

Post Graduate Syllabus in Economics
(Under Choice Based Credit System)
Department of Economics
Dibrugarh University
Dibrugarh – 786 004
Assam

Syllabus, Course Contents & Reading Lists for M.A. Economics (Under Choice Based Credit System) as approved by the Board of Studies in Economics, in its meeting held on 14.03.2019, by the Post Graduate Board in its meeting held on and the Academic Council in its meeting held on

The Post Graduate Programme in Economics shall be of four-semesters covering two academic years.

The Course Structure

1. The M.A. Programme in Economics shall be of minimum 76 credits, distributed unevenly in 4 Semesters.

2. The Programme is divided into a number of courses.

a) Core Courses: These Courses include compulsory components of the M.A. Programme in Economics and are to be compulsorily studied as a core requirement for the Programme. All Core Courses shall be of 4 (four) credits each. A total of 12 Core Courses are offered which are distributed equally in the four semesters.

b) Elective Courses: Elective courses shall be chosen by each student from a pool of courses. The Courses shall be of 4 (four) credits each. The Elective Courses shall be of two types:

(i) Discipline Specific Elective (DSE): These courses shall be intra-departmental. At least one course, out of a basket of DSE courses, shall be chosen by each student in each semester.

(ii) Generic Elective (GE): These Courses shall be interdepartmental/ inter-disciplinary. The students shall have to opt for at least 2 (two) courses from other departments according to his/ her area of interest. These courses are offered in 2nd and 3rd semesters.

c) Ability Enhancement Courses (AEC): The Ability Enhancement Courses shall be inter-disciplinary in nature and shall be of 2 (two) credits. The students shall have to opt for at least 2 (two) courses according to his/ her area of interest. These courses are offered in 1st and 3rd semesters.

3. The M.A. Programme in Economics shall be governed by the Dibrugarh University Regulations for the Post Graduate Programmes in the Choice Based Credit System, 2018.

COURSE STRUCTURE

Semester	Courses with Credit								Credit
I	Core Course		Elective				AEC		
			DSE		GE				
	Code	Title	Code	Title	Code	Title	Code	Title	
	ECNCC101	Microeconomic Analysis – I	ECNDSE101	Agricultural Economics	-----	-----	ECNAEC101	Foundations of Social Science Research	
ECNCC102	Macroeconomic Analysis	ECNDSE102	Economics of Social Sector						
ECNCC103	Mathematics for Economic Analysis	ECNDSE103	Basic Demography						
II	ECNCC201	Microeconomic Analysis – II	ECNDSE201	Demographic Analysis	ECNGE201	Issues of Indian Economy	-----	-----	20
	ECNCC202	Monetary Theories and Policy	ECNDSE202	Operations Research					
	ECNCC203	Statistical Foundations of Econometrics	ECNDSE203	Gender Economics					
III	ECNCC301	International Economics	ECNDSE301	Econometric Methods	ECNGE301	Basic Econometrics	ECNAEC301	Data Collection and Analysis for Social Science Research	22
	ECNCC302	Economics of Growth and Development - I	ECNDSE302	Financial Economics					
	ECNCC303	Public Finance	ECNDSE303	Industrial Economics					
IV	ECNCC401	Indian Economy	ECNDSE401	Environmental Economics	-----	-----	-----	-----	16
	ECNCC402	Economics of Growth and Development -II	ECNDSE402	Labour Economics					
	ECNCC403	Regional Economics	ECNDSE403	Rural Development and Management					

SEMESTER I

Course Code : ECNCC101
Title of the Course : Microeconomic Analysis – I
Type of the Course : Core Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	The Theory of Consumer Behaviour-I: A Review of Indifference Curve Analysis; Revealed Preference Hypothesis; the Slutsky Equation; Ordinary and Compensated Demand Curves; Indirect Utility Function and Roy's Identity; Duality in Consumption. The Theory of Consumer Behaviour-II: Consumer Behaviour Under Risky and Uncertain Situations: Uncertainty, Probabilities and Expected Values; Fair Gambles; The St. Petersburg Paradox and Bernoulli's Hypothesis; Neumann-Morgenstern Method of Constructing Utility Index Under Risky Situations ; Risk Lover, Risk Averter And Risk Neutral Persons; Friedman-Savage Hypothesis.	16
II	Theories of Production and Costs: The Production Function for a Single Product Firm: Basic Concepts; Homogeneous and Non-Homogeneous Production Functions - Cobb- Douglas (C.D.) and Constant Elasticity of Substitution (C.E.S.), Variable elasticity of substitution, Ideas of partial and total factor productivity. Production Function - Short-Run and Long-Run Analysis of Production - Returns to Scale and Returns to a Factor Choice of Optimal Factor Combination: Constrained Profit Maximization and Optimal Expansion Path - Production Possibility Curve and Equilibrium of the Multi-Product Firm. Derivation of Cost Functions from Production Functions, Traditional vs. Modern Theory of Costs; Economies of Scale - the Relevance of the Shape of Costs in Decision Making Envelope theorem	16
III	Pricing in Product Market: A Review of Equilibrium of the Firm and Industry under Perfect Competition, Monopolistic Competition and Monopoly - Effect of Imposition of a Tax under Perfect Competition and Monopoly - Monopoly and Its Regulation - the Multi-Plant Firm Oligopoly Models: Non-Collusive Oligopoly- Cournot's Duopoly Model, Bertrand's Duopoly Model, and Stackelberg's Duopoly Model - Kinked-Demand Curve Model, Collusive Oligopoly- Cartels Aiming at Joint Profit Maximisation and Market-Sharing Cartels - Price Leadership Models.	16

IV	An Introduction to the Theory of Games: Basic Concepts, Objectives and Applications; Classification of Games depending upon Number of Players, Sum of Gains and Losses, and, Strategy; Competitive Games: Two-Person Zero-Sum Games; Pure and Mixed Strategies ; Rules of Dominance and Iterated Deletion of Dominated Strategies; Solution of Games with and without Saddle Point; Two Person, Non-Constant- Sum Games: Cooperative Games and Nash Bargaining Solution; Non-Cooperative Games and Prisoners' Dilemma.	16
Total		64

Reading List:

1. Baumol, W.J.: Economic Theory and Operations Analysis, Prentice Hall of India Private Limited
2. Henderson, J.M. & Quandt, and R.E.: Micro Economic Theory, McGraw Hill.
3. Maddala, G.S. and Miller, E.: Microeconomics, Theory and Applications; McGraw Hill
4. Pindyck, R.S., Rubinfeld, D.L. & Mehta: Micro Economics, Pearson Education
5. Salvatore. D.: Micro Economics, Theory and Applications, Oxford University Press.
6. Hall varian: '*Micro Economic Analysis*,' Viva
7. Snyder and Nicholson: '*Micro Economics- Basic principles and Extensions*' Cengage learning

Course Code : ECNCC102
Title of the Course : Macroeconomic Analysis
Type of the Course : Core Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	General Framework of Macroeconomic Analysis: IS-LM Model Brief review of classical and neo-classical economic systems; Keynesian system: Theory of effective demand, output and employment determination, theory of interest; Policy evaluation under the Keynesian system - IS-LM Framework: IS curve and good market equilibrium, LM curve and money market equilibrium, General equilibrium. Evaluation of policies in IS-LM model	10
II	General Framework of Macroeconomic Analysis: AD-AS model The Keynesian Aggregate demand schedule; the Aggregate Supply curve; Determination of the aggregate price level; A contractual view of the Labour market – sources of wage rigidity; the Keynesian aggregate supply schedule; Shocks to the aggregate demand and supply schedules; Price adjustments; the Classical dichotomy; Keynes vs. classical. Supply Side Economics: Distinguishing features, policy implications of supply side economics. Objections against Supply- Side Economics	12
III	Open Economy Macroeconomics The international flows of capital and goods; the Trade balance; the Balance of Payments; Exchange rates: Real vs nominal, Policy effects on exchange rates; Fixed vs flexible exchange rates; Policy framework in an open economy – The Mundell-Fleming model; Interest rate differentials; The Mundell-Fleming model with a changing price level.	10
IV	New –Macro Economics New Classical Macroeconomics- Rational Expectations Hypothesis and Policy Ineffectiveness; Sellers’ Misperception and Non-Neutrality of Money; Real Business Cycle Theory. New-Keynesian Macroeconomics- Keynesian Counter Critique, Wage- Price Rigidity-Menu Cost Hypothesis, Efficiency Wage Hypothesis. The Random Walk of GDP.	12
V	Behavioural Foundations of Macro Economics Consumption and Saving: Consumption Puzzle, The Life Cycle and The Permanent Income Hypotheses. Ricardian Equivalence: Efficacy of Policy Action. Hall’s Random Walk Hypothesis and its Implications. Theories of Investment Demand: the Accelerator Theories of Investment; the Neoclassical Theory of Investment; q-Theory of Investment.	12
VI	Macroeconomic Policy Debates Monetary Policy Rules – Taylor rule, Monetary policy rules; The Macroeconomic Policy Model; Should Policy be active or passive; Discretionary policy vs. rule based policy.	8
Total		64

Reading List:

1. N. G. Mankiw: Macroeconomics, Pearson.
2. A. B. Abel and B. S. Bernanke: Macroeconomics, Pearson
3. Dorndusch, Fischer and Startz: Macroeconomics, Tata McGraw Hill.
4. Richard T. Froyen: Macroeconomics, Pearson
5. Errol D'Souza: Macroeconomics, Pearson
6. David Romer: Advanced Macroeconomics, 4th edition, McGraw Hill, 2012

Additional Readings:

1. Sunil Bhaduri: Macroeconomic Theory, New Central Book Agency.
2. Soumyen Sikdar: Principles of Economics, Oxford.

Course Code : ECNCC103
Title of the Course : Mathematics for Economic Analysis
Type of the Course : Core Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Sets, Set Operations, Convex Set – Properties, Relations and Functions: Different forms of functions and their graphs – Limit and Continuity of functions. Differentiation – Definition and Basic rules of differentiation – derivative of implicit functions – application of derivative in case of elasticity, revenue function, cost function and derivation of other marginal functions – Application to comparative static analysis of market model and national income model.	10
II	Unconstrained optimization – Optimization with single explanatory variable – Applications to Cost minimisation, Revenue maximisation, Profit maximisation and Equilibrium of firm, Partial Differentiation; Optimisation with more than one explanatory variable –Economic Application. Constrained optimization – Optimization with equality constraint – Lagrange’s multiplier method – Application to consumer’s equilibrium and producer’s equilibrium in factor market.	10
III	Integration – Basic rules of integration – Definite integral – Application to Economic problems – Derivation of total function from marginal function – Consumer’s surplus and producer’s surplus.	10
IV	Dynamic Analysis – I: First Order Differential Equation and solution – Application to dynamic stability of market, First Order Difference equation and solution – Application to Cobweb model. Dynamic Analysis – II: Second Order Differential Equation and solution – application to dynamic stability of market; Second Order Difference equation and solution.	12
V	Elements of Matrix Algebra – Determinants, their evaluation and properties, Solution of Simultaneous equations, Input-Output analysis – Structure of an input-output model – Static open input-output model – Solution – Hawkins – Simon conditions, Pricing – dynamic input – output model, linkage analysis – Income multiplier, Output multiplier.	10
VI	Optimal Control Theory Calculus of variation and optimal control problem, control, state, and co-state variables, Hamiltonian – current value and present value, transversality conditions; Economic applications.	12
Total		64

Reading list:

1. Sydsaeter, K. and Hammond, P., *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi, 2002.
2. Chiang, A.C.: *Fundamental Methods of Mathematical Economics*, Fourth edition, McGraw Hill 2005.
3. Hoy, M., J. Livernois, C. McKena, R. Rees, and T. Stengos: *Mathematics for Economics*, PHI Publishers.
4. Barua, Srinath: *Basic Mathematics and Its Applications in Economics*, Second Edition, Laxmi Publications 2013
5. Allen, R.G.D., *Mathematical Analysis for Economists*, Macmillan India, Madras.
6. Allen, R.G.D., *Mathematical Economics*, ELBS, London.
7. Chow, G.C., *Analysis and Control of Dynamics Economic Systems*, John Wiley, New York.
8. Chiang, A.C., *Dynamic Optimization*, McGraw Hill, New York.
9. Allen, R.G.D: *Mathematical Economics*, MacMillan Publishers
10. Alpha C. Chiang: *Elements of Dynamic Optimisation*
11. Gandolfo, G: *Economic Dynamics*
12. Michael D. Intriligator: *Mathematical Optimisation and Economic Theory*, PHI

Course Code : ECNDSE101
Title of the Course : Agricultural Economics
Type of the Course : Discipline Specific Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Agriculture and the Economy Agriculture and Economic Development, Interdependence between agriculture and industry, Changing importance of agriculture; Agriculture in the macro economy; Theories of Agricultural Development- Transformation of traditional agriculture- Theories of Mellor, Boserup, Lewis, Fie- Ranis and Schultz; Organizational aspects of farming- Traditional, Commercial, co-operative, contract and state farming, Problems of organization; Conditions of Indian Peasantry	16
II	Agricultural production- Production relationship-Factor Product Relationship, Returns of scale, Stages of rational and irrational production; Factor-factor relationship- Problem of allocation and substitution of resources; least cost combination; Product-product relationship- Basic relationship, Optimum combination of two products; Production Function; Farm efficiency; Risks and uncertainty in agriculture; Structural change in agricultural production; Size productivity debate in agriculture;Agricultural Mechanization; Economic Impacts of Agricultural Research and Extension measures.	16
III	Agricultural Product market and marketing of agricultural produce Product market: Demand and supply of agricultural products, Demand for agricultural products- Factors affecting demand for food, Supply behaviour of agricultural products- Individual and aggregate supply of farm products; Behaviour of agriculture price- Cobweb Cycles; Instability of farm prices- Agriculture price policy; Agricultural marketing- Approaches to agricultural marketing; Problems of agricultural Marketing ; Price spread; Marketing margin; Marketing efficiency; Market integration; Institutions and organizations in agricultural markets; Food processing.	16
IV	Factor market in Agriculture Agricultural Factor Market: Role of land, labour and capital in Farming; Land and lease Market: land rental contracts, Tenancy and efficiency, Labour market- labour categories, Nutrition and labour market; Credit Market- Characteristics of rural credit market, Theories of informal credit markets; Type and sources of credit; Rural credit in India; Agricultural insurance; Inter-linkages between land, labour and capital markets; Emerging factor market in Indian agriculture.	16
Total		64

Reading lists

1. Subba Reddy, P.Raghu Ram, T.V. Neelakanta Sastry and I. Bhavani Devi(2008): '*Agricultural Economics*' Oxford
2. Sadhu, A.N. & A. Singh: Fundamentals of Agricultural Economics, Himalaya publishing House, Bombay.
3. Soni, R.N.: *Leading Issues in Agricultural Economics*, Sobhanlal Nagin Chand & Co. Jalandhar
4. Debraj Ray(2012) : '*Development Economics*' Oxford India
5. Basu, Kaushik : '*Agrarian Questions*' Oxford India
6. Bruch L. Gardner and Gordon C. Rausser : *Handbook of Agricultural Economics*, North Holland

Course Code : ECNDSE102
Title of the Course : Economics of Social Sector
Type of the Course : Discipline Specific Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Health Economics and Development Rationale and Scope of Health Economics; Investment in Health; Health outcomes and their relationship with macroeconomic performance; Health and Productivity Relation: Empirical Evidence; Economics of Nutrition.	10
II	Determinants and Indicators of Health Determinants of Health Status; Indicators of Health Status: Input and Output Indicators; Measures of Health Status: Disease Burden - DALY, QALY; Consequences of Gender Bias in Health; Concept of Missing Women; Linkages of Female Education with mortality and morbidity. Health outcomes; health care delivery systems and health financing: Public-Private Partnership in Providing health care services: Equity and Efficiency debate; Evolution of health care policies in India. Cross Country Comparisons in terms of health care investment and health outcomes	15
III	Health Care Market Demand for Health care – Grossman model of health demand; Supply of Health Care; Economics of Health Insurance: Market failure in health insurance and sources; Market of Pharmaceuticals	13
IV	Introduction to Economics of Education: Concept and scope of Economics of Education; Education as consumption and investment goods; Role of education in Economic development, Human Capital- Human Capital Vs Physical Capital, Demand and Supply of Education; Cost of education- private costs and social cost, direct and indirect cost; Benefits of education-Direct and indirect benefits, private and social benefits; inequality in education; the Relationship between Employment Opportunities and Educational Demand.	13
V	Financing of Education: Private versus public provision of education, Empirical evidence on the determinants of public versus private funding, Interactions between public and private sector, Centralization versus decentralization of educational finance, Fiscal federalism in education finance.	13
Total		64

Reading List:

1. William, Jack (1999): Principles of Health Economics for Developing Countries, World Bank Publications.
2. World Development Report (1993): Investing in Health, The World Bank.
3. Ronald G., Ehrenberg and Robert S., Smith (2005) Modern Labor Economics: Theory and Public Policy, Addison Wesley
4. Human Development Reports, Technical Notes: UNDP-various issues
5. Michael P. Todaro & Stephen C. Smith (2005): Economic Development, Pearson Education
6. Grossman, Michale (1999): The Human Capital Model of the Demand for Health, working paper, National Bureau of Economics Research, Cambridge
7. Gerald M. Meier & James E. Rauch (2005): Leading Issues in Economic Development, Oxford University Press.
8. George Psacharopoulos(1987): Economics of Education, Pergaman Press,
9. Blaug, M. (1972): Introduction to Economics of Education, Penguin, London.
10. Checchi, D, The Economics of Education, Cambridge University Press
11. Johnes, G. and Johnes, J., (Ed.) International Handbook on the Economics of Education, Edward Elgar Publishing Ltd.
12. K.Venkatasubramanian,(1998) Education and Economic Development of TN.
13. G.S.Parnes, Planning Education for Economic Social Development.
14. Cohn,(2005) Economics of Education
15. Tilak(2006), Economics of Inequality in Education
16. Sudha V.Rao (2003), Education and Rural Development
17. Nalla Gounden A.M. (1998), Education and Economic Development
18. Cohen, E. and T. Gaske (1989): Economics of Education, Pergamon Press, London
19. Vaizoy (1962): Economics of Education, Faber and Faber, London
20. Mc Mohan, W.W. (1999): Education and Development: Measuring the Social Benefits, OUP, Oxford.
21. Woodhall, M. (1992): Cost Benefit Analysis in Educational Planning, UNESCO, Paris

Course Code : ECNDSE103
Title of the Course : Basic Demography
Type of the Course : Discipline Specific Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of lecture hours
I	Basics of demography and Sources of demographic data: Meaning and subject matter of demography; Linkage between economics and demography; Sources of demographic data –Population census, Vital registration system, Sample Registration System, Sample surveys- features, advantages and problems, Population register.	10
II	Theories of population: Pre-Malthusian view, Malthusian theory of population, Optimum theory of population, Demographic transition theory, Marx's theory.	12
III	Components of population change Fertility: Basic concepts of fertility; Fertility Theories: Social Capillarity theory, Theory of change and response, Theory of diffusion; Economic Theories of fertility - Cost-benefit theory, Theory of micro-consumption, Easterlin Hypothesis; Biological theories of Spencer, Sadler and Doubleday, Basic measures of fertility: Crude birth rate, General fertility rate, Age-specific fertility rate, Total fertility rate. Mortality – Basic concepts, Mortality variables, Basic measures of mortality: Crude death rate, Infant mortality rate, Maternal mortality rate; Health outcomes and their relationship with economic performance. Migration – Basic concepts, Theories of migration: The Push-pull hypothesis, Lee's theory, Petersen's typology, Ravenstein's laws of migration, Stouffer's theory of intervening opportunities, Zipf's Gravity Model, Harris-Todaro model, Sjaastad's human capital model of migration.	20
IV	Population Growth and projection: Population, Development and environment linkages; Population growth rates – inter-censual, arithmetic, geometric and exponential growth rates; Concepts of population projections; Population estimates, forecasts and projection; Uses of population projection, Economic importance of projection; methods of population projections; Methods of rural-urban and sub-national population projections; ; Population policy-meaning and importance.	10
V	Population Composition and Distribution Age structure, Factors affecting age structure, Aging of population; Measures of age structure; Sex structure - Factors affecting sex structure, Measures of sex structure, Population pyramid; Economic characteristics-LFPRs; Marital and educational characteristics; Meaning of population distribution; Population density, Factors affecting population density.	12
Total		64

Reading List:

1. Thompson, W.S. and Lewis, D.T.: Population Problems, McGraw Hill Book, New York
2. Thomlinson, R.: Population Dynamics, Random House, New York
3. Srinivasan, K. : Basic Demographic Techniques and Application, Sage Publications, New Delhi
4. Bhende, A.A. and Kanitkar, T.: Principles of Population Studies, Himalaya Publishing House, Bombay
5. Sinha, V.C. and Zacharia, E.: Elements of Demography, Allied Publishers Private Limited, New Delhi
6. Shryock, H.S. et. al : Methods and Materials of Demography, Academic Press, New York
7. Hinde, Andrew: Demographic Methods, Routledge
8. Preston, S. H., Heuvenile, P. & Guillot, M.: Demography, Wiley
9. Cox, P. R.: Demography, Cambridge University Press
10. Jay Weinstein & V. K. Pillai: Demography – The Science of Population, Pearson

Course Code : ECNAEC101
Title of the Course : Foundations of Social Science Research
Type of the Course : Ability Enhancement Course
Number of Credits : 2
Marks : 50 (In-Semester: 20 +End-Semester: 30)

Unit	Topics	No. of lecture hours
1	Foundations of Research Methodology: Meaning and characteristics of research, Importance of research, Objectives of research, Types of research, Research methodology and research methods; Research process, Ethics in research.	10
2	Planning of Research: Identification of research problem; Primary and secondary data – usefulness and problems; Primary data – Census and Sample survey; Sampling techniques – probability and non-probability sampling and their merits and demerits.	12
3	Analysis of Data: Univariate and bivariate analysis – cross tabulation; Hypothesis – Meaning, types; Qualities of a good hypothesis; Steps involved in hypothesis testing; Errors in hypothesis testing; Report writing.	10
Total		32

Readings List:

1. Good and Hatt : Methods in Social Research, McGraw Hill.
2. Panels P. Forcesses : Social Research Methods, Prentice Hall.
3. Paul Oliver : Writing your Thesis, Vistaar Publication, New Delhi.
4. Panneerselvam, R : Research Methodology, PHI, New Delhi.
5. Johnston, J & Dinardo : Econometric Methods, McGraw Hill.
6. Maddala, G.S : Econometrics, McGraw Hill.
7. Rajaram, V. : Fundamentals of Computers, PHI, New Delhi.
8. Studenmund : Using Econometrics- A Practical Guide, Addison Wesley.

SEMESTER II

Course Code : ECNCC201
Title of the Course : Microeconomic Analysis – II
Type of the Course : Core Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Theories of Firm: Traditional Vs. Modern Theories of Firm, Managerial Theory of Firm: Baumol's Model of Sales Revenue Maximization - Williamson's Model of Managerial Discretion - Marris Model of Managerial Enterprise. Theory of Limit Pricing: Models of Bain, Sylos-Labini, Modigliani and Bhagawati - Baumol's Contested Market Model Inter-temporal Choice: Discounting and Present Values; Choice of Investment Projects - Inter-temporal Consumption Decisions - Inter-temporal Production Decisions - Determination of the Rate of Interest; Applications.	16
II	The Economics of Information: Markets with Asymmetric Information; Quality Uncertainty and the Market for Lemons. Adverse Selection; Social Insurance; Signaling and Screening; Moral Hazard; The Principal-Agent Problem. Asymmetric Information in Labour Markets: Efficiency Wage Theory.	16
III	General Equilibrium Analysis : Partial vs. General Equilibrium Analysis; the Walrasian Model: Problem of Existence, Stability and Uniqueness of an Equilibrium; Tatonnement; Pareto Criterion: Efficiency in Exchange, Efficiency in Production and Efficiency in Product-Mix; Non-Walrasian Equilibrium: Non-tatonnement process, Rationing equilibria, Effective demand, Micro foundations of macro economics	16
IV	Welfare economics: Kaldor-Hicks Compensation Criterion; Social Welfare Function; Maximization of Social Welfare; Determination of Welfare Maximizing Output-Mix, Commodity Distribution, and Resource Allocation; Welfare Maximization and Perfect Competition. Social Choice: Contributions of Arrow and Sen; Market Failure; Externalities and Public Goods.	16
Total		64

Reading List:

1. Maddala, G.S. and Miller, E.: *"Microeconomics - Theory and Applications"*; Tata McGraw-Hill Publishing Company Limited, New Delhi.
2. Pindyck, R.S., Rubinfeld, D.L. & Mehta, P.L.: *"Micro Economics"*; Pearson Education, Delhi.
3. Henderson, J.M. & Quandt, and R.E.: *"Micro Economic Theory: A Mathematical Approach"*; McGraw-Hill Book Company.
4. Hall varian: *'Micro Economic Analysis,'* Viva
5. Snyder and Nicholson: *'Micro Economics- Basic principles and Extensions'* Cengage learning

Course Code : ECNCC202
Title of the Course : Monetary Theories and Policy
Type of the Course : Core Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of lecture hours
I	Money and the economy: Demand for money – Classical approach, Keynesian approach, Baumol's theory, Tobin's theory, Friedman's theory; Money in the utility function; Neutrality of money, Dichotomy between the real and monetary sectors, Pigou effect, Real balance effect.	16
II	Money, inflation and unemployment: Measuring inflation – price indices and deflators, High inflation and hyper inflation; Laffer curve and the inflation tax, Monetary transmission mechanism; Inflation and unemployment – Phillips Curve, Inflationary expectations – Monetarists view, New Classical Economics, New Keynesian counter critique; Economic cost of unemployment, inflation targeting.	16
III	Business Cycle: Characteristics of business cycles, Theories of business cycles - Multiplier-accelerator theories of Samuelson and Hicks, Schumpeter's theory, Cobweb theory, Real business cycle theory, Political business cycle theory.	16
IV	Monetary Policy: Components of money supply, Money multiplier, Monetary policy goals and instruments, Targets in monetary policy, Tradeoff between Money Supply and interest rate targeting, Policy lags, Effectiveness of monetary policy and fiscal policy, Role of monetary policy and fiscal policy in open economy – Mundell-Fleming Model.	16
Total		64

Reading List:

1. Keith Bain and Peter Howells : *Monetary Economics – Policy and its Theoretical Basis*, Palgrave Macmillan
2. Jagdish Handa: *Monetary Economics* , Routledge
3. R.E. Hall and D.H. Papell: *Macroeconomics*, W.W. Norton and company.
4. C. R. McConnel and S. L. Brue: *Macroeconomics – Principles, Problems and Policies*, McGraw-Hill Irwin
5. Richard T. Froyen: *Macroeconomics*, Pearson
6. Soumyen Sikdar: *Principles of Macroeconomics*, Oxford.
7. Dorndusch, Fischer and Startz: *Macroeconomics*, Tata McGraw Hill.

Course Code : ECNCC203
Title of the Course : Statistical Foundations of Econometrics
Type of the Course : Core Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Probability and Distribution – Random Variables- Discrete and Continuous, Probability Mass Function and Probability Density Function, Rules of probability, Mathematical Expectation, Discrete and Continuous distributions- Binomial distribution, Poisson distribution and Normal distribution.	9
II	Sampling distribution and Statistical Inference – Statistic and Parameter, Estimator & Estimate, Characteristic of a good estimator, Sampling distribution of an estimator, Point estimation, Interval estimation, Testing of hypothesis: Type I and type II errors, one-tailed and two-tailed tests; Level of Significance and Degrees of Freedom; χ^2 and F distributions.	9
III	Linear Regression Model – Principles of least squares - Two-Variable Linear Regression Model, BLUE – The Gauss–Markov Theorem – Extension to Multi-Variable Linear regression Model, R^2 and Adjusted R^2 . Prediction & Forecasting; Introduction to Maximum likelihood estimation, Dummy Variable.	12
IV	Single Equation Problems – I: Auto-Correlation, Heteroscedasticity – Problem, Detection and Alternative Methods of Estimation – Generalised Least Square Method, Properties of GLS Estimators	12
V	Single Equation Problems – II: Multicollinearity, Errors in Variable and Specification Errors – Problems, Detection and Alternative Methods of Estimation.	12
VI	Qualitative Response Model – Models with binary dependent variables- LPM, Introduction to Logit and Probit.	10
Total		64

Reading list:

1. Lind, D.: *Statistical Techniques in Business and Economics*, McGraw-Hill
2. Wooldridge, J.M., *Introductory Econometrics: A Modern Approach*, SouthWestern Cengage Learning
3. Studenmund, A.H., *Using Econometrics: A Practical Guide*, Pearson
4. Gujarati, D.N., *Basic Econometrics*, Tata McGraw-Hill
5. Ramanathan, R., *Statistical Methods in Econometrics*, Academic Press Inc.
6. Pindyck, R.S., and Rubinfeld, D.L., *Econometric Models and Economic Forecasts*, McGraw-Hill
7. Johnston, J. and Dinardo, J., *Econometric Methods*, McGraw-Hill

Course Code : ECNDSE201
Title of the Course : Demographic Analysis
Type of the Course : Discipline Specific Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of lecture hours
I	Fertility: Basic concepts of fertility, Intermediate variables, Proximate determinants of fertility, Socio-economic determinants of proximate variables; Importance of fertility studies; Measures of fertility – Crude Birth Rate, General Fertility Rate, Age-specific Fertility Rate, Total Fertility Rate, Gross Reproduction Rate, Net Reproduction Rate, Order Specific Fertility Rate, Marital Fertility Rate, Child Woman Ratio, Standardized Birth Rate, Completed fertility rate; Coale's fertility indices.	16
II	Mortality: Mortality – Basic concepts, Need and importance of mortality study; Measures of mortality – Crude Death Rate, Age-specific Death Rate, Infant Mortality Rate, Neo natal Mortality Rate, Post Neo Natal Mortality Rate, Cause Specific Death Rate, Maternal Mortality Rate, Monthly Death Rate, Fetal wastage-Fetal death rate, Perinatal Mortality Rate; Standardized death rate - Direct and indirect standardization; Life table – types of life tables, uses of life table and its construction.	16
III	Migration and Urbanization: Basic concepts, Problems of measuring migration, Factors affecting migration, Push-pull hypothesis, Consequences of migration on both places; Migration rates and ratios; Estimation of migration – Direct estimation of migration, Indirect measures of migration – Vital statistics method, National growth rate method, Survival ratio method; Urbanization – Definition of an urban area, Measures of urbanization, Concentration and dispersion in urban area.	16
IV	Quality of demographic data Sources of demographic data; Errors and omissions in demographic data, Sources of errors, Post-enumeration surveys, Dual Record System, Techniques of evaluation of age data - Whipple's index, Myers' Blended index, Digit preference Quotients for birth intervals, UN Joint Score or Accuracy index.	16
Total		64

Reading List:

1. Thompson, W.S. and Lewis, D.T.: Population Problems, McGraw Hill Book, New York
2. Thomlinson, R.: Population Dynamics, Random House, New York
3. Srinivasan, K. : Basic Demographic Techniques and Application, Sage Publications, New Delhi
4. Bhende, A.A. and Kanitkar, T.: Principles of Population Studies, Himalaya Publishing House, Bombay
5. Sinha, V.C. and Zacharia, E.: Elements of Demography, Allied Publishers Private Limited, New Delhi
6. Shryock, H.S. et. al : Methods and Materials of Demography, Academic Press, New York
7. Hinde, Andrew: Demographic Methods, Routledge
8. Preston, S. H., Heuvenile, P. & Guillot, M.: Demography, Wiley
9. Cox, P. R.: Demography, Cambridge University Press
10. Jay Weinstein & V. K. Pillai: Demography – The Science of Population, Pearson

Course Code : ECNDSE202
Title of the Course : Operations Research
Type of the Course : Discipline Specific Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. lecture hours
I	Linear Programming: Definition, significance, scope and limitations of Operations Research; Linear Programming: Assumptions, formulation and solution by graphic method and simplex methods; Duality in LP programming and its economic interpretation, difference between primal and dual, dual simplex method; Sensitivity analysis; Some special cases: unbounded solution, infeasibility, multiple optimal solution.	14
II	Transportation problem and Assignment problem: Transportation problem, mathematical model of transportation problem, the transportation method. Methods for finding initial solution Tests for optimality; Assignment problem: Different approaches to finding solution.	12
III	Non-Linear programming: Non-Linear programming, Mathematical formulation; Concepts of global minima and local minima; Lagrange multipliers and Kuhn-Tucker conditions; Duality in non-linear programming; Integer programming: Algorithms for integer programming	14
IV	Game Theory: Competitive games, Pure strategy, by Dominance, Mixed strategy (2x2, mx2 and 2xm), Two persons zero sum games, 'n' persons zero sum games, Solution of Game problems with Linear Programming: Graphical methods and Simplex method.	12
V	Queuing Models, PERT and CPM: Basic nature and characteristics; Queuing system and problems; Queue models and solutions: Probabilistic queuing model, Deterministic queuing model and Mixed queuing model. Program evaluation and Review technique: PERT and CPM	12
Total		64

Recommended readings:

1. Taha, Hamdy, A: *"Operations Research"* , seventh edition, Pearson education
2. Sharma J.K.: *"Operations Research:Theory and application"*,S. Chand, second edition
3. Chiang, Alpha C. (2005): *"Fundamental Methods of Mathematical Economics"*, 4th edition, McGraw-Hill.
4. Natarajan, Balasubramani and Tamilarasi: *"Operations research"* Pearson

Course Code : ECNDSE203
Title of the Course : Gender Economics
Type of the Course : Discipline Specific Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of lecture hours
I	Introduction to Gender Economics: Meaning, Rationale, Scope An Economic Approach to Marriage, Fertility and Family—Empirical Issues; Issues relating to Gender and Development: Economic growth and gender equality; Globalisation and gender status; Feminisation of poverty; Women’s contribution to GDP; The Demographic Transition and Gender Impacts	16
II	Gender factor in household economics: Gender and time distribution: work in the labour market, work in the household, and leisure time. Demographic factors in time budget differences. Gender and Household Decision Making : Gender, Bargaining Power and Intra-Household Distributions	16
III	Labor Market Inequalities: Occupation Segregation, Gender division of work; Invisibility of women’s work; Women’s Labor Force Participation: Historical and Current Trends ; The Gender Gap in Earnings: Theoretical Issues, Human Capital explanation for Gender Gap in earnings and Empirical Evidence.	16
IV	Gender Analysis and Public Policy : Gender Policy at national, regional and global level: History, Objectives, and Results; Gender Budgeting; Gender and the Sustainable Development Goals.; Measuring Gender Gaps: GDI, GII, GGI, GEM.	16
Total		64

Readings:

1. Jacobsen, J .2007. *The Economics of Gender*. Cambridge: Wiley Blackwell.
2. Saul D. Hoffman and Susan L. Averett .2016.*Women and the Economy: Family, Work, and Pay*, 3rd ed. London: Palgrave,
3. Bettio, F. Verashchagina, A. (ed).2008. *Frontiers in the Economics of Gender*. New York: Routledge
4. Beneria, L 2003. *Gender, Development and Globalisation. Economics As If All People Mattered*. New York: Routledge
5. Rai, S. and G. Waylen (eds). 2014. *New Frontiers in Feminist Political Economy*. London. Routledge
6. Marcoux, A. The Feminization of Poverty , March 1998, Population and Development Review, Vol.24, Issue-1

Course Code : ECNGE201
Title of the Course : Issues of Indian Economy
Type of the Course : Generic Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 + End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Development Strategy and Growth Development strategies since independence; Pre and Post Liberalisation period- an assessment of performance, Overview of Economic Reforms, major aspects of transformation and recent developments.	12
II	Agriculture Sector The Problem of Food Security: Public Distribution System, Agricultural Subsidies, Agricultural prices and marketing, Diversification of Agriculture, Agriculture and environment, WTO and agriculture.	14
III	Industry and Services Sector Strategy of Industrial development, Identification of industries having India's Comparative Advantage: IT Industry, MSME; Industrial sickness, privatization and disinvestments; Services sector: Importance of the Services Sector in India, Services led growth- sustainability.	14
IV	Public Finance Fiscal Reforms, FRBM Act and its Implication, Finance Commission and Fiscal Federalism	10
V	India's External Sector Recent changes in Foreign Trade Policy, Balance of Payments: Role of Private Transfer, Software Services and Foreign Capital in BOP, Current and Capital Account Convertibility; WTO, TRIPS and GATS	14
		64

Reading list:

1. Bardhan, P., "The Political Economy of Development of India", OUP.
2. Brahmananda, P.R. and Panchamukhi, V.R., "The Development Process of Indian Economy", Himalaya.
3. Basu, Kaushik (Ed), "India's Emerging Economy" OUP.
4. Datt, R. and Sundharam, K.P.M.: *Indian Economy*, S. Chand.
5. Jalan, Bimal (Ed), "The Indian Economy – Problems and Prospects", Viking.
6. Kapila, Uma (Ed), "India's Economic Reforms", Academic Foundation.
7. Kapila, U.: *Indian Economy since Independence*, Academic Foundation
8. Sen, A. and Dreeze, J., "Economic Development and Social Opportunities", OUP.
9. Wadhwa, C. (Ed), "Some Problems of India's Economic Policy", Tata McGraw Hill.
10. Fouseca, A.J. (Ed), "Challenge of Poverty in India", Vikas.
11. Rao, V.K.R.V., "India's National Income, 1950-1980", Sage.
12. Joshi, Vijay and Little, IMD, "India's Economic Reforms 1991-2001", Oxford University Press.

SEMESTER III

Course Code : ECNCC301
Title of the Course : International Economics
Type of the Course : Core Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 + End-Semester: 60)

Unit	Topics	No. of lecture hours
I	Basis of trade and gains from trade: Comparative advantage and trade, Heckscher-Ohlin, Stolper-Samuelson theorem, Specific factors model, Leontief paradox; Technological gap model, Product cycle theory, Overlapping demand theory, Vertical specialization-based trade, the gravity model.	16
II	Economic growth, trade and International factor movement: Economic growth and terms of trade; Bhagwati's theory, Technological progress and terms of trade, Factor growth and terms of trade; Reasons for international capital movement, Foreign portfolio investment (FPI) and Foreign direct investment (FDI), Determinants of FDI, Theory of FDI, Effects of international capital movement, Benefits and costs of FDI to home and host countries; Motives for labour migration, Economic effects of labour movements.	16
III	Trade policy: Economic and non-economic arguments for protection, Partial equilibrium effects of an import tariff, General equilibrium effects of an import tariff, Optimum tariff; Non-tariff barriers, Effects of import quota, Quota versus tariff for a large and small nation; Economic integration – theory of Customs Union, Optimum currency area, WTO and international trade.	16
IV	Balance of Payments and Exchange Rate: Balance of Payments – current and capital account; Exchange rate – equilibrium exchange rate, spot and forward rates, Currency swaps, Foreign exchange risks, Hedging and speculation, Interest arbitrage and foreign exchange markets, Monetary approach to balance of payments and exchange rate, Asset market model and exchange rate; Exchange rate and balance of payments; Exchange rate, domestic prices and terms of trade; International monetary system – Bretton Woods System, Operation of the present system.	16
Total		64

Reading List:

1. Salvatore, D.: International Economics, John Wiley and Sons, New York
2. Soderstein, B.: International Economics, MacMillan Press Ltd. London
3. Krugman, P. and Obstfeld, M.: International Economics, Pearson Education
4. Thomas A. Pugel: International Economics, Tata McGraw-Hill
5. Manur, H.G.: International Economics, Vikash Publishing House Pvt. Ltd., New Delhi
6. J.D. Daniels, L.H. Radebaugh & D.P. Sullivan: *International Business*, Pearson Education
7. Rana, K.P. and Verma, K.N.: International Economics, Vishal Publishing Company, Jalandhar

Course Code : ECNCC302
Title of the Course : Economics of Growth and Development - I
Type of the Course : Core Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 + End-Semester: 60)

Unit	Topics	No. of Lectures
Unit – I	Economic Development: An Overview Emergence of Development Economics as a Discipline; Development in historical perspective; Perpetuation of underdevelopment – Vicious circle of poverty, structural view of underdevelopment; Proximate versus fundamental causes of growth ; Economic performance of the developing countries (Case study of India, Brazil, East Asian countries, and China); Overview of the World Economy: Indicators of development, international comparisons of countries.	15
Unit – II	Measuring Development: Measurement of development: Conventional, HDI, GDI, MPI and other quality of life indices. Broadening of development economics: Basic needs, capabilities and human development. Capabilities and Development: From economic development to human development, growth-development divergence, development as freedom.	12
Unit-III	Economic Growth: Basic features of modern economic Growth; Growth models- Harrod-Domar model, Solow-Swan model; Absolute and Conditional Convergence; Golden Rule of Accumulation; Total Factor Productivity; Augmented Solow Model. Models of Endogenous Growth: AK model, Endogenous Technical Change; Romer Model, Models of Schumpeterian Growth.	15
Unit – IV	Alternative theories of Development: Dependencia Theories of Development; The Neoclassical Counterrevolution; Dualism, Centre- periphery models and the process of cumulative causation.	10
Unit – V	Population Growth and the Constraint of Natural Resources: World Population Growth through History, Demographic Transition; Economic theories of population growth (Malthus model, Optimum theory of population and the microeconomic theory of household); theories of resource constraint on Economic growth: Malthus to the Club of Rome, the Ricardo model and the dual economy model; Ways to break the natural resource constraints: Harris Todaro Model of Urban Migration; Interrelation between population, development and environment, sustainable development; population as 'Limits to Growth' and as 'Ultimate Source'.	12
Total		64

Reading list:

1. Daron Acemoglu (2009): *Introduction to Modern Economic Growth*, Princeton University
2. Debraj Ray (1998): *Development Economics: Development Economics*: Princeton University Press
Michael P Todaro & Stephen C Smith (2017): *Economic Development*: Pearson Education
3. Charles Jones (2013): *Introduction to Economic Growth*, Viva Books
4. Robert J Barro & Xavier Sala-i-Martin (1995): *Economic Growth*, McGraw Hill Publication
5. A P Thirwall (2011): *Economics of Development*, Palgrave
6. Hayami and Godo (2005): *Development Economics*, Oxford University Press
7. Kaushik Basu: *Analytical Development Economics*, Oxford University Press
8. Philippe Aghion and Peter Howitt (2010): *The Economics of Growth*, Prentice Hall of India

Course Code : ECNCC303
Title of the Course : Public Finance
Type of the Course : Core Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 + End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Government and the Economy Major Economic Functions of the Government: Establishing the legal framework for the market economy, the allocation function, the distribution function, the stabilization function. Public-Choice Theory: Meaning, outcomes of collective choice, the choice process – unanimity, majority rule, cyclical voting and the voting paradox, Arrow's theorem.	6
II	Public Goods and Externalities Private versus public goods, club goods, local public goods; externalities and inefficiency of externalities, remedies for externalities.	6
III	Taxation Tax Incidence : Partial equilibrium view of product and factor taxes, incidence in general equilibrium, modern views on incidence, measure of incidence. Excess Burden of Tax : Meaning and types, demand supply elasticity and excess burden, neutrality, efficiency and equity of taxation, the Laffer curve. Optimal Taxation : Commodity tax and income tax.	11
IV	Public Expenditure and Public Debt Public Expenditure : The classical theory of minimum expenditure, principle of maximum social advantage, Lindahl's model of voluntary exchange, Samuelson's theory of public expenditure, the Tiebout hypothesis. Public Debt : Burden of public debt, debt burden and future generation - capital stock transfer theory, welfare attitude theory, intergeneration equity theory; Safe limits of public debt, public debt management, public debt as a means of regulating the economy, public debt and economic growth.	15
V	Budget System and Policy Classical and modern theories of government budgeting, budget framing, incremental budgeting and zero base budgeting, programme and performance budgeting, budget as an instrument of economic policy, Budgetary policy in India – study of Union Budgets.	11
VI	Fiscal Policy and Fiscal Federalism Fiscal Policy : Classical, Neo-classical and modern views on fiscal policy; contra-cyclical and compensatory fiscal policy, limitations of fiscal policy; integration of monetary and fiscal policies. Fiscal reform measures in the context of India's New Economic Policy. Fiscal Federalism: Principles of federal finance, inter-government resource transfer, advantages and limitations of decentralization. Centre-State Financial Relations – the Indian experience: An overview.	15
Total		64

Reading List:

1. Musgrave, R. A. and Musgrave, P. B. (1989), *Public Finance in Theory and Practice*, 5th Edition, McGraw Hill Book Co.
2. Hindriks, J. and Myles, G. (2007), *Intermediate Public Economics*, Prentice Hall of India.
3. Samuelson, P.A. and Nordhaus, W.D. (1992), *Economics*, 14th Edition, McGraw Hill Book Co.,
4. Samuelson, P.A. (1955), "Diagrammatic Exposition of a Theory of Public Expenditure", *Review of Economics and Statistics*, Vol. 37.
5. Prest, A. R. (1971), *Public Finance in Theory and Practice*, Vikash Publications Ltd.
6. Choudhry, R. K. (2004), *Public Finance and Fiscal Policy*, Kalyani Publishers
7. Rao, M. G. (2005), "Changing Contours of Federal Fiscal Arrangements in India", in Amaresh Bagchi (ed.), *Readings in Public Finance*, Oxford University Press.
8. Rao, M. G. (2011), "Goods and Services Tax : A Gorilla, Chimpanzee or a Genius like Primates ? ", *Economic and Political Weekly*, February 12-18.
9. *Economic Survey*, Government of India (Latest)

Course Code : ECNDSE301
Title of the Course : Econometric Methods
Type of the Course : Discipline Specific Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 + End-Semester: 60)

Units	Topics	No. of Lecture Hours	No. of Practical Hours
1	The General Linear Regression model in multivariable framework- Assumptions; Least squares estimators; Gauss-Markov theorem; Significance tests and confidence intervals; Concepts of simple R-square, Adj. R-square and modified R-square; predictions; Maximum likelihood estimators. Model selection criteria.	13	-
2	Qualitative and Limited Dependent Variable Models Models with Binary Dependent Variables – The LPM, The Probit model, The Logit Model for binary variable; Maximum Likelihood estimation of Logit model; Multinomial Logit models; Conditional Logit models; Ordered Choice models; Models for count data; Limited Dependent Variable models – Censored regression and Truncated regression.	13	8
3	Time Series Analysis Importance of time series analysis – Stationary and Non-stationary time series – Univariate time series processes: AR, MA, ARMA and ARIMA – Estimation of AR, MA and ARMA models. Estimation and testing of ARIMA model – Economic forecasting – Box-Jenkins approach. Multivariate time series techniques: Vector Auto Regression – Problems with VAR – Exogeneity and Causality analysis; Random Walk Model – Problem of UNIT Root – UNIT Root Test – Co-integration – Test for co-integration. Vector Auto Regression and Cointegration – Cointegration and Error Correction model – Estimation of Vector Error Correction Model	13	8
4	Simultaneous Equation models Seemingly unrelated regressions; Simultaneous equation model and Recursive model; Problem of Identification: Structural form approach and reduced form approach; Conditions for identification; Method of estimation in simultaneous equation model: Indirect Least Square, 2-Stage Least Squares; three stage least squares; Full Information Maximum Likelihood methods. Panel data models: Panel Data and its importance – Types of Panel data – Panel Regression: Fixed effect model; Random effect model.	13	8
Total		52	24

Reading List:

1. William Greene: Econometric Analysis, Pearson
2. Hill, Griffiths and Lim: Principles of Econometrics, Wiley
3. Gujarathi: Basic Econometrics, McGraw Hill
4. J. Johnston and J. DiNardo: Econometric Methods, McGraw Hill
5. Pyndick and Rubinfeld: Econometric Models and Economic Forecasts, McGraw Hill
6. Walter Enders: Applied Time Series Econometrics, Wiley
7. C. Dougherty: Introduction to Econometrics, Wiley

Additional Readings:

1. Ramu Ramanathan: Introductory Econometrics with Applications, The Dryden Press
2. Peter Kennedy: A Guide to Econometrics, Wiley
3. J. Wooldridge: Introductory Econometrics, Cengage Learning

Course Code : ECNDSE302
Title of the Course : Financial Economics
Type of the Course : Discipline Specific Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Financial System: Meaning and Functions; Financial Markets: Money Market and Capital Market; Financial Assets: Debt, equity, derivatives; Financial Market Rates: Interest Rates, Rates of Return on Risky Assets, Market Indexes and Market Indexing, Financial Intermediaries: Banking and Non Banking Intermediaries Financial Infrastructure and Regulation.	16
II	Allocation of Resources over Time : Present Value and Future Value of Single Cash Flow and Multiple Cash Flows and Investment Decisions; Annuities : PV and FV of Annuities, Perpetual Annuities, Investing in Preferred Stock, Loan Amortization, Exchange Rates and Time Value of Money, Inflation and Discounted Cash Flow Analysis, Inflation and Investment Decisions, Taxes and Investment Decisions	10
III	Market Valuation of Assets: Valuation of Debt Instruments: Pure Discount Bonds, Coupon Bonds: Current Yield and Yield to Maturity; Behaviour of Bond Prices over Time, Valuation of Shares of Stock: Valuation of a preferred stock, Valuation of Common Stocks- Discounted Dividend Model: Zero Growth, Constant Growth and Multiple Growth Models, Linkage between Share Price, Earnings and Dividends, The significance of Price-Earnings Ratio (P/E) The law of One Price and Arbitrage	14
IV	Risk Transfer and Portfolio Theory: Risk Transfer: Hedging : Forward and Future Contracts, hedging foreign exchange risk with swap contracts; Insuring- Basic Features of Insurance Contracts, Options as Insurance, The Derivative Market: Traders in a Derivative Market; Hedgers, Speculators and Arbitrageurs. Diversifying; Portfolio Theory for Optimal Risk Management: Probability Distributions of Returns, Standard Deviation as a Measure of Risk, Trade-off Between Expected Risk and Return: Efficient Portfolio, Markowitz Mean- Variance Portfolio Theory; Capital Asset Pricing Model: Use of CAPM in Portfolio Selection	16
V	Corporate Finance: Structure of the financial statements of the firm: Balance Sheet, Income Statement, Statement of Cash Flows, Financial Ratios, Internal Vs. External Financing, Equity Financing, Debt Financing, the Modigliani-Miller theorem.	8
Total		64

Reading List

1. Alexander G. J, Sharpe W. F. & Bailey J. V. (2001): Fundamentals of Investments. Pearson Education.
2. Bodie Z, Merton R. C. & Cleeton D. L. (2009) :Financial Economics. Pearson/ Prentice Hall.
3. Hull J. C. & Basu S. (2010): Options, Futures and Other Derivatives. Pearson.
4. Madura J. (2006): Financial Institutions and Markets. Thomson.
5. Copeland, T. E. and J. F. Weston(1992): Financial Theory and Corporate Policy, Addison Wesley.
6. Brealey, R. and S. Myers (1997): Principles of Corporate Finance, fifth edition, New York, McGraw Hill,
7. Elton, E.J and M.J. Gruber(1991): Modern Portfolio Theory & Investment Analysis, (fourth edition) John Wiley & Sons.
8. Houthakker, H.S. and P.J. Williamson(1996): Economics of Financial Markets, Oxford University Press.

Course Code : ECNDSE303
Title of the Course : Industrial Economics
Type of the Course : Discipline Specific Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Introduction to Industrial Economics: Meaning, scope, need and significance of the study on Industrial Economics, A revision of the concepts of Firm, Industry, Market, Market structure, Market power, Market conduct and Market performance, Market concentration and Monopoly Power	10
II	Industrial Organisation and Industrial Expansion The organizational form and alternative motives of the firm – Types of organizational form – private, joint and public sector, choice of organizational form, Business motives – profit maximization, sales maximization, maximization of growth, maximization of value, managerial motivations. Industrial Expansion – Diversification, Vertical Integration and Merger – Meaning - Types - Motives for Diversification, Vertical Integration and Merger, Measurement approaches	12
III	Pricing and Investment Decision: Theoretical considerations; Pricing in Practice – Cost-plus pricing ,Variable cost pricing , Target rate of return pricing, Acceptance pricing, Going rate pricing, Group pricing, Menu pricing, Bundling; Pricing in Public Enterprises Nature and Type of Investment Decisions – Methods of Project Evaluation –Pay back method, NPV and IRR, Social cost-benefit analysis, Risk and Uncertainty in Project Appraisal, Replacement decision, Inventory Investment, Market Investment	12
IV	Industrial Finance and Accounting: Need for finance, Types of Finance – short term and long term, sources of finance – internal and external, Commercial and Development Bank, choice of funding – internal vs external sources Accounting – Need for accounting, Basic accounting procedure – balance sheet, profit and loss account – cost of capital – depreciation accounting – cost accounting	10
V	Industrial Location Analysis and Industrial Efficiency: Factors affecting Industrial Location , Approaches to industrial location analysis – Central place theory – Renner's theory – Rawstron's principles, Economic theories of Industrial Location – Weber's theory – Market area theory – Central place theory, Operational approaches to industrial location Industrial Efficiency – Productive efficiency and Economic efficiency	10
VI	Indian Industrial Sector: Evolution of Indian industries, Industrial policy in India, Globalization, Small scale industries, Industrial sickness, Empirical evidences on mergers and acquisitions and diversification, Industrial locational trends in India, Regional imbalance, Patent policy in India	10
Total		64

Readings:

1. Barthwal, R. "Industrial Economics", Wiley Eastern.
2. Bain, J., "Industrial Organization", John Wiley.
3. Panagariya, A., "India – The Emerging Giant"
4. Sen, A., "Industrial Organisation", Oxford
5. Ahluwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi
6. Divine, P.J. and R.M. Jones et. al. (1976), An Introduction to Industrial Economics, George Allen and Unwin Ltd., London
7. Cherunilam, F. (1994), Industrial Economics: Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai
8. Harndeen, J.B. (1975), The Economics of Corporate Economy, Dunellen Publishers, New York
9. P. Bellaflame and M. Peitz: Industrial Organization and Market Structure
10. Government of India, Economic Survey (Annual)

Course Code : ECNGE301
Title of the Course : Basic Econometrics
Type of the Course : Generic Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of lecture hours
I	Basic Statistical prerequisites Measures of central tendency: mean, median and mode, relation between mean, median and mode, properties of mean; Measures of dispersion: standard deviation and variance; Random variable, Co-Variance & Correlation	16
II	Statistical Inference: Statistic and Parameter, Estimator & Estimate, Characteristic of a good estimator; Testing of hypothesis : Type I and type II errors, one-tailed and two-tailed tests; Level of Significance and Degrees of Freedom. Sampling distribution- χ^2 , t and F distribution;	16
III	Linear Regression Model: Principles of least squares - Two-Variable Linear Regression Model, BLUE – The Gauss–Markov Theorem –Goodness of fit, Dummy variable.	16
IV	Single Equation Problems : Auto-Correlation, Heteroscedasticity, Multicollinearity – Concept Problem, Detection	16
Total		64

Reading list:

1. Gupta, S.P., *Statistical Methods*, Sultan Chand and Sons, New Delhi
2. Gupta, S.C., *Fundamentals of Statistics*, Himalaya Publishing House, Mumbai
3. Gujarati, D.N., *Basic Econometrics*, Tata McGraw-Hill
4. Ramanathan, R., *Statistical Methods in Econometrics*, Academic Press Inc.
5. Wooldridge, J.M., *Introductory Econometrics: A Modern Approach*, SouthWestern Cengage Learning
6. Studenmund, A.H., *Using Econometrics: A Practical Guide*, Pearson
7. Dougherty, C., *Introduction to Econometrics*, Oxford University Press

Course Code : ECNAEC301
Title of the Course : Data Collection and Analysis for Social Science Research
Type of the Course : Ability Enhancement Course
Number of Credits : 2
Marks : 50 (In-Semester: 20 +End-Semester: 30)

Unit	Topics	No. of Lecture Hours
Unit-I	Methods of Data Collection: Primary and Secondary Data: Meanings; Collection of Primary data: Observation Method, Interview Method, Questionnaire, Schedules; Characteristics of Secondary Data; Census and Sampling	12
Unit-II	Data Analysis: Reliability and validity; Graphs and Diagrams - One dimensional –single, subdivided, multiple deviation; Two dimensional- histogram, pie diagram; Three dimensional- rectangular, cube; Pictograms and cartograms, scatter, line and radar diagrams; Tabular Presentation -Single; Double, Multiple; Quantitative tools	12
Unit-III	Case Study: Students shall have to prepare case study report.	8
Total		32

Readings List:

1. Good and Hatt : Methods in Social Research, McGraw Hill.
2. Panels P. Forcesses : Social Research Methods, Prentice Hall.
3. Paul Oliver : Writing your Thesis, Vistaar Publication, New Delhi.
4. Panneerselvam, R : Research Methodology, PHI, New Delhi.
5. Johnston, J & Dinardo : Econometric Methods, McGraw Hill.
6. Maddala, G.S : Econometrics, McGraw Hill.
7. Rajaram, V. : Fundamentals of Computers, PHI, New Delhi.
8. Studenmund : Using Econometrics- A Practical Guide, Addison Wesley.

SEMESTER IV

Course Code : ECNCC401
Title of the Course : Indian Economy
Type of the Course : Core Course
Number of Credits : 4
Marks : 100 (In- Semester: 40, End- Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Development Strategy and Growth Development strategies since independence; Pre and Post Liberalisation period- an assessment of performance, major aspects of transformation and recent developments.	8
II	Population and Economic Development Population as a factor of economic development, Age and Sex Composition, the quality of population, Demographic Dividend; Occupational Structure- Symptoms of change; The problem of poverty and unemployment.	8
III	Agriculture Sector Land relations and land reforms, Green revolution, Modern farm inputs, The Problem of Food Security: Public Distribution System, Agricultural Subsidies, Agricultural prices and marketing, Diversification of Agriculture, Agricultural and rural credit, Agriculture and environment, WTO and agriculture.	14
IV	Industry and Services Sector Strategy of Industrial development: Industrial Policy Reforms; Reservation Policy relating to small scale industries, Competition policy, Sources of industrial finance, Identification of industries having India's Comparative Advantage: IT Industry, MSME; Industrial sickness, privatization and disinvestments; Services sector: Importance of the Services Sector in India, Performance of the Services sector, Services led growth- sustainability.	14
V	Economic Reforms Reform in Capital Market: Inflow of FDI and FPI and its Implication for the Domestic Economy; Financial Sector Reform; Fiscal Reform: FRBM Act and its Implication.	10
VI	India's External Sector Reforms in External sector, Direction of Foreign Trade, Composition of Foreign Trade, Recent changes in Foreign Trade Policy, Balance of Payments: Role of Private Transfer, Software Services and Foreign Capital in BOP, Current and Capital Account Convertibility; WTO, TRIPS and GATS	10
Total		64

Reading list:

1. Bardhan, P., "The Political Economy of Development of India", OUP.
2. Brahmananda, P.R. and Panchamukhi, V.R., "The Development Process of Indian Economy", Himalaya.
3. Basu, Kaushik (Ed), "India's Emerging Economy" OUP.
4. Datt, R. and Sundharam, K.P.M.: *Indian Economy*, S. Chand.
5. Jalan, Bimal (Ed), "The Indian Economy – Problems and Prospects", Viking.
6. Kapila, Uma (Ed), "India's Economic Reforms", Academic Foundation.
7. Kapila, U.: *Indian Economy since Independence*, Academic Foundation
8. Sen, A. and Dreeze, J., "Economic Development and Social Opportunities", OUP.
9. Wadhwa, C. (Ed), "Some Problems of India's Economic Policy", Tata McGraw Hill.
10. Fouseca, A.J. (Ed), "Challenge of Poverty in India", Vikas.
11. Rao, V.K.R.V., "India's National Income, 1950-1980", Sage.
12. Joshi, Vijay and Little, IMD, "India's Economic Reforms 1991-2001", Oxford University Press.

Course Code : ECNCC402
Title of the Course : Economics of Growth and Development - II
Type of the Course : Core Course
Number of Credits : 4
Marks : 100 (In- Semester: 40, End- Semester: 60)

Unit	Topics	No. of Lecture hours
Unit – I	Institutions, Political Economy and Growth: Institutions- Role of institutions in economic development; Geography, History and Culture and their affect on economic performance through institutions; Inclusive and Extractive institutions, Inefficient institutions ; Approaches to political economy of development- Radical, Mainstream and Institutional; Political aspect of development- Governance and economic development, Democracy and economic development; political institutions and economic growth.	14
Unit – II	Market , State and the Community: The economic functions of the market and the state- efficiency of the competitive market, market failure, Role of the state; Government failure; Choice of economic system; rise and fall of Developmentalist Models; Success and failure of the new developmental market economies; Resurgence of market liberalism and its consequences; From the Washington Consensus to the Post Washington consensus; Role of Community in economic development.	12
Unit – III	Factors in The Development Process: Importance of agriculture and industry in economic development; Technical Progress; Choice of techniques and appropriate technology; Investment criteria – Elementary idea of cost – benefit analysis; Trade and Economic development- Foreign Aid; Globalization and LDC's; Objectives and role of monetary and fiscal policies in economic development.	14
Unit – IV	Concepts and Measurement of Poverty: Measures of poverty- Head-count; Foster –Greer- Thorbecke, Sen; Critique of the poverty line approach; Absolute vs. Relative Poverty; Millennium Development Goals and Poverty; Poverty traps, Multi-dimensional measures of Poverty: MPI; Poverty as capability failure; Poverty and under nutrition; poverty and environment; Policies to tackle Poverty: Macro vs. Micro Interventions; Targeting vs. Universalism; Micro-credit.	12
Unit – V	Inequality: Causes and measures of income inequality, Lorenz curve, Gini Co-efficient, Concentration ratio, Entropy; Growth-Inequality and Poverty debate, Patterns and Changes in inequality and poverty- the inverted U hypothesis, Inequality and capitalism in the twenty-first century, the rise of global middle class and global plutocracy; Inequality within and among countries; Measures to reduce inequality; Inclusive Growth	12
Total		64

Reading list:

1. Debraj Ray (1998): Development Economics: *Development Economics*: Princeton University Press
2. Michael P Todaro & Stephen C Smith (2017): *Economic Development*: Pearson Education
3. A P Thirwall (2011): *Economics of Development*, Palgrave
4. Hayami and Godo (2005): *Development Economic: From the poverty to the Wealth of Nations*, Oxford University Press
5. Kaushik Basu: *Analytical Development Economics*, Oxford University Press
6. James A .Robinson and Daron Acemoglu (2005): *Economic Origins of Dictatorship and Democracy: Economic and Political origins*, Cambridge Univesity Press
7. Murali Patibandla (2006): *Evolution of Markets and Institutions*, Rutledge
8. Daron Acemoglu : *WHY NATIONS FAIL; The origins of Power, Prosperity and Poverty*, Profile Books ,2013
9. Branko Milanovic (2016): *Global Inequality-A new approach for the age of Globalisation*, Harvard University Press
10. Abhijit V Banerji and Esther Duflo (2013): *Poor Economics*, RHI
11. Thomas Piketty (2017): *Capital in the Twenty First Century*, Harvard University Press

Course Code : ECNCC 403
Title of the Course : Regional Economics
Type of the Course : Core Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Definition of a Region and Its types – Concept of Regional Economics – Its Content and Importance, Regional Growth Theories – Export Base Model, Concept of Regional Multiplier, Neoclassical Model, Input-Output Model, Location Theories: Weber’s Theory of Location, Concept of Agglomeration Economies, Losch’s theory of industrial location, Christaller’s Central Place Theory; Regional Convergence: Theoretical Approaches, Growth Pole Theory, Myrdal’s Backwash Theory.	14
II	Regional Planning: Definition, Scope and Needs of Regional Planning - Regional vs. National Planning, Role of Decentralized Planning in Regional Development.	10
III	Regional Economic Development: Strategy of Balanced Regional Development, Urbanization and Regional Development; Regional Disparities in India – Evaluation of balanced regional development efforts since independence in India.	12
IV	North East India as a Region - Economic Characteristics of N.E. Region – Centre Periphery Theory in the Context of North East Region - Resource Base of the Region: Mineral, Forest and Water Resources, Human resources: Present Status and Development: Population Composition, Growth Rate, Density and Occupational Distribution – Rural Urban Population – Urbanization – Migration of population.	14
V	Sectoral Development of North East India: Agriculture - Trends and Pattern of Production, Land Use and Cropping Pattern, Shifting Cultivation; Productivity Level, Food Production and Food Security, Modernization of Agriculture; Industry and Infrastructure: Structure of Industrial Production- Causes of Industrial Backwardness and their Remedies – NE Industrial Policy; State of Infrastructure; Emergence of the service sector, growth of banking and Financial Institutions - Performance of social sector; Special Agencies for Regional Development – NEC; Potential Areas – Tourism potential of the region, Border Trade and Act East Policy, Organic Farming.	14
Total		64

Reading list:

1. H.W. Richardson (Ed): Regional Economics: A. Reader, Allen & Irwin, London.
2. Nourse, Hugh O.: Regional Economics, Mc Graw-Hill.
3. Manrique, O. , Salamanca, A.: “On the Agglomeration Economies : Microfoundations and some other aspects”, LAP Lambert Academic Publishing.
4. Paul Krugman, "Space: The Final Frontier," Journal of Economic Perspectives, Spring 1998, pp. 161-174 (in packet)
5. Goswami, P.C.: Economic Development of Assam, Kalyani, Ludhiana.
6. B. Dutta Roy: Social and Economic Profile of N.E. India, Omsons, New Delhi.
7. NCEAR: Techno Economic Surveys of Assam, Arunachal Pradesh, Manipur and Nagaland
8. NEC: (a) Basic Statistics of N.E. Region, 1980-85 (b) Towards Regional Development: Plans and Perspective
9. Government of Assam: Economic Survey and Statistical Hand book (latest)
10. North Eastern Development Finance Corporation Ltd (NEDFI) database

Course Code : ECNDSE401
Title of the Course : Environmental Economics
Type of the Course : Discipline Specific Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of lecture hours
I	Basic Environmental Issues Ecology, Environment and Economy; Economy and Environment interlinkages; The first two laws of thermodynamics; Environmental Economics: Definition and Development of the subject as a separate branch of study; Resource Economics Vs. Environmental Economics, Environment–Development trade off; Population and Environment – Poverty and Environment nexus: Exogenous and Endogenous poverty, Policy prescription. Concept of market failure - Environment Degradation as Market Failure; Environmental Quality as Public Goods; Externality: Environmental damage as negative externality, Solution of Market Failure: Pigouvian Tax, Coase Theorem – Property Rights and Transaction Costs.	12
II	Economics of Resources Renewable Resources: Optimal management, Common Property and Open Access–Tragedy of Commons, Non-renewable Resources - Economic Issues relating to use of Non-renewable Resources: Management – Backstop-Exploration and Technological progress.	10
III	Valuation of Environmental goods Use and Nonuse Values, Valuation Methods: Direct methods or Stated Preference Methods - Estimation of WTP/WTB by Contingent Valuation, Indirect or Revealed Preference Methods: Hedonic Pricing Method and Travel Cost Method.	12
IV	Sustainable Development <i>Sustainable Development</i> – Concept, Notions and Different approaches to sustainability; Measurement of sustainability; Sustainable Accounting – United Nations' System of Environmental and Economy Accounting; Environmental Impact Assessment; Micro planning for Eco-preservation – Watershed and Joint Forest Management.	10
V	Instruments of Environmental Protection Conventional Methods: Command and Control Measures; Economic Incentives: Price Rationing – Charges and Subsidies, Quantity Rationing – Tradable Pollution Permits, Liability Rules – Non-compliance fees, Performance bonds and Deposit refunds; Mixed instruments; Bases for judging among instruments; Issues related to Monitoring and Enforcement of environmental policies; Porter Hypothesis.	10
VI	Global Environmental Issues and Indian Experience: Trade and Environment: Price differential and Arbitrage, Pollution Havens and Empirical evidence; Climate change, Loss of biodiversity, Ozone depletion, International Conventions and Protocols, Domestic environmental policies in India.	10
Total		64

Recommended Readings:

1. Baumol, W.J. and Oates, W.E., "The Theory of Environmental Policy", Cambridge university Press
2. Fisher, A.C., "Resource and Environmental Economics", Cambridge university Press
3. Kolstad, Charles D., "Environmental Economics", Oxford University Press
4. Hanley, Shogren and White, "Environmental Economics in Theory and Practice", Macmillan
5. Perman, R., Ma, Y., McGilvray, J. and Common, M., "Natural Resource and Environmental Economics", Pearson
6. Shanker, U, "Environmental Economics", Oxford University Press
7. Bhattacharya, R. (Ed), "Environmental Economics: An Indian Perspective", Oxford University Press
8. Tietenberg, T., "Environmental Economics and Policy", Harper Collins
9. Conrad, J.M., "Resource Economics", Cambridge university Press
10. Prato, T., "Natural Resource and Environmental Economics", Iowa State University Press, Ames

Additional Readings:

1. Ostrom, E., "Governing the Commons – The evolution of Institutions for Collective Action", Cambridge university Press
2. World Development Report 1992: Development and Environment, World Bank
3. "Report of the NOAA Panel on Contingent Valuation", Federal Register

Course Code : ECNDSE402
Title of the Course : Labour Economics
Type of the Course : Discipline Specific Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Introduction to labour Economics Concept, Nature and scope of labour economics; Labour market- concept, Labour supply, Labour demand, Equilibrium in the labour market; An overview of major theories of labour market mismatch; Imperfections in the labour market- Job search and Job matching, Imperfect information, labour market institutions of minimum wage and trade unions; segmentation of labour market	14
II	Employment and Unemployment Concepts of labour force participation and underutilization; Employment/ Unemployment definitions applied in international and national context; Informal employment; Decent work- Concept, Measurement and policy response; Conditions of work; Theories of unemployment; Relation between employment and manpower planning technique; Manpower techniques.	13
III	Wage determination Theories of wage- Classical, neo classical and modern; Efficiency wage models; Wage determination in organized and unorganized sector; Human capital theory of wage; Wage differentials; Labour market discrimination; relation between wage and employment; Labour productivity concept- Measurement, determinants and measures to increase labour productivity	14
IV	Labour migration and mobility Types of labour mobility, determinants and consequence of migration; Mobility, Migration and efficiency; Labour turnover	9
V	Issues in Indian labour market Features of Indian labour market- Size and composition in the organized and unorganized labour; Major issues in the Indian labour market; Labour productivity in India, Labour turnover and absenteeism in India; Women and Child labour in India; Agricultural and rural labour; Employment and wage policy in India; Informal labour and Social security measures; Globalization and labour market; sources of labour statistics in India	14
Total		64

Reading list

1. Michael Hopkins (2002): '*Labour market planning revisited*', Palgrave Macmillan
2. Ashenfelter, Orley and Richard Layard, *The Handbook of labour Economics*. Vol.1 and 2. New York: North-Holland, 1986; Vol.3A, 3 B and 3C, 1999
3. George J. Borjas (2000): '*Labour Economics*' McGrawhill, New York
4. Mcconnel and Stanley Brue (2002): *contemporary labour Economics*, McGrawhill, New York

Course Code : ECNDSE403
Title of the Course : Rural Development and Management
Type of the Course : Discipline Specific Elective Course
Number of Credits : 4
Marks : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of Lecture Hours
I	Concept of Development and Growth in General – Measures of Development, Concept of Rural Development, Important Issues in rural Development, Different Approaches to Rural Development, Theories of Rural Development, New Paradigm and Practices. Rural Development Experiences: An Asian Perspective	14
II	Rural Development in India – Socio-economic Aspects, Rural Social Structure – Demography – Economic Structure – Rural Poverty, Agricultural Development in India Growth – Problems – Policies –Rural Industrialization, Growth – Problems – Policies, Rural Infrastructure and Social Sector	12
III	Institutions for Rural development- Voluntary effort in Rural Development – Voluntary agency, NGOs ,Objectives and Functions, Panchayati Raj Institutions (PRIs), Cooperatives, Self Help Groups (SHGs), Rural financial institutions, Micro Finance Institutions (MFIs)	12
IV	Rural development policies and programmes in India Rural Development Policies during different plan periods; Strategies of Rural Development – growth oriented strategy, Welfare strategy; participatory strategy; right-based strategy, etc. Rural Development Programmes for agricultural sector; Social Sectors; Rural Social Security- Programmes for disabled and destitute; Poverty removal and employment generation programmes in rural India.	12
V	Planning and management for Rural Development – Planning Process – Multi-level Planning – District Planning – Block Planning, Management of Rural Development Projects – Project Dimension, Identification and Formulation – Project Appraisal – Technical Feasibility – Economic Viability – Financial Feasibility – Planning and Management of Rural Project Implementation – Monitoring Development Projects – Project Evaluation, Impact evaluation studies of World bank	14
Total		64

Reading list:

1. Singh Katar: '*Rural Development, Principles, Policies and Management*', Sage Publication
2. Sundaram, Satya,I.: '*Rural Development*', Himalaya Publishing
3. Desai Vasant: '*Rural Development- Programmes and Strategies*', Himalaya Publishing House, Mumbai
4. Reddy,Venkata.K.: '*Agriculture and Rural Development (A Gandhian Perspective)*', Himalaya Publishing House.
5. Karalay, G.N.: '*Integrated Rural Development*', Concept Publishing company