New Delhi.

Sarap Kailash (1991), Interlinked Agrarian Markets in Rural India, Sage Publication, New Delhi.

Khusro, A.M.(1973), The Economics of Land Reforms and Farm Size in India, MacMillan. Taylor, H.C., (1949), Outlines of Agricultural Economics, MacMillan.

Dutta, B.K. (2003): Theories of Sharecropping, Mittal Publications New Delhi.

Module –II

Schultz, T.W. (1964), Transforming Traditional Agriculture, Yale University Press. Mellor, J.W., The Economics of Agricultural Development, Vora and Co., Bombay, 1964. Black, J.D, (1953) Introduction to Economics for Agriculture, Macmillan.

Ghatak, S. and K. Ingerscant (1984), Agriculture and Economic Development, Select Books, New Delhi.

Lekhi, R.K, Singh Joginder (2002), Agricultural Economics, Kalyani Publishers

Module –III

Rao, CHH, (1975), Technological Change and Distribution of Gains in Indian Agriculture, MacMillan.

Bharadwaj, K. (1974), Production Condition in India Agriculture; OUP, Cambridge. 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.

Module –IV

Raghavan and L. Sarkar (Eds.) (1996), Poverty and Employment: New Delhi. 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.

Dhawan B.D., (1993), Trends and New Tendencies in Irrigated Agriculture, Common Wealth Publishers, New Delhi.

Wanmali S. and C. Ramasamy (Eds.) (1995). Developing Rural Infrastructure; Macmillan, New Delhi.

ADDITIONAL READING LIST :

Dantawala, M.L. et al. (1991): Indian Agricultural Development since Independence, Oxford& IBH, 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.

DE 403 (ii): History of Economic Thought

Objectives: This paper helps students to understand the changes in economic ideas that have been developed over time. The paper covers the economic ideas during ancient time to the post Keynesian development. It also provides some ideas of Indian economic thinkers.

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.

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.

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.

Module IV

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

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. Rangaranjan, 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.
- Raphel, 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

Objective

This is a course for advanced econometrics deal with advanced models for forecasting in different complex situations.

No. of Lectures, tutorials, contact hours: $15 \ge 4 = 60$ hours

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.

Module II

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

Module III

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

Module IV

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

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. Rubinfield (1976). Econometric Models and Econometric Models and Economic Forecasts, McGraw Hill, Kogakusha, Tokyo.
- Ramanathan Ramu, (2002), Introductory Econometrics with Applications, Thomson, South-Western.

DE 404 (ii) Economics of Discrimination

Objectives: The objective of the paper is to analyse the economic behaviour of individuals, firms and markets in pragmatic society. It is mainly to equip the students in a rigorous and comprehensive understanding with the various aspects of Economic Discrimination, socio economic behaviour of consumer and producers, production, Labour, Employment, Distribution and behaviour of firms in pragmatic or orthodox market economy, Economic equality and Justice, economic welfare and policy.

No. of Lectures, tutorials, contact hours: $15 \times 4 = 60$ hours

Module I

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

Module II

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

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.

Module IV

- Planning and Policy- Strategies to Control Economic Discrimination, Empowerment, Reservation Policy, Re-distribution Policy: Welfare-Redistribution Trade Off Corporate Social Responsibility, Governance and Participation

Recommended Reading List:

- 1. Ajit Roy "Caste and Class: An Interlinked View" EPW, Annual No. Feb 1979.
- 2. Akerolof, George (1976). "The Economics of Caste and of Rat Race and Other Woeful Tales", Quaretrly Journal of Economic, XC.04. Nov.1976.
- 3. Akerolof, George (1980). "The Theory of Social Customs, of which Unemployment may be one consequences, "Quareterly journal of Economics" XCIV-04, June 1980.
- 4. 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.
- 5. 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.
- 6. Ambedkar, B.R. (first published 1987). "Philosophy of Hinduism" Vasant Moon (Edit) "Dr. Babasaheb Ambedkar writings and Speeches" Vol. 03, Page 1-94.
- 7. Anno O Kruger (1963). 'The Economics of Discrimination'. Journal of Political Economy, LXXI (5), October 481-06.
- 8. B.T. Randive "Caste, Class and Property Relations EPW, Annual No. Feb.1997.
- 9. Banerjee, Biswajeet et al. (1985), Caste Discrimination in the Indian Urban Labour Market, Journal of Development Economics, Vol. 17, April.
- 10. Bardhan, Pranab (1989). "Alternative Approaches to the Theory of Institution in Economic Development" in The Economic Theory of Agrarian Institutes, 1989, Clarendon, Oxford.
- 11. Beeker Gray S. (1964). Human Capital: A Theoritical And Empirical Analysis, National Bureau of Economic Research New York.
- 12. Darity, William A et al. (1985). Peddlers Forever: Culture, Competition And Discrimination, American Economic Review Vol. 75, No.02.
- 13. David Romer (1984). "The Theory of Social Custom: A Modification and some Extension" in Quarterly Journal of Economics.
- 14. Derity, William A Jr (1982). The Human Capital Approach to Black-White Earnings Inequality Journal of Human Resource Vol. 17, No.01.
- 15. Dr. K. B. RatanaKumari (2007), Economic Discrimination Against Women, Abhijeet Publication, New Delhi.
- 16. Dr.L.C.Mallaiah, Karunykar & Ratnakumari(2007), Dalits and Human Development, Abhijeet Publication, New Delhi
- 17. E.M.S. Namboodripad, "Caste, Classes and Parties in Modern Political Development" in Social Scientist, Nov. 1977.
- Edward Montogomery (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.
- 19. Gary S. Beeker (1957). The Economics of Discrimination , Chicago: University of Chicago Press 84-100.
- 20. George K. Lieten (1979). "Caste in Class Politics" EPW Annual No. Feb 1979.
- 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.

- 22. 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.
- 23. Joseph E Stiglitz (1973). 'Approaches to the Economics of Discrimination', American Economic Review, 63 (2), May, 287-95.
- 24. L.C.Mallaiah & Ratnakumari(2007) Economic Development and Dalit Agricultural Workers, Abhijeet Publication, New Delhi
- 25. L.C.Mallaiah & Viswantha (2008), Dalits and Globalisation, Abhijeet Publication, New Delhi
- **26.** Lawrence M. Khan (1991). 'Customer Discrimination and Affirmative Action', Economic Inquiry, XXIX, July, 555-71
- 27. 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 Famillial Defeat, Review of Black Political Economy, Vol. 20, No.04.
- 29. Me Intosh, Neil et.al (1974). The Extent of Racial Discrimination, Vol. 11.
- 30. 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.
- 31. Romer, John E (1979). Divide and Conquer: Micro- foundations of a Marxian Theory of Wage Discrimination, Bell Journal of Economics, Vol. 10, No.02.
- 32. 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.
- 34. 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.
- 35. Williams Rhonda M. (1987). Capital, Competition and Discrimination, Review of Radical Political Economics Vol. 19, No. 02.

DE 404(iii) Labour Economics

Objectives: The paper makes students aware of different theories on labour and employment from the point of view of economic research. It provides a details analysis on the latest development of labour market in developing countries with reference to India The paper laid a special emphasis on informal sector and the problem of labour in India.

No. of Lectures, tutorials, contact hours: $15 \ge 4 = 60$ hours

Module I

Paradigms of Labour Market Aanalysis – Classical, Neoclassical and Dualistic Economy. The Nature and Characteristics of Labour Markets in Developing Countries like India. Globalisation and Labour Market.- 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.

Module II

Unemployment and Poverty – Concepts, Types and Measurement with reference to India. The Growth and Pattern of Employment in India during Pre and Post Economic Reforms. Poverty and Reforms in India. The Analysis of Education and Employment. Employment Generation Programme in India with Special Emphasis on Present Day Wage Employment and Self-Employment Programme.

Module III

Wage determination – Classical and Neo-classical views; 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. Minimum wage, Concepts, Legisaltion and Implementation. Mobility and Productivity of Labour.

Module IV

Labour and Informal Sector in India. Trends and Structure of Employment in Informal Sector. Social Security for Labour- 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.

BASIC READING LIST :

- Datt, G. (1996), Bargaining power Wages and Employment; An Analysis of Agricultural labour markets in India, Sage Publications, New Delhi.
- Papola, T.S., P.P. Ghosh and A.N. Sharma (Eds.) (1993), Labour Employment and Industrial Relations in India, B.R. Publishing Corporation, New Delhi.
- Venkata Ratnani, C.S.(2001), Globalization and Labour Manangement Relations:Dynamics of change, Sage Publications/ Response Books, New Delhi.
- Sharma, Alekh Narayan, Flexibility, Employment and Labour Market Reforms in India, Economic and Political Weekly, May 27, 2006.

RECOMMENDED READINGS :

Module I

- Ghosh Jayati, Macroeconomic Reforms and Labour Policy Framework for India, Employment Strategy Paper, ILO, Geneva, 2004
- 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.
- Verma, N.M.P. (2008), Indentured Indian Labour Market Deptt. Of Economics, BBAU, Lucknow.
- Solow, R.M. (1990), Labour Market as an Institution, Blackwell, London.
- 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.
- Ghosh Jayati (1995), Employment and labour under Structural Adjustment in India since 1991, Indian Journal of Labour Economics, Vol. 38, No.4, October-December.
- 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.
- 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.

Module II

- Deshpande, L.K., P.R. Brahmananda, E.A.G. Robinson (Eds) (1983), Employment policy in a Developing Economy, Vol. 1 & 2, Macmillan, London.
- Report of the Group to Review the Methodology for Estimation of Poverty, Government of India, Planning Commission, November, 2009.
- Employment and Unemployment Situations in India, National Sample Survey Organisation, Ministry of Statistics and Programme Implementation, Government of India, Various Issues.

- Hirway, Indira, NREGA After Four Years: Building on Experiences to Move Ahead, Indian Journal of Labour Economics, Vol. 53, No. 1, 2010.
- 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.
- 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.
- 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.

Module III

- Despande, L.K. and J.C. Sandersara, (Eds.) (1970), Wage Policy and Wage Determination in India, Bombay University Press, Bombay.
- Madan, B.K. (1977), The real wages of Industrial concerns in India Management Development Institute, New Delhi.
- Verma, N.M.P. (1988): Employment and Wage Structure in Drought Prone Agriculture, Manpower Journal, No.2.
- 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.
- Papola, T S (2013), Employment Growth during the Post Reform Period, Indian Journal of Labour Economics, Vol. 56, No.1, January-March.
- Reddy, D, Narasimha (2000), Structural Change, Structural Adjustment and Challenge to Union Function, Indian Journal of Labour Economics, Vol.43, No.2, April-June, 2000.

Module IV

- Punekar, S.D.(1978), Labour Welfare, Trade Unionism and Industrial Relations, Himalaya Publishing House, Bombay.
- Hanseman, S. (1991), Industrial Restructuring with Job Security, Harvard University Press, Cambridge, Mass.
- 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.
- 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.
- 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.
- 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.

ADDITIONAL READING:

- 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.
- George, J.B. (1996): Labor Economics McGraw Hill, NY.
- Sen, A.K.(1975): Employment, Technology and Development, OUP, ND.