

COURSE STRUCTURE & SYLLABUS

(New Syllabus applicable to the University Department from the academic year 2013-14)

Course Structure for M. Sc. Economics Course

Semester I to Semester X for M.Sc. Economics (5-year Integrated Course)
Semester VII to Semester X for M.Sc. Economics (2-year Post Graduate Course)

Code	Course	Hard/soft	Credits
SEMESTER I			
ECON111	Understanding Economics	H	4
ECON112	Basic Statistics	H	4
ENGL111	Functional English - I	H	3
EASC 111	Earth and Environment	H	3
	A Course from Physical Education	S	3
SEMESTER II			
ECON121	Introduction to Microeconomics - I	H	4
ECON122	Mathematical Methods - I	H	4
ENGL 121	Functional English - II	H	4
	A Course from Social Science	H	3
	Optional from other Departments	S	3
SEMESTER III			
ECON211	Introduction to Microeconomics - II	H	4
ECON212	Mathematical Methods - II	H	4
ECON213	Elements of Macroeconomics - I	H	4
	Language other than English	H	3
	Optional from other Departments	S	3
	Optional from other Departments	S	3
SEMESTER IV			
ECON221	Public Finance - I	H	4
ECON222	Development Economics	H	4
ECON223	Elements of Macroeconomics - II	H	4
	Comprehensive Viva	H	2
	Language other than English	H	3
	Optional from other Departments	S	3
SEMESTER V			
ECON311	Public Finance - II	H	4
ECON312	Elements of Econometrics	H	4
ECON313	International Trade	H	4
	A Course from Social Science	H	3
	Optional Paper	S	3
	Optional Paper	S	3
SEMESTER VI			
ECON321	Monetary Economics	H	4
ECON322	Indian Economy	H	4
ECON323	Environmental Economics	H	4
	Comprehensive Viva	H	2
	A Course from Management & Commerce	H	3
	Optional Paper	S	3
	Optional Paper	S	3

Code	Course	Hard/soft	Credits
SEMESTER VII			
ECON411	Microeconomic Analysis - I	H	4
ECON412	Macroeconomics - I	H	4
ECON413	Statistical Methods	H	4
ECON414	Mathematical Economics	H	4
	Comprehensive Viva	H	2
SEMESTER VIII			
ECON421	Microeconomic Analysis - II	H	4
ECON422	Macroeconomics - II	H	4
ECON423	Econometrics	H	4
	Comprehensive Viva	H	2
	Optional Paper	S	3
	Optional Paper	S	3
SEMESTER IX			
ECON511	Public Finance and Policy	H	4
ECON512	Economics of Growth and Development	H	4
ECON513	Research Methodology	H	4
ECON514	Project I: Topic Selection and Review of Literature	H	2
	Comprehensive Viva	H	2
	Optional Paper	S	3
SEMESTER X			
ECON521	Indian Economy: Issues and Policies	H	4
ECON522	International Economics	H	4
ECON523	Project II: Thesis Writing & Viva	H	4
	Optional Paper	S	3

LIST OF ELECTIVES

Code	Course	Soft	Credits
Quantitative Electives			
ECONS01	Optimization Techniques	S	3
ECONS02	Financial Econometrics	S	3
ECONS03	Applied Econometrics	S	3
Finance Electives			
ECONS04	Economics of Microfinance	S	3
ECONS05	Financial Economics	S	3
ECONS06	Economics of Money and Banking	S	3
ECONS07	Indian Financial Institutions and Markets	S	3
Others			
ECONS08	Demography	S	3
ECONS09	Industrial Economics	S	3
ECONS10	Economics of Education	S	3

SEMESTER I

ECON 111 - UNDERSTANDING ECONOMICS

Module 1: Exploring the Subject Matter of Economics

Why study economics? - scope of economics - the economic problem: scarcity and choice - the question of what to produce, how to produce and how to distribute output - science of economics - the basic competitive model - prices, property rights and profits: incentives and information, rationing - opportunity sets - economic systems.

Module 2: Role of Markets, their Functioning and Welfare

Markets and competition - determinants of individual demand/supply, demand/supply schedule and demand/supply curve, market versus individual demand/supply, shifts in the demand/supply curve - demand and supply together - how prices allocate resources - elasticity and its application - controls on prices - taxes and the costs of taxation - consumer, producers and the efficiency of the markets.

Module 3: The Households

The consumption decisions - budget constraints, consumption and income/price changes, demand for all other goods and price changes - description of preferences - the investment decision - investment alternatives for a household - desirable attributes of investments - labor supply and savings decision - choice between leisure and consumption - labour force participation - tax policy and labour supply - human capital and education - budget constraints and savings - savings and interest rate, other factors affecting savings.

Module 4: The Firm and Perfect Market Structure

Financing, controlling and managing firms - the firm's legal form, corporate finance - why corporations care about financial structure - takeover and the market for managers - making decisions - centralization and decentralization - the boundaries of the firm. behaviour of profit maximizing firms and the production process - short run costs and output decisions.

Module 5: Introduction to Macroeconomics and National Income Accounting

The roots of macroeconomics - concerns over macroeconomic - the role of government in the macro economy - the components of the macro economy - the methodology of macroeconomics - concepts of national income - approaches to calculating national income - nominal and real income - issues on measurement of national income.

Readings:

1. Karl E. Case and Ray C. Fair (2002), Principles of Economics, 6th Edition, Pearson Education Asia Low Price Edition.
2. N. Gregory Mankiw, (2002), Principles of Economics, Thomson.
3. J.E. Stiglitz, and C.E. Walsh (2002), Principles of Economics, 3rd Edition, W.W. Norton & Company, New York.
4. R. Stone and G. Stone (1962), National Income and Expenditure, Bowes and Bowes London.
5. Paul Hayne (1998), Economic Way of Thinking, Prentice Hall.

SEMESTER I

ECON 112 - BASIC STATISTICS

Module 1: Measures of Central Tendency

Meaning of average - types of average: arithmetic mean, median, mode, geometric mean, harmonic mean quartiles, deciles and percentiles.

Module 2: Measures of Dispersion

Meaning of dispersion - types of dispersion: range, quartile deviation, mean deviation, standard deviation and variance (along with absolute measure, the relative measure or coefficient of each type of dispersion) - coefficient of variation - combined standard deviation - Lorenz curve (application in income distribution).

Module 3: Skewness and Kurtosis

Skewness - meaning of skewness and symmetry in a distribution - symmetrical distribution - asymmetrical or skewed distribution - negatively skewed and positively skewed, measures of skewness: absolute measure - Karl Pearson's coefficient of skewness - Bowley's coefficient of skewness - definition, types and measures of kurtosis - Karl Pearson's coefficient of kurtosis.

Module 4: Correlation

Concept of correlation - types of correlation - bivariate distribution and covariance - simple correlation - Karl Pearson's product moment coefficient of correlation measure - partial correlation: definition and measure (ceteris paribus assumption) - multiple correlation: definition and measure (long run production function) - Spearman's rank correlation coefficient (when ranks are given, when ranks are not given and when equal ranks are given) - properties and uses of correlation.

Module 5: Index Numbers

Definition of index number - types of index number - price index-quantity index -value index - simple index number - weighted index number - construction of index number - problems in construction - methods in construction - simple and weighted - Laspeyre's price index (cpi in india) - Paasche's price index - Fisher's ideal index - splicing of index number - deflating (finding real wages).

Readings:

1. A.L. Nagar and R.K. Das (2006), Basic Statistics, Second Edition Oxford University Press, New Delhi.
2. S.P. Gupta (2000), Statistical Methods, Sultan Chand and Sons, New Delhi.

SEMESTER II

ECON 121 - INTRODUCTION TO MICROECONOMICS I

Module 1: Introduction

Why study economics? - Principles of economics - Nature and scope of micro economics - the economic problem: scarcity and choice - the question of what to produce, how to produce and how to distribute output - importance and limitations of micro economics - micro statics - micro dynamics - comparative statics.

Module 2: Consumer Behaviour

Demand and law of demand - determinants of individual demand schedule and curve, market versus individual demand, shifts in the demand - elasticity and its application - utility analysis and derivation of demand - ordinal approach - indifference curve - consumer equilibrium - The consumption decisions - budget constraints, consumption and income/price changes price, income and substitution effect(Hicks and Slutsky) - Engel curve.

Module 3: Theory of Supply and Production

Supply and law of supply - elasticity of supply - production decision - factors of production - production function - law of variable proportion - returns to scale - economies of scale - Iso quant approach and producer's equilibrium - factor substitution - elasticity of factor substitution.

Module 4: Partial Vs General Equilibrium

Partial Vs General equilibrium - How tax affects market participants - How tax affects welfare- Deadweight losses and gain from trade- role and limitations of price mechanisms in a free market economy - frontiers & microeconomics.

Module 5: Consumer surplus and Producer surplus

Consumers, Producers, and the efficiency of markets - Consumer Surplus- How a lower price raises consumer surplus- What dose the consumer surplus measure- Producer Surplus - How a higher price raises producers surplus- Market efficiency- Evaluating the market equilibrium - Market efficiency and market failure.

Readings:

1. A .Koutsoyannis (1979), Modern Micro Economics, MacMillan Press, London
2. H.R.Varian (1993), Intermediate Microeconomics a Modern Approach, 3rd Edition, Affiliated East West Press.
3. N.G. Mankiw (2009), Economics : Principles and Application Cengage Learning, Printed in India

SEMESTER II

ECON 122 - MATHEMATICAL METHODS I

Module 1: Preliminaries

Elements of logic and proof - converse and contra-positive, necessary and sufficient conditions - mathematical induction - sets and set operations - Introduction to functions - composite functions, inverse function - Introduction to numbers

Module 2: Matrices and Determinants

Addition, scalar multiplication, matrix multiplication - the transpose - singularity and invertibility - Determinants - definition, properties, minors and cofactors

Module 3: Introduction to Vectors

Two, three and n - dimensional row and column vectors - vector addition and scalar multiplication - length of a vector, scalar products, orthogonality - linear and convex combinations of vectors..

Module 4: Elementary Calculus - Differentiation

The derivative of a function - differentiability and continuity - techniques of differentiation - sums, products and quotients of functions - composite functions and the chain rule - inverse functions - implicit differentiation, second and higher order derivatives - concavity and convexity of functions.

Module 5: Elementary Calculus - Integration

Introduction to integration- integration by substitution - integration by parts - area under a curve - properties of definite integrals

Readings

1. Knut Sydsaeter and Peter J. Hammond (2002), Mathematics for Economic Analysis. Pearson Educational Asia: Delhi (reprint of 1st 1995 edition).
2. Alpha C. Chiang (1984), Fundamental Methods of Mathematical Economics. McGraw Hill (3rd edition).
3. Hadley, G. (1987), Linear Algebra, Addison-Wesley.
4. Metha B.C. and Madnani. GMK (2004), Mathematics for Economists, Sultan chand & Sons, New Delhi.

SEMESTER III

ECON 211 - INTRODUCTION TO MICROECONOMICS II

Module 1: Theory of Cost

What are costs? - Production and costs - various measures of cost - cost curves and their shapes - the relationship between short run and long run average total cost - elasticity of cost.

Module 2: Theory of Revenue and Equilibrium

What are revenues - average and marginal revenue - relation between AR and MR Curves - AR, MR and elasticity - importance of revenue curves - interactions of cost and revenues - conditions of equilibrium of a firm.

Module 3: Market Structure and Equilibrium

Market forms - perfect and imperfect forms - equilibrium of a firm under perfect competition, monopoly, monopolistic competition, duopoly and oligopoly - importance of time element in price theory - price discrimination and measure of monopoly power - control and regulation of monopoly - collusive price leadership - kinked demand curve-taxation and equilibrium of a firm-comparison of various markets.

Module 4: Factor Pricing

Market for the factors of production - marginal productivity theory of pricing of factor (distribution theory) - Euler's theorem-linkages among the factors of production - theories of wages - determination - wages and collective bargaining - wage differentials - rent - Ricardian and modern theories of rent - scarcity rent - differential rent and quasi rent - interest - classical and Keynesian theories - profit - innovation, risk and uncertainty theories - the concept of normal profit - monopoly profit.

Module 5: Welfare Economics

What is welfare economics - economic and general welfare problems in measuring welfare - classical welfare economics - Pigovian welfare condition - Pareto's criteria - value judgment - concept of a social welfare function-compensation principle -the Kaldor- Hicks criterion.

Readings:

1. A.Koutsoyannis,(1979), Microeconomics A Modern Approach, East West Press, New Delhi
2. H.R.Varian (1993), Intermediate Microeconomics, W.W. Norton, New York
3. J.I Ryan(1962), Price Theory, ,MacMillan Press, London
4. N.C.Ray(1998), An Introduction to Microeconomics, MacMillan Press, London
5. N.G.Mankiw(2009), Economics : Principles and Applications, Cengage Learning, Printed in India

SEMESTER III

ECON 212 - MATHEMATICAL METHODS II

Module 1: Functions of One Real Variable

Introduction to Functions of one real variable - elementary curve types - Sets of points in the plane determined by equations or inequalities.

Module 2: Limits

Introduction - Infinite sequence and series - the concepts of convergence and limits - algebraic properties of limits - the limit of $f(x)$ as $x \rightarrow a$ - continuity - the intermediate value theorem.

Module 3: Advanced/Higher Calculus

Jensen's inequality - the second derivative criterion - points of inflexion - differentials and linear approximation - Taylor's theorem and polynomial approximation - L'Hôpital's rule - exponential and logarithmic functions - logarithmic differentiation - partial differentiation - Young's theorem - partial derivatives in economics - the implicit function theorem (statement only)

Module 4: Problem of Optimization

Homogeneous and homothetic functions - elasticity of substitution - concave and convex functions - Jensen's inequality and characterization in terms of the Hessian (statement only) - convex sets - quasiconcave and quasiconvex functions - maxima and minima - saddle points - unconstrained optimization - economic examples.

Module 5: Applications in Economics

Examples of the use of the *exp* and *log* functions (proportional rates of change, elasticities, continuous compounding etc.) - the role of concavity and convexity - applications, profit maximization of firms, utility maximization and cost minimization using optimization - integration and its application in economics.

Readings

1. Knut Sydsaeter and Peter J. Hammond (2002), *Mathematics for Economic Analysis*. Pearson Educational Asia: Delhi (reprint of 1st 1995 edition).
2. Alpha C. Chiang (1984), *Fundamental Methods of Mathematical Economics*. McGraw Hill (3rd edition).
3. Weber Jean, E (1982), *Mathematical Analysis HarperCollins college Div:4, Sub edition*.

SEMESTER III

ECON 213 - ELEMENTS OF MACROECONOMICS I

Module 1: Nature and Scope of Macroeconomics

Nature and scope of macroeconomics - meaning and definition of key macroeconomic variables (output, unemployment, inflation etc.) - concepts of national income - methods of measuring national income - circular flow of income - issues in national income accounting.

Module 2: Employment and output in a growing economy

The goal of full employment - frictional and structural unemployment - unemployment and inadequate demand - the concept of potential output - factors affecting output - production and employment with economic growth - growth of actual and potential output

Module 3: The Classical System

The classical revolutions - say's law -quantity theory of money- wages, prices, employment, and production - rigid wages and monetary policy in the classical model.

Module 4: The Keynesian Model

The problem of unemployment - the components of aggregate demand - equilibrium income - determination of equilibrium income - changes in equilibrium income - the role of fiscal policy and multiplier - the concept of balanced budget multiplier - exports and imports in Keynesian model.

Module 5: Money, Interest and Income:

The money supply, money demand and interest rate - the relationship between bond prices and interest rates - the Keynesian theory of money demand and interest rate - the liquidity trap - the implications of increase in money supply.

Readings

1. R T Froyen (2008), Macroeconomics, Theory and policies, Prentice Hall.
2. N. Gregory Mankiw, (2002), Principles of Economics, Thomson.
3. Gardner Ackley (1978), Macroeconomics, Theory and Policy, Macmillan Library

SEMESTER IV

ECON 221 - PUBLIC FINANCE I

Module 1: Role of Government

Nature and scope of public finance - Rationale for government intervention - Musgrave's three function of government - types of government intervention - production versus provision - regulation of markets - sources of public revenue - deficit financing.

Module 2: Taxation

Theories of taxation- ability and benefit principles of taxation (Lindhal) - Principle of maximum social advantage - taxable capacity - shifting and incidence - types of taxes - characteristics of good tax system.

Module 3: Public Expenditure

Theories of public expenditure - Wagner's law - Peacock hypothesis - Samuelson theory of public goods- basics of cost benefit analysis.

Module 4: Decentralization

Rationale for decentralization - economic, administrative and political - assignment of taxes and expenditure between various tiers of a federal government - rationale and role of local governments.

Module 5: Deficit Financing

Deficit financing - monetarist versus Keynesian views - pattern of deficit financing - public debt management and implication for growth, inflation and interest rate.

Readings:

1. Goode, R. (1986), Government Finance in Developing Countries, TMH, New Delhi
2. Jha. R. (1998), Modern Public Economics, Routledge, London.
3. Musgrave, R.A. and P.B. Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo
4. Atkinson, A.B. and J.E. Stiglitz (1980), Lectures on Public Economics, TMH, New York.
5. Herber, B.P. (1967), Modern Public Finance, Richard D. Irwin, Homewood.

SEMESTER IV

ECON 222 - DEVELOPMENT ECONOMICS

Module 1: Nature and Scope of Development Economics

Emergence of development economics - reasons, subject matter, nature and significance - role of values in development economics.

Module 2: Economic Development (Meaning and Measurement)

Meaning of economic development - distinction between growth and development - new view of economic development (Dudley Seers view) - three core values of development: sustenance, self esteem and freedom - growth and environmental degradation - economic development and human welfare - measurement of economic development - limitations of using per capita income as a measure - alternative measures: PQLI and Human Development Index.

Module 3: Economic Growth

Modern economic growth - Kuznets six characteristics - relevance of historical growth experience to the under developed countries - contemporary UD countries - diverse structure and common characteristics.

Module 4: Theories of Under Development and Development

Theories of under development: vicious circle of poverty, low level equilibrium trap, circular causation and backwash effect, dualism, dominance and dependence - theories of development, classical theories (Smith, Ricardo, Malthus), Marxian theory of capitalist development, Schumpeterian analysis of capitalism.

Module 5: Strategies for development

Big push - balanced vs unbalanced growth - Mahalanobis strategies - balance between agriculture and industry - import substitution vs export orientation - neo-liberal vs interventionist policies.

Readings

1. Michael P. Todaro, (1998), Economic development Longman,
2. A.P. Thirwall (2005), Growth and Development: With Special Reference to Developing Economies, Palgrave Macmillan
3. Denis Gullet, (1971), The Cruel Choice: A New Choice in the Theory of Development, New York, antheneum.
4. Charles P. Kindleberger and Bruce Herrick (1983), Economic Development, McGraw-Hill
5. Adam Szirmai,(2005), The Dynamics of Economic Development: An Introduction Cambridge University Press .
6. Higgins (1968), Economic Development, WW Norton & Co.
7. G.M. Meier, (2003) Leading issues in economic development, Oxford University Press.
8. Gunnar Myrdal (1970) The Challenge of World Poverty: A World Anti-Poverty Program in Outline, Random House Trade Paperbacks.
9. Harriss - White, Barabara (2003), *India Working: Essays on Society and Economy*, Cambridge University Press, Cambridge
10. Douglas Kellner (2012) *Theorizing Globalization*, Critical Quest, New Delhi.
11. John Harriss (2012), *Researching Poverety*, Critical Quest, New Delhi.
12. David Hume & Andrew Shepherd (2012), Conceptualizing chronic Poverty, Critical Quest
13. Sukhadeo Thorat, Hindu Social System and the Human Rights of Untouchables, Critical Quest
14. Barbara Harris-White, *India's Socially Regulated Economy*, Critical Quest ISBN: 978-81-89524-29-6

SEMESTER IV

ECON 223 - ELEMENTS OF MACROECONOMICS II

Module 1: Microeconomic Foundations

Consumption - absolute income hypothesis, relative income hypothesis, life cycle hypothesis, permanent income hypothesis - investment (business fixed investment, residential investment and inventory investment) - neo-classical theory of investment - accelerator theory of investment - the Tobin's q theory.

Module 2: The Closed Economy in the Short Run

The goods market and derivation of IS curve - real influences and Shift in IS schedule - the money market and derivation of LM curve - the shift in LM curve - determination of equilibrium income and interest rates - the relative efficacy of fiscal and monetary policy.

Module 3: The Aggregate Demand and Supply

The derivation of aggregate demand and supply curves - the Keynesian aggregate demand with vertical aggregate supply curve - sources of wage rigidity and unemployment - the flexible price with fixed money wage model - labour supply and money wage - the shift in aggregate supply - Keynes vs. Classics.

Module 4: Output, Inflation and Unemployment

Inflation: concepts and consequences- The Phillips curve - the natural rate of unemployment - factors affecting natural rate of unemployment - the adaptive expectation and long-run Phillips curve - the concept of rational expectations - policy ineffectiveness debate.

Module 5: Open Economy Models

The Mundell-Fleming model - determining equilibrium output in a small open economy - the monetary and fiscal policy under flexible and fixed exchange rates regimes - the Mundell-Fleming model with changing price level.

Readings:

1. R T Froyen (2008), *Macroeconomics, Theory and policies*, Prentice Hall
2. N. Gregory Mankiw (2002) *Macroeconomics*, 5th or later edition, Worth Publishers.
3. Rudiger Dornbusch, Stanley Fischer and Richard Startz,(2007) *Macroeconomics*, 7th or later edition, McGraw Hill.
4. Jones, Charles I. (1998), *Introduction to Economic Growth*, W.W. Norton & Company, Chapters 1, 2, 8.

Module 1: Trend and Pattern of Public Revenues

India's public revenue - taxes of union, state and local Governments - trends in tax revenue - tax/GDP - tax and distributive justice - direct versus indirect taxes - tax reforms - rate and procedure rationalization - VAT in union and state taxes.

Module 2: Trend and Pattern of Public Expenditure

India's public expenditure - trend in union, state and local Government's public expenditure - public expenditure/GDP - change in the composition of public expenditure - developmental versus non developmental - plan versus non plan - revenue versus capital - economic and functional classification of public expenditure - implications.

Module 3: Basics of Budgeting

Constitutional basis for budgeting - process of passing finance and appropriation bills in the parliament/assembly - CAG and PAC - FRBM - deficit, public debt and monetary management.

Module 4: Centre State Financial Relationships

Role of Finance Commission in filling vertical and horizontal fiscal imbalance - plan transfers and discretionary transfers - latest finance commission report of the union and state governments.

Module 5: Recent Fiscal Reforms

Latest commentary on India's fiscal policy - tax reforms, expenditure pruning, constitutional constraints on deficit - fiscal and monetary policy nexus.

Readings:

1. Goode, R. (1986), Government Finance in Developing Countries, TMH, New Delhi
2. Jha. R. (1998), Modern Public Economics, Routledge, London.
3. Musgrave, R.A. and P.B. Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo
4. Atkinson, A.B. and J.E. Stiglitz (1980), Lectures on Public Economics, TMH, New York.
5. Herber, B.P. (1967), Modern Public Finance, Richard D. Irwin, Homewood.

SEMESTER V

ECON 312 - ELEMENTS OF ECONOMETRICS

Module 1: Nature and Scope of Econometrics

Meaning of econometrics - relationship between statistics, mathematics and economics - economic and econometric models - the aims and methodology of econometrics - historical origin of the term regression and its modern interpretation - statistical vs deterministic relationship - regression vs causation - regression vs correlation - terminology and notation - the nature and sources of data for econometric analysis.

Module 2: Two Variable and Multiple Regression Analysis

The basic two variable regression models: estimation - statistical inference-extensions of two variable regression model - regression through origin - scaling and units of measurement - functional forms of regression model - Multiple Regression Analysis: The problem of estimation - meaning of partial regression coefficients the multiple coefficient of determination - R^2 and adjusted R^2

Module 3: The Problem of Inference

The normality assumption - hypothesis testing about individual partial regression coefficients - testing the overall significance of the sample regression - testing the equality of two regression coefficients

Module 4: Assumptions of the Classical Regression Model

Assumptions of Classical Linear Regression Model- Introduction to the problems associated with the relaxation of the assumptions.

Module 5: Regression on Dummy Independent Variables

The nature of dummy variables - regression on one quantitative variable and one qualitative variable - regression on one quantitative variable and one qualitative variable with more than two classes - regression on one quantitative variable and two qualitative variables -interaction effects

Readings

1. Gujarathi, D (2003) Basic Econometrics, 4th Edition, New York: McGraw Hill
2. Maddala, G (1992) Introduction to Econometrics, 2nd ed., New York: MacMillan.

ECON 313 - INTERNATIONAL TRADE

Module 1: Introduction to International Economics

Importance of international economics - international trade & economic growth - subject matter of international economics - purpose of international economic theories and policies - current international economic problems

Module 2: Theories of International Trade

Distinguishing features of internal and international trade - the pure theory of international trade-theories of absolute advantage, comparative advantage and opportunity cost - Heckscher-Ohlin theory of trade - factor price equalization theory - empirical relevance of the H-O theory

Module 3: Alternative Trade Theories

Vent for surplus approach - Kravis and Linders theory of trade - imitation gap and product cycle theory and other theories, role of dynamic factor in explaining the emergence of trade, taste and preference, labour, technology.

Module 4: Economic Growth and International Trade

Introduction - effect of growth on trade - production and consumption effects of growth, combined effect - effects of growth on terms of trade, immiserizing growth - technical progress and international growth - import substitution and export promotion strategy.

Module 5: Gains from Trade

Meaning - factors determining the gains from trade - gains from trade and income distribution - measurement of gains from trade and their distribution - the gains from trade in the case of large and small country - free trade vs no trade - restricted trade vs no trade

Readings:

1. Paul Krugman and Maurice Obstfeld (2002), International Economics: Theory and policy, latest edition
2. Salvatore D (1997), International Economics, PHI, New York
3. Dana ,M.S (2000), International Economics ,Routledge Publications ,London
4. Carbough ,R.J (1999), International Economics
5. Bhagwati.j(1981), International trade,Cambridge university Press.London

SEMESTER VI

ECON 321: MONETARY ECONOMICS

Module 1: Definition, Functions and Theories of Money

Money and its function - the concepts and definitions of money - measurement of money - advantages of money - theories of demand for money: Classical approach, the transactions and cash balance approach, the Keynesian analysis

Module 2: Money Supply

Financial intermediaries - nature and functions - theories of money supply - mechanistic model of money supply determination - high powered money and behavioral model of money supply determination - methods of monetary control - Interest rates in closed and open economies - theories of term structure.

Module 3: Monetary Transmission Mechanism

Meaning - interest rate channel, credit channel, bank lending channel, balance sheet channel, exchange rate channel, other asset price channels.

Module 4: Monetary Policy

Instruments, targets, indicators, lags in monetary policy and rules versus discretion debate.

Module 5: Central Banking

Functions of a central bank - quantitative and qualitative methods of credit control - bank rate policy, open market operations, cash reserve ratio, selective methods, role and functions of Reserve Bank of India - objectives and limitations of monetary policy with special reference to India.

Readings:

1. Pierce, D G and P J Tysome (1985) Monetary economics: theories, evidence and policy, Butterworths, London.
2. Saving, R T (1967), "Monetary policy targets and indicators", Journal of Political economy, 75: 446-465
3. Carl E Walsh (1998), Monetary Theory and Policy, MIT Press, Cambridge.
4. Bennett McCallum (1989), Monetary Economics: Theory and Policy, Macmillan.
5. C Rangarajan (1999), Indian Economy: Essays in Money and Finance, UBSPD.
6. Narendra Jadhav (1994), Monetary Economics for India, Macmillan.

Module 1: Indian Economy during the colonial period

People, resources and institutions in the pre-independent India - Structure of Indian villages, land and agriculture, traditional industries and handicrafts, infrastructure - urban centres, roadways, railways and ports, economic consequences of the Colonial rule and the theory of drains

Module 2: Indian economy at the time of independence

Structure of the Indian economy - natural resources -land, forest, mineral resources, fisheries; national income and contributions from various sectors; theory of demographic transition, age and sex ratio, density of population, social infrastructure.

Module 3: Planning in India

Need for planning in India, objectives, overview of plans in India - approaches, outlays, targets and priorities, broad achievements and failures, new-economic reforms, Liberalization, Privatisation, and Globalisation - rationale behind new economic reforms, progresses during the post-reform period

Module 4: Planning and Indian Agriculture

Land and agriculture in India - land, climate and irrigational infrastructure; land reforms and its implementation across states, green revolution and the advent of HYV seeds, green revolution in retrospect - pros and cons; Nationalization of banks and farmers' access to formal credit and its social implications.

Module 5: Need for an Inclusive Growth

Human Resources: Social institutions and peoples' access to productive resources; population distribution across rural and urban, access to education and employment, patterns and determinants of migration, access to health care. Change in attitude towards the poor and marginalized and the need to evolve a model for inclusive growth

Readings:

1. Ahluwalia. I.J. and I.M.D Little (Eds) (1999), *India's Economic Reforms and Development*, Oxford University Press (OUP), New Delhi.
2. Bardhan, P.K. (1999), *The Political Economy of Development in India*, OUP, New Delhi.
3. Bawa,R.S. and P.S. Raikhy,(1997), *Structural Changes in Indian Economy*, Gurunanak Dev University press, Amritsar.
4. Chakravarty, S. (1987), *Development planning: The Indian Experience*, OUP, New Delhi.
5. Datt.R. (2001), *Second Generation Economic Reforms in India*, Deep & Deep Publications.
6. Ruddar Datt and K.P.M. Sundaram. (2008), *Indian Economy*, Sultan Chand and Co, New Delhi.
7. Harriss - White, Barabara (2003), *India Working: Essays on Society and Economy*, Cambridge University Press, Cambridge
8. Tirtankar Roy (2011), *The Economic History of India*, Oxford University Press, New Delhi.
9. Raychaudhuri, Tapan and Habib, Irfan (2004), edited *The Cambridge Economic History of India Vol. 1*, reprint, Orient Longman Private Ltd, New Delhi.
10. Dharma Kumar (1983) edited *The Cambridge Economic History of India, Volume 2*, Cambridge University Press, Cambridge.
11. Dharma Kumar (1965), *Land and Caste in South India: Agricultural Labour in Madras Presidency in the Nineteenth Century*, Cambridge University Press, Cambridge.

SEMESTER VI

ECON 323 - ENVIRONMENTAL ECONOMICS

Module 1: Theory and Concept

Nature and significance of environmental economics - definition and scope of environmental economics - basic theory - market system and the environment - welfare and environment - the economics of externalities.

Module 2: Environment and Economics

Environment - economy linkage - environment as a necessity and luxury - population and environment linkage - environmental use as an allocative problem - environment as a public good - valuation of environmental damages: land, water, air and forest.

Module 3: Environmental Problems

Economic development and environmental problems - air pollution - water pollution - sound pollution - energy use and environment problem - pollution and urbanization - global warming and green house effect - health, urbanization, transport and technology - environmental degradation.

Module 4: Pollution Control

Prevention, control and abatement of pollution - choice of policy instruments in developing countries - environmental law - sustainable development - indicators of sustainable development - environmental planning - environmental accounting.

Module 5: Policy measures

Basic approach - design of environmental policy - Indian environment policies and performance - pollution control boards and their function.

Readings

1. M. Karpagam (1993), Environmental Economics, Sterling Publishers, New Delhi.
2. S. Sankaran(1994) Environmental Economics, Margham , Madras
3. N.Rajalakshmi and Dhulasi Birundha (1994), Environomics, Economics of Enviroment, Allied, Ahmedabad.
4. S.Varadarajan and S. Elangovan(1992), Environmental economics, Speed, Chennai.
5. Singh G.N (Ed.) (1991) Environmental Economics, Mittal Publications, New Delhi.
6. Garge, M.R. (Ed.) (1996), Environmental Pollution and Protection, Deep and Deep Publications, New Delhi.
7. Lodha, S.L (Ed.) (1991), Economics of Environment, Publishers, New Delhi.
8. The Hindu survey of Environment: Annual Reports.

SEMESTER VII

ECON 411: MICROECONOMIC ANALYSIS - I

Unit I: Advances in Demand Theory

Revision of Demand theory by Hicks - Revealed Preference Theory and derivation of demand and indifference curve - Recent developments in demand theory-Pragmatic Approach (The Constant Elasticity of Demand function, The Dynamic Demand function, Lagged Adjustment in interrelated markets)- The Linear Expenditure systems, the Indirect utility function - Modern utility analysis of Choices involving risk or uncertainty- Neumann-Morgenstern, Friedman-Savage and Markowitz Hypotheses - Cobweb theorem.

Unit II: Advances in Production Theory

Relation between returns to scale and returns to a factor - production function: Cobb Douglas, CES, VES and Translog production function - Production function Vs production process - Technical progress and production function - Multi-product firm.

Unit III: Advances in Theory of Costs and Optimization

Traditional and modern theories of Costs - Derivation of cost curve from production function - Economies of Scale and Long Run Average Cost Curves.

Unit IV: Price and Output Determination

Marginal analysis as an approach to price and output determination - Perfect competition - short run and long run equilibrium of the firm and industry - Monopoly - Short run and long run equilibrium, price discrimination - Degree of monopoly power- monopoly control and regulation - Bilateral monopoly - Monopolistic competition - General and Chamberlain approaches to equilibrium, equilibrium of the firm and group with product differentiation - Oligopoly-non collusive (Cournot, Kinked demand curve and Stackelberg's solution) and collusive (cartels and mergers, price leadership and basic point price system) models - Workable competition.

Unit V: Alternative methods of Pricing and Optimization

Pricing principle - Average or full cost pricing- Mark up pricing- Limit pricing theory- Bains version- Sylos-Labini model of limit pricing- Public Utility Pricing.

Readings

1. Koutsoyiannis, A. (2000) *Modern Microeconomics*, (2nd Edition), Macmillan press, London
2. Layard, P.R.G. and Walters, A.W. (1978), *Microeconomic Theory*, McGraw Hill, London.
3. Sen A. (1999), *Microeconomics: Theory and Application*, Oxford University Press, New Delhi
4. Stigler, G. (1996), *Theory of Price*, PHI, New Delhi
5. Varian, H.R. (2000), *Microeconomic Analysis*, W.W.Norton, New York
6. Mankiw, N.G. (2009), *Economics: Principles and Applications*, Cengage Learning, India edition

SEMESTER VII

ECON 412 - MACROECONOMICS - I

Module 1: Measuring Key Macroeconomic Variables

Various Concepts and Measurements of Aggregate Income - Income, Expenditure and the Circular Flow - Rules for Computing GDP - Real vs. Nominal GDP - Measuring the Cost of Living (consumer and whole sale price indices) - Measuring the Unemployment Rate - Unemployment, GDP and the Okun's Law.

Module 2: Theories of Consumption

The Classical Views on Consumption - The Psychological Law of Consumption - Kuznets's Consumption Puzzle - Fisher's Inter-temporal Choice Model - Permanent Income Hypothesis - Life Cycle Hypothesis

Module 3: Theories of Investment

The Neoclassical Theory of Investment - Capital Theory and Theory of the Firm - Finance and the Cost of Capital - The Accelerator Theory of Investment - The Stock Market and Tobin's Q Theory - Inflation and Investment - Policies affecting Investment.

Module 4: The IS - LM Model (Closed Economy)

The Neoclassical and Keynesian Macroeconomic Models - The Interaction of Real and Monetary Sector - The Neoclassical and Keynesian version of IS-LM Model - Fiscal and Monetary Policy Analysis in IS-LM Model - Fiscal Policy and Crowding out - Ricardian Equivalence - The Relative Efficacy of Fiscal and Monetary Policy - The Aggregate Supply in the Short and Long Run - Aggregate Demand and Price Determination - Pigou Effect and Real Balance Effect in the IS-LM Model.

Module 5: The IS-LM Model (Open Economy)

The Mundell-Flemming Model - The Fiscal and Monetary Policy Operation under Fixed and Floating Exchange Rate Regime - Aggregate Demand in the Open Economy - Trade Policy in IS-LM Models.

Readings:

1. Rosalind Levacic and Alexander Rebmann (1982), *Macroeconomics: An Introduction to Keynesian - Neoclassical Controversies*, Macmillan.
2. Errol D'Souza (2008), *Macroeconomics*, Pearson.
3. David Romer (1996), *Advanced Macroeconomics*, McGraw-Hill.
4. David, G Pierce and Peter J Tysome (1985), *Monetary Economics: theories, evidence and policy*, Butter worths.
5. Laidler, D.E.W. (1984), *The Buffer Stock Notion in Monetary Economics*, *Economic Journal* 94, 17-34.

Module 1: Sampling Theory

Population and sample- Parameter and statistic-(Census method and sampling method of Data collection); Objects of Sampling- Methods of Sampling- Random and Non- Random; Techniques of sampling under each method- Sampling error and Non-Sampling error-Sampling distribution of a Statistic-Law of Statistical Regularity-Law of Inertia of Large Numbers-Central limit theorem

Module 2: Mathematical Expectation

Random variable-Discrete and continuous- Probability function of discrete Random Variable (Probability Mass Function)- Probability function of Continuous Random Variable (Probability Density Function)- Cumulative Distribution function; Mathematical Expectation- Theorems on Mathematical Expectation-Variance- Theorems on Variance

Module 3: Theory of Estimation

Meaning and concept of an Estimation-Concept of Estimator-Types of Estimation-Point and Interval Estimation- Desirable properties of an Estimator-Standard error of Estimator-Confidence limits for a population parameter

Module 4: Theoretical Distribution

Definition-types of theoretical distribution-Discrete theoretical distribution-Binomial Distribution-Poisson distribution; Continuous theoretical Distribution-Normal Distribution-Standard Normal Variate -Z distribution; Other Theoretical Distribution-Students "t" Distribution-Chi-Square (χ^2) Distribution- F-Distribution

Module 5: Statistical Inference

Formulation of Statistical Hypothesis; Testing of Hypothesis-Null Hypothesis and Alternative Hypothesis-Stages in Hypothesis testing-Types of Error in Hypothesis testing- Type I error and Type II error-Level of Significance and confidence coefficient-Critical region or rejection region; Two tailed test and one-Tailed Test; Computation of Test statistic and significance Test-small sample test-'t' Test- χ^2 test- F test; Large sample test- Z test; Test of Significance concerning correlation coefficient; Power of Test; Analysis of Variance

Readings:

1. Speigal.M. R. (1992), Theory and problems of Statistics, McGraw Hill, London.
2. Monga,G.S. (1972), Mathematics and Statistics for Economists, Vikas Publications, New Delhi.
3. Gupta.S.C. (1993) Fundamentals of Applied Statistics, S.Chand, New Delhi.

SEMESTER VII

ECON 414 - MATHEMATICAL ECONOMICS

Module 1: Basic Calculus

Introduction to basic calculus - applications of differentiation in economics - Concept of integration - Simple rules of integration and its application to consumer's surplus and producer's surplus - Growth rates and simple properties of time path of continuous variables.

Module 2: Linear Algebra

Determinants and their basic properties - Solution of simultaneous equations through Cramer's rule - matrix inversion and rank of a matrix - Concept of vector - its properties - Matrices and vectors - Concept of quadratic forms - Eigen roots and Eigen vectors.

Module 3: Differential equations

Exponential growth - Separable equations - linear differential equations and integrating factors - Second-order differential equations - Economic applications of differential equations.

Module 3: Difference equations

Solving first-order difference equations - Application of first-order difference equations to financial problems - The cobweb model - Second-order difference equations - use of matrix diagonalisation - Economic applications of second - order difference equations - Applications in Trade and Growth models.

Module 5: Linear programming

Basic concept, formulation of a linear programming problem Its structure and variables - Solution of linear programming through graphical and simplex method - Statement of basic theorems of linear programming - Concept of duality and statement of duality theorems - Concept of a game - Strategies - simple and mixed - Value of a game - Saddle point solution - Simple applications.

Readings:

- 1 Sydsaeter, Knut and Peter Hammond (2006), Essential Mathematics for Economic Analysis, 2nd Ed. Financial Times, Prentice Hall: Harlow, England.
- 2 Yamane, Taro (1975), Mathematics for Economists, PHI, New Delhi.
- 3 Allen, R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press, New Delhi.
- 4 Gupta, S.C. (1993), Fundamentals of Applied Statistics., S.Chand, NewDelhi.
- 5 Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
- 6 Handry, A.T. (1999), Operations Research, PHI, New Delhi.

SEMESTER VIII

ECON 421: MICROECONOMIC ANALYSIS - II

Unit I: Alternative Theories of the Firm

Critical evaluation of marginal analysis - Baumol's sales revenue maximization model - Williamson's model of managerial discretion - Marris model of managerial enterprise - Behavioural model of Cyert and March.

Unit II: Advances in Distribution Theory

Macro theories of distribution - Ricardian, Marxian, Kalecki and Kaldor's - Staffa model - Neo-classical approach - Marginal productivity theory - Product exhaustion theorem - Elasticity of technical substitution, Technical progress and factor shares - Theory of distribution in imperfect product and factor markets.

Unit III: Welfare Economics

Pigovian welfare economics - Welfare Criteria - Pareto optimal conditions - Social welfare Maximization - Inability to obtain optimum welfare - Imperfections, market failure, decreasing costs, uncertainty and non-existent and incomplete markets - Theory of Second Best - Arrow's impossibility theorem.

Unit IV: General Equilibrium Theories

Partial and general equilibrium - Walrasian general equilibrium - stability and uniqueness of equilibrium - Two-sector model - Stopler-Samuelson theorem - Rybczynski theorem.

Unit V: Economics of Uncertainty

Individual behaviour towards risk, expected utility and certainty equivalence approaches, risk and risk aversion - Economics of insurance - Risk pooling and risk spreading - Mean-variance analysis - Economics of search - Adaptive search - the efficient market hypothesis, stochastic models of inventory demand - search and transaction cost - Economics of information.

Readings

1. Koutsoyiannis, A. (2005) - Modern Microeconomics, Macmillan press, London
2. Layard, P.R.G. and Walters, A.W. (2001) - Microeconomic Theory, McGraw Hill, London.
3. Sen A. (2005). - Microeconomics: Theory and Application, Oxford University Press, New Delhi
4. Stigler, G. (2008). - Theory of Price, PHI, New Delhi
5. Varian, H.R.(2005) - Microeconomic Analysis, W.W. Norton, New York
6. Baumol, W.J (1998). - Economic Theory and Operations Analysis, Prentice Hall, New York
7. Pindyck and D. Rubinfeld (2005) - Microeconomics, East West Press, London
8. Nicholson Walter (2007)- Microeconomic Theory, The Drydon Press, London
9. E.K .Browning and J.M. Browning (2003) - Microeconomics; Theory and Applications, Kalyani Publisher, New Delhi.

SEMESTER VIII

ECON 422 - MACROECONOMICS - II

Module 1: The Labour Market

Profit Maximization and Labour Demand - Utility maximisation and Labour Supply - Aggregate Supply with/without Money Illusion - Neoclassical Labour Market Equilibrium - Introducing Unemployment - Principles of Effective Demand - The Keynesian Underemployment Equilibrium.

Module 2: Inflation and Unemployment

The Phillip's Relationship - Theoretical Underpinnings of Phillip's Curve - Natural Rate Hypothesis - Theory of Adaptive Expectation - Expectation Augmented Phillip's Curve - The Rational Expectation and Luca's Supply function - Policy Ineffective Theorem - The Lucas Critique - Rational Expectation and Implications of Monetary Policy.

Module 3: Theories of Business Cycles

Multiplier-Accelerator Interaction Model - Monetarists Interpretation of Business Cycles - Real Business Cycle Theory.

Module 4: The Post Keynesian Macroeconomics

Micro Theoretic foundations for Wage and Price Rigidity - Small Menu Cost - Efficient Wage Theory - Staggered Wage Setting - Insider-Outsider Model.

Module 5: Recent Advancements in Macroeconomic Policies

The Debate over Rules vs. Discretion - Taylor's Rule and Monetary Policy - Inflation Targeting - Issues Relating to Inflation Targeting - Country Experiences with Inflation Targeting.

Readings:

1. Rosalind Levacic and Alexander Rebmann (1982), *Macroeconomics: An Introduction to Keynesian - Neoclassical Controversies*, Macmillan.
2. Errol D'Souza (2008), *Macroeconomics*, Pearson.
3. David Romer (1996), *Advanced Macroeconomics*, McGraw-Hill.
4. David, G Pierce and Peter J Tysome (1985), *Monetary Economics: theories, evidence and policy*, Butter worths.
5. Laidler, D.E.W. (1984), *The Buffer Stock Notion in Monetary Economics*, *Economic Journal* 94, 17-34.

SEMESTER VIII

ECON 423 - ECONOMETRICS

Unit I: Basic Regression Analysis

Nature and Scope of Econometrics - Simple Regression Model: Specification, OLS Method, Assumptions of CLRM and Gauss Markov Theorem, Hypothesis Testing and Goodness of Fit - Extensions of Simple Regression Model: Regression through Origin, Scaling and Units of Measurement, Functional Forms of Regression Model - Maximum Likelihood Estimation

Unit II: Multiple Regression Models

Model Specification, Interpretation Multiple Regression Equation, Testing Hypothesis: Individual

Partial Regression Coefficient and Overall Significance, Goodness of Fit - F-tests, R² and Adjusted

R².

Unit III: Relaxing Select CLRM Assumptions

Multicollinearity, Heteroscedasticity and Autocorrelation- Nature, Consequences, Detection and Remedial Measures. General Criteria for Model Selection, Types of Specification Errors and Testing Model Specification, Errors of Measurement

Unit IV: Simultaneous Equations System

Introduction to Simultaneous Equation Models - Problem of Identification and Consequences of Ignoring Simultaneity - Estimation Procedures: Indirect Least Squares, 2SLS, 3SLS - Application: A Simple Keynesian Model

Unit V: Dummy Variable Models

Qualitative Independent Variables: Qualitative Variables with Two Categories and Many Categories, Estimating Seasonal Effects, Testing for Structural Change, Piecewise Linear Regression, Qualitative and Limited Dependent Variable: Binary Choice Model, Probit Model, Logit Model, Limited Dependent Variable

Readings

1. Gujarati, D (1998) - Basic Econometrics, 4th Edition, New York: McGraw Hill
2. Johnston, J (1995) - Econometric Methods, 3rd edition, New York: McGraw Hill.
3. Pindyck, Robert S. and Daniel L. Rubinfeld (1995) - Econometric Models and Economic Forecasts, 4th Edition, Irwin McGraw-Hill, New York
4. Ramanathan, Ramu (2000) - Introductory Econometrics with Applications, 5th Edition, Cengage Learning India Pvt. Ltd., New Delhi

SEMESTER IX

ECON 511- PUBLIC FINANCE AND POLICY

Module 1: Public Choice

Problems of preference revelation and aggregation of preferences; Voting systems; Arrow impossibility theorem; An economic theory of democracy; Politico-eco-bureaucracy; Rent seeking and directly unproductive profit seeking (DUP) activities.

Module 2: Rationale for Public Policy

Demand revealing schemes for public goods – Contributions of Clarks, Groves and Leyard, Tiebout model, theory of club goods; Stabilization Policy – Keynesian case for stabilization policy; Uncertainty and expectations; Failure of inter-temporal markets; Liquidity preference; Social goals; Poverty alleviation; Provision of infrastructural facilities, removing distributional inequalities and regional imbalances.

Module 3: Taxation and Public Debt

Trade off between equity and efficiency in Taxation ; Theory of measurement of dead weight losses; The problem of double taxation. Classical view of public debt; Compensatory aspect of debt policy; Burden of public debt; Sources of public debt;

Module 4: Fiscal Policy

Objectives of fiscal policy – full employment, anti-inflation, economic growth, redistribution of income and wealth; Interdependence of fiscal and monetary policies; Budgetary deficits and its implications; Fiscal policy for stabilization – automatic vs. discretionary stabilization; Alternative measures of resource mobilization and their impact on growth, distribution and prices; Balanced budget multiplier.

Module 5: Indian Public Finances

Lack of flexibility in Central and State budgets, shrinking size of development finance through budgets; Trends in public expenditure and public debt; Fiscal crisis and fiscal sector reforms in India; Reports of Finance Commissions in India.

Readings:

1. Goode, R. (1986), Government Finance in Developing Countries, TMH, New Delhi
2. Jha. R. (1998), Modern Public Economics, Routledge, London.
3. Musgrave, R.A. and P.B. Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo
4. Atkinson, A.B. and J.E. Stiglitz (1980), Lectures on Public Economics, TMH, New York.
5. Herber, B.P. (1967), Modern Public Finance, Richard D. Irwin, Homewood.
6. Stiglitz, J.E (2000), Economics of the Public Sector.

SEMESTER IX

ECON 512: ECONOMICS OF GROWTH AND DEVELOPMENT

Module I: Introduction

Growth and development- conceptual issues. Issues in measurement- national income and per capita income -measurement of purchasing power parity. GNP- a biased index of development and welfare- construction of poverty weighted index of social welfare. Alternative measures of development - human development index- gender based development index, gender empowerment measure- international poverty index, global hunger index- social sector and development- Education and health.

Module II: Theories of Growth and Development

Classical Economic Theory, Neo-Classical Economic Theory, Marxian Economics, Keynesian Economics. Rosenstein Rodan's Big- Push theory, Theory of Backwash and Spread effect. Stage theories of development — Marx and Rostow.

Module III: Dualism

Social, technical and financial dualism. Lewis model of economic development, Ranis and Fei model, Jorgenson's model, Criticism. Balanced and unbalanced growth, Linkage effect — Hirschman and Nurkse.

Module IV: Theories of Development and the Indian experience

Indian Social Structure and Development - Caste - Properties, Common Property Resources; agriculture and labour, access to land, access to education, employment, judicial and political power and development.

Module V: Relevance of Mainstream theories and the need for alternatives

Relevance of Mainstream theories and the need for alternative theories of development - modernity, post-modernity, structuralism, post-structuralism, Post-colonialism, Post-developmentalism, Feminist approaches, Emerging Paradigms in Cultural Studies, Rights based approach to development and alternatives.

Readings:

1. Simon Kuznets, (1966), *Economic Growth, Rate structure and Spread*, Yale University Press.
2. Adam Szirmai, (2005), *Dynamics of socio economic development-An introduction*, Cambridge University Press.
3. Amartya Kumar Sen, *Growth Economics*, Penguin Harmondsworth
4. Gerald Meir, (2003), *Leading Issues in Economic Development*, Oxford University Press.
5. A.P. Thirwall, (1994), *Growth and Development ELBS*.
6. Richard Peet and Elaine Hartwick, (1999), *Theories of Development*, New York: Guilford Press, (ISBN 1-57230-489-8).
7. Polanyi, Karl. (1944). *The great transformation*. Sussex: Beacon Press.
8. Harriss - White, Barabara (2003), *India Working: Essays on Society and Economy*, Cambridge University Press, Cambridge
9. Brian Fray *Critical Social Science*, Critical Quest
10. Arjan de Haan & Naila Kabeer, *Social Exclusion (Two Essays)*, Critical Quest
11. Barbara Harris-White, *India's Socially Regulated Economy*, Critical Quest
12. Rudra, Ashok, *Intelligentsia as a Ruling Class*, Critical Quest
13. Aloysius, G, *Interpreting Kerala's Social Development*, Critical Quest
14. Hilary Silver, *The Process of Social Exclusion* , Critical Quest
15. Pulin Nayak, *Economic Development & Social Exclusion in India*, Critical Quest
16. Arjan de Haan & Naila Kabeer, *Social Exclusion (Two Essays)*, Critical Quest
17. Amartya Sen (2004), *Social Exclusion*, Critical Quest

Module 1: Contemporary Society and Social Science Research

Contemporary society and the need for social science research, approach to research - characteristics and nature of issues and social science disciplines, Research in social science - Facts, theories and concepts in social science research - Research Design - features of a good research design.

Module 2: Review of Literature and Identifying Research Problem

Research problem - Identifying the research problem, Engaging with literature - reading through the lines, against the grains, between the lines; constructing research gaps and formulation of research problem, concept of hypothesis- role and formulation of hypothesis- scientific methods of research- nature of scientific research- stages of scientific methods, logic and Scientific method- deductive and inductive methods.

Module 3: Quantitative and Qualitative Methods

Quantitative methods - use of secondary data, Constructing a questionnaire and designing a survey, merits and demerits of survey methods- type of survey- selecting the survey method - sample survey different types - merits and demerits. Qualitative Methods: the case study methods - merits and demerits, Participant observation, interview methods - open and closed, structured and unstructured, focused group discussions, process documentation.

Module 4: Research Ethics

Research Ethics: Social Stereotypes and the need for conceptual clarity - disciplinary, legal and moral conceptualization, ethical stance with regard to sensitive social issues, stigma and taboos - relating to caste, gender and the inter-relations, power relations between the researcher and the 'subject', On-field behavior - dos and don'ts. Anonymity and confidentiality, informed consent, ownership of research and knowledge.

Module 5: Analysis, Interpretation, and Drafting Report

Analysis of quantitative and qualitative data, interpretation, Politics of interpretation, report writing - formulating and arranging concepts and ideas, formulating arguments, substantiating arguments with evidence, data, notes and references, bibliography.

Readings:

1. W. G. Cochran (1977)- Sampling Technique, John Wiley, New York.
2. W.J. Goode and P.K. Hatt (1952) - Methods in Social Research, McGraw Hill, New York.
3. T.S. Wilkinson and P.L. Bhandarkar (1994) Methodology and Techniques of social Research, Himalaya Publishing.
4. Matt Henn, Mark Weinstein and Nick Foard, (2006), *A Short Introduction to Social Research*, Vistaar Publications, New Delhi.
5. Earl Babies (2006), *The practice of Social research*, Wadsworth Publishing
6. Brian Fray *Critical Social Science*, Critical Quest, ISBN: 978-81-89524-65-4.
7. István Mészáros, *Ideology & Social Science*, Critical Quest, ISBN: 978- 81-89524-56-2.
8. Mao Tse Tung (1893-1976) *On Contradictions*, Critical Quest, ISBN: 978-81-89524-22-7
9. Barbara Harris-White, *India's Socially Regulated Economy*, Critical Quest
10. Rudra, Ashok, *Intelligentsia as a Ruling Class*, Critical Quest ISBN: 81-89524-11-9
11. Teun A Van Dijk: *Principles of Critical discourse Analysis*, Critical Quest.
12. John Harriss: *Researching Poverty*, Critical Quest.
13. Jayati Ghosh: *Poverty Reduction in China & India*, Critical Quest
14. Max Horkheimer: *Traditional & Critical Theory*, Critical Quest.

SEMESTER X

ECON 521- INDIAN ECONOMY: ISSUES AND POLICIES

Unit I: Overview

State of the Economy at the Beginning of the Fifties - Policy of Planned Development - Growth and Structural Change till the 'eighties - Evolution of Controls and Obstacles to Fast Growth - New Economic Policy - Performance of the Economy since 1991 - Major Aspects of Transformation

Unit II: Industrial Development

Critique of industrial policies-industrial reforms-Sources of Industrial finances- Banks, share market, Insurance companies, Pension funds, Non banking sources and Foreign Direct Investment (FDI) - Role of Foreign Capital for direct investment and portfolio investment-Multinationals - reform of public sector enterprises-privatization and disinvestment debate-globalization and its impact on industrial development- regional disparities in industrial and structural growth -issues facing small scale sector-unorganized sector- Reservation policy relating to small scale Industries- Industrial relations and Labour welfare-National commission on labour- issues in labour market reforms

Unit III: India's External Sector

Foreign Trade: Salient features of India's Foreign trade- composition, direction and Organization of Trade - New Economic policy and trade: Intellectual Property Rights, Implications of TRIPS, TRIMS, GATS and New EXIM policy- Impact of WTO on various aspects of Indian Economy- Balance of Payments, tariff policy- New Exchange Rate Regime: Partial and full convertibility, Capital Account convertibility, Exchange rate and WTO requirements

Unit IV: Financial Sector in India

Money and capital markets- Changing role of RBI -financial sector reforms-monetary policy of RBI and interest rate polices- issues of commercial banks-stock exchange-working of SEBI and capital market reforms- Development finance Institutions, foreign banks and non banking financial institutions-Analysis of price behavior in India-policies of price control.

Unit V: Current Economic Issues in India

Adverse impact of Economic Reforms (privatization, liberalization and globalization)- impact of global financial crisis on the Indian economy-response of India to global crisis- Decelerating agricultural growth- Causes of environmental degradation-jobless growth and unemployment - inequality and economic power- poverty and deprivation-parallel economy- Growing regional inequalities- Rural urban disparities- problems of urbanization and migration- Balance of payments crisis -Growing fiscal deficit

Readings

1. Ahluwalia. I.J. and I.M.D Little (Eds) (1999), India's Economic Reforms and Development, Oxford University Press, New Delhi.
2. Bardhan, P.K. (1999), The Political Economy of Development in India, Oxford University press, New Delhi.
3. Bawa,R.S. and P.S. Raikhy,(1997), Structural Changes in Indian Economy, Gurunanak Dev University press, Amritsar.
4. Chakravarty, S.(1987), Development planning: The Indian Experience, Oxford University press,
5. Datt.R. (2001), Second Generation Economic Reforms in India, Deep and Deep publications,.
6. Ruddar Datt and K.P.M. Sundaram,(2008), Indian Economy, Sultan Chand and Co ,New Delhi.

SEMESTER X

ECON 522 - INTERNATIONAL ECONOMICS

Unit I: Trade Theories

Comparative Advantage: The Ricardian Model; Specific Factors and Income Distribution; Resources and Trade: The Heckscher-Ohlin Model; The Standard Trade Model; External Economies of Scale and the International Location of Production.

Unit II: Trade under Imperfect Competition

Monopolistic competition models of trade; Love-for-Variety preferences; Gains from trade; Tariff versus Quota under Monopoly; Strategic trade policy: Cournot and Bertrand competition; Voluntary Import Expansion and Export Restrictions.

Unit III: Open-Economy Macroeconomics

National Income Accounting and the Balance of Payments; Exchange rate and Foreign Exchange Market; Fixed and Floating Exchange Rates.

Unit IV: Exchange Rate Models

Purchasing Power Parity; Exchange rate, Interest rate and Money; Exchange Rate and Price level -Overshooting Model of Exchange Rate; Exchange Rate and Output in the Long-run.

Unit V: Policies in Open-Economy

The Instruments of Trade Policy; The Political Economy of Trade Policy; Trade Policy in Developing Countries; Controversies in Trade Policy; International Monetary Systems: An Historical Overview; Optimum Currency Areas and the European Experience; Financial Globalization: Opportunity and Crisis; Developing Countries: Growth, Crisis, and Reforms.

Readings:

1. Krugman P. R., Obstfeld M., and Melitz M., (2006), International Economics: Theory and policy. (latest edition).
2. Salvatore D. (1997), International Economics, PHI, New York.
3. Carbough ,R. J. (1999), International Economics.
4. Dana, M. S. (2000), International Economics, Routledge Publications, London.
5. Bhagwati J. (1981), International Trade, Cambridge University Press, London.
6. Van Marrewijk, C., International Economics, Oxford University Press, 2007.
7. Caves, R, R. Jones, and J. Frankel, World Trade and Payments: an Introduction, Addison-Wesley, 1999

QUANTITATIVE ELECTIVES

ECONS01 - OPTIMIZATION TECHNIQUES

Unit I

Unconstrained and constrained optimizations

Unit II

A special variety of equilibrium analysis - Optimum values and relative maximum and minimum - First derivative test - Second derivative test - Second and higher order derivatives.

Unit III

Linear programming - Simplex method - Statement of basic theorems of linear programming - Shadow prices and their uses.

Unit IV

Non linear programming - its nature - Kuhn-Tucker conditions - Constrained qualification, Kuhn- Tucker sufficiency theorem - Economic applications.

Unit V

Dynamics and integration - Indefinite integrals - Definite integrals -Improper integrals -Domar growth model.

Readings

1. Sydsaeter, Knut and Peter Hammond (2002) - Essential Mathematics for Economic Analysis, Prentice Hall: Harlow, England.
2. Yamane, Taro (1962) - Mathematics for Economists, Prentice Hall,
3. Allen, R.G.D (2008). - Mathematical Analysis for Economists, Macmillan Press, New Delhi.
1. Chiang, A.C (2005)- Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
4. Handry, A.T (1995). - Operations Research, PHI, New Delhi.

QUANTITATIVE ELECTIVES

ECONS02 - FINANCIAL ECONOMETRICS

Unit I: Predicting Financial Return

Financial time series, asset returns, distributional properties of financial returns, Market efficiency, Principle component analysis, factor analysis

Unit II: Models of Volatility

Modeling volatility, ARCH, GARCH and various versions of GARCH. Long-memory and stochastic volatility models, Recent developments in volatility estimation using high frequency data

Unit III: Risk and Return Models for Multiple Assets

Multivariate time series analysis, Weak stationarity and cross correlations, Vector autoregressive models- VAR, Vector moving average models-VMA, ARMA and Model evaluation
Vector models

for mean, Time varying variance-covariance matrix and the dynamic conditional correlation models.

Unit IV: Random Walks and Cointegration

Pitfalls-Spurious regression, Cointegration and error correction models, Threshold cointegration and arbitrage models.

Unit V: Value at Risk (VaR) Models

Value at risk-VaR, An econometric approach to VaR calculations, Quantile estimation, Extreme value theory, An extreme value approach to VaR

Readings

1. Pattersan Kerry (2000), An Introduction to Applied Econometrics: A Time Series Approach, Palgrave Macmillan
2. Tsay, Ruey S (2001), Analysis of Financial Time Series, John Wiley and Sons, Macmillan Press.
3. Cochrane, John (2005), Asset Pricing, Princeton University Press, Princeton

QUANTITATIVE ELECTIVES

ECONS03 - APPLIED ECONOMETRICS

Unit I: Review of Basic Econometrics and Introduction to Time Series & Panel Data Analysis

Introduction - Review of Single Equation Regression Model: Estimation and Hypothesis Testing
-Time Series Analysis: Stationarity and Unit Root Tests, Co-integration, VAR, Panel Data Analysis

Unit II: Applications in Microeconomics I

Consumer Demand Analysis: Specification and Estimation of Demand Equations - Estimation of Engel Curves - Estimation of Complete Systems of Demand Equations

Unit II: Applications in Microeconomics II

Production Analysis: Specification and Estimations of Production Function: Cobb-Douglas, CES and

Translog, Measurement of Multifactor Productivity

Unit IV: Applications in Macroeconomics

Demand for Money - Term Structure of Interest Rates - Phillips Curve - Exchange Rate and Purchasing Power Parity.

Unit V: Use of Econometrics Software

Uploading Raw Data - Summary Statistics - OLS Method: Model Specification, Estimation, Interpretation, Diagnostic Checks - Time Series Analysis: Unit Root Tests, Co-integration Analysis, Estimation of VAR Model - Panel Data Analysis

Readings

1. Pindyck, Robert S. and Daniel L. Rubinfeld (1997), Econometric Models and Economic Forecasts, 4th Edition, Irwin McGraw-Hill, New York
2. Ramanathan, Ramu (2001) Introductory Econometrics with Applications, 5th Edition, Cengage Learning India Pvt. Ltd., New Delhi
3. Thomas, R.L (1993). Introductory Econometrics: Theory and Applications, Longman, London
4. Patterson, Kerry (2001) - An Introduction to Applied Econometrics - A Time Series Approach, MacMillan Press Ltd., London

FINANCE ELECTIVES

ECONS04 - ECONOMICS OF MICROFINANCE

Unit I: Development of Microfinance products

Concept of Micro Finance - Genesis and History of Micro Finance - Contributions of Md. Yunus - Growth of Micro Finance in India - Micro Finance for poverty reduction in India - Micro Finance and the Millennium Development Goals - Pros and cons of Micro Credit Programme - Micro Finance Models in India - Impact of Micro Finance on Poverty eradication

Unit II: Microfinance an Instrument for Women Empowerment

Concept of empowerment of women- Components of women empowerment - Constraints faced by women for empowerment - Role of Micro Finance in economic development of women - Empowerment of women and Micro - business.

Unit III: An Assessment of Innovative Initiatives of NGOs in Entrepreneurship

Role and strategy of NGO - Functions of NGOs - NGOs and their role in poverty alleviation - NGOs in Entrepreneurship Development - Strengths and weakness of NGOs - Women and Micro Finance - Gender issue in micro finance - Rationale behind SHG and need to institutionalization - Genesis of rural credit system - Genesis of SHG.

Unit IV: Self Help Group and Rural Development Approach

The Concept, Why Self Help Groups? - Objectives - Functions of SHGs Promotion- Formation of SHG - Constraints of Women SHGs - What are the Important Steps for Sustainable Development of SHGs? What are the Skills needed for Managing Successful SHGs? - Linking of Self Help Group to Bank, Stepwise process of Operating of SHG - SHG Federation.

Unit V: Progress under the SHG bank -Linkage Program

SHG - Banking programme an introduction - NABARD as implementing agency in India and the strategy adopted - The demand side of Micro - finance - the supply side of micro finance - the MFI

or the Non Government Micro finance sector (NGMS) - Achievements in SHGs through SHG - banking- Impact of the formal banking set - up - Why could SHG - banking achieve such good results - Risk in SHG - Banking as implemented by the formal banking system

Readings

1. Daniel Lazar (2008), Micro Finance and poverty eradication, New Century Publications, New Delhi.
2. Desai Vasant. (2005) Rural Development in India , Himalaya Publishing House
3. Rais Ahmad (2009) Micro Finance and Women Empowerment, Mittal Publication New Delhi.
4. Vijayakumar . A, (2009) Banking , Micro Finance and Self Help Group in India, New Century Publications, New Delhi
5. Praveen Sharma, Indian Economic Association, Anil Kumar Thakur (2009), Micro-Credit and Rural Development
6. Cernea, Michael M.(1988), NGOs and Local Development, The World Bank, Washington, Discussion Paper.
7. Farrington, John, Leiws, D.J.,(1993), NGOs and the State in Asia, Routledge, London.
8. Periyar E V Ramasami, *Women Enslaved*, Critical Quest, ISBN: 978-81-89524-49-4, pp48, Rs 35/-

FINANCE ELECTIVES

ECONS05 - FINANCIAL ECONOMICS

Module 1: Expected Utility Theory and Choice under Uncertainty

The Economic properties of utility functions - concept & measures to model attitudes towards risk - Expected utility maximization - Risk aversion - First order stochastic dominance - Second order stochastic dominance

Module 2: Risk and Asset Pricing Models

Trade-off between risk and return - Mean Variance analysis - Efficient frontier of risky assets - Security market line - Standard CAPM - Empirical evidence on CAPM - Arbitrage Pricing Theory

Module 3: Term Structure and Bond Markets

Drawing the term structure - Methods of computing the yield to maturity - Market expectations theory of the term structure - Yield curve - Liquidity preference theory of the term structure - Market segmentations theory of the term structure - Bond Prices - Spot Prices - Discount factors

Module 4: Efficiency in Financial Markets

Introduction to Efficient Market Hypothesis (EMH) - Implications of EMH for financial markets - Empirical Models of EMH

Module 5: Derivatives and Hedging

Introduction to Forward, future and option contracts - Pricing futures and options - Black-Scholes model - Introduction to Hedging - Optimal hedging.

Readings

1. E. J. Elton and M.J. Gruber, Modern Portfolio Theory and Investment Analysis, Wiley, London.
2. J. C. Hull (2004), Futures and Option Markets, Prentice-Hall, New Jersey
3. Z. Bodie, A. Kane and A.J. Marcus (2004), Investments, Irwin McGraw - Hill, London
4. D.G. Luenberger (1998), Investment Science, Oxford University Press, New York.
5. J. Cvitanic and Zapatero F (2004), Introduction to Economics and Mathematics of Financial Markets, MIT Press, Cambridge, London.
6. R. A. Haugen (2001), Modern Investment Theory, Fifth Edition, Prentice Hall, New Jersey.

FINANCE ELECTIVES

ECONS06 - ECONOMICS OF MONEY AND BANKING

Unit I: Introduction to the Course and Basic Concepts

Introduction - Concept of money and its functions - Basic banking and general principles of bank management - Role of money and banking for the economy - Historical aspect of money and banking in India

Unit II: Demand for and Supply of Money

Demand for Money: Quantity theory of money - Keynesian analysis - Monetarist approach - Empirical evidences Supply of Money: Central bank and money supply - Creation of money and role of commercial banks

Unit III: Money and Interest Rates

Money and Interest Rate: Understanding interest rates behavior and term structure of interest rate - Factors influencing changes in equilibrium interest rate and liquidity preference framework - Role of money and interest rates on real economic activity and inflation Applications: Changes in income, money and prices on equilibrium interest rates

Unit IV: RBI and Conduct of Monetary Policy in India

Reserve Bank of India and its monetary policy: Overall monetary policy framework - instruments, targets and objectives - transmission mechanism - operating procedure, liquidity management and OMOs - challenges in the conduct of monetary policy

Unit V: Banking Regulation and Supervision in India

Banking supervision and regulation in India - CAMELS - Management of credit risk, market risk and operational risk - Basel prudential norms - Derivatives and other off-balance sheet activities - Lessons from recent financial crisis for banking regulation and operations

Readings

1. Mishkin, Frederic (2008): The Economics of Money, Banking, and Financial Markets, 7th edition, Pearson Addition Wesley, New York
1. Pierce D.G. and P.J. Tysome (1985): Monetary Economics: Theories, Evidence and Policy, 2nd Edition, Butterworths, London
2. Rangarajan, C. and B. H. Dholakia (1979): Principles of Macroeconomics, Tata-McGraw Hill Publishing Company Limited, New Delhi
3. Rangarajan, C. (2009): India: Monetary Policy, Financial Stability and Other Essays, Academic Foundation, New Delhi
4. Reddy, Y.V. (2000): Monetary and Financial Sector Reforms in India: A Central Banker's Perspective, UBSPD, New Delhi.
2. Reserve Bank of India: Report on Currency and Finance, various issues.

FINANCE ELECTIVES

ECONS07 - INDIAN FINANCIAL INSTITUTIONS AND MARKETS

Module 1: Introduction to Money

Simple exposition to money demand and money supply - RBI and measures of money supply - commercial banks and credit creation - RBI control on money supply - time value of money and interest rates.

Module 2: Introduction to Indian Financial System

Overview of Indian Financial System - functions of financial system - players - structure and growth - regulatory bodies.

Module 3: Money and Capital Markets

Indian money market - instruments - institutions - functioning of Indian money market - changes in the regulatory framework - growth - stocks and bonds - primary and secondary markets - process of initial public offer - offer of Government bonds - stock market functioning - stock indices - evaluation of stocks and bonds - understanding stock market information.

Module 4: Foreign Exchange Market

Exchange rate - types - determination of exchange rate - nature of forex market - nature of forex inflow and outflow - examples of ECBs and NREs - RBI and exchange rate management.

Module 5: Financial Derivatives

Need for derivatives - types of derivatives - example of how stock index derivatives could be used to hedge risks in stock market investment - evaluation of financial derivatives.

Readings:

1. Bhole, L.M. (2002), Indian Financial Institutions and Markets, Tata McGraw Hill Ltd, New Delhi.
2. David S. Kidwell, David W. Blackwell, David A. Whidbee, Richard L. Peterson, (2005) Financial Institutions, Markets, and Money, 9th Edition, Wiley Publication, New York.
3. Khan M.F., (2006), Indian Financial Institutions, Tata McGraw Hill Ltd, New Delhi.
4. Pathak, Bharathi V., (2007), The Indian Financial System: Markets, Institutions and Services, 2/e, Pearson Education India, New Delhi.

OTHERS

ECONS08 - DEMOGRAPHY

Unit I: Introduction to Demography

Meaning and scope of demography; Components of population growth and their inter-dependence; Theories of population – Malthus; Optimum theory of population; Theory of demographic transition

Unit II: Population Change: Determinants and Techniques of Analysis

Determinants - Fertility, Nuptiality, Migration and Mortality; Techniques - Crude birth and death rates, age specific birth and death rates, standardized birth and death rates; Fertility - Total fertility rate, gross reproduction rates, net reproduction rate; Factors affecting fertility – Socio-economic factors, economic status, health, education, nutrition, caste, religion, race, region, rural-urban and status of husband and wife; Nuptiality – Concept and analysis of marital status, single mean age at marriage; Mortality – Mortality at birth and infant mortality rate; Sex and age pattern of mortality; Factors for decline in mortality in recent past; Life table – Construction and uses; Migration - Net migration rate

Unit III: Population: Structure and projection

Population trends in the twentieth century; Population explosion – Threatened or real, distant or imminent; International aspects of population growth and distribution; Pattern of age and sex structure in more developed and less developed countries; Determinants of age and sex structure; Demographic effects of sex and age structure, economic and social implications, Demographic Dividend and Age pyramids; concept of stationary, stable and quasi - stationary population; Projections – Uses and techniques - Cohort Component Projection technique.

Unit IV: Source of Demographic data in India

Study of census in India– History of Census in India; Nature of information collected in 2001 and 2011 census in India; National Family Health Survey (NFHS) I, II and III and District Level Household Survey(DLHS); their relative merits and demerits.

Unit V: Population and Development with reference to India

Population policy in India – the shift in policy from population control to family welfare, to women empowerment; Population, economy and environment linkages - population and human development issues - Population and Millennium Development Goals (MDG); education and fertility, Migration and urbanization - trends, pattern and consequences; population aging - Causes, trends, issues and consequences; Skewed sex ratio in India.

Readings

1. Jacob S. Siegel and David A. Swanson (2004): The Methods and the materials of Demography, Second Edition, Elsevier Science. USA.
2. John weeks (2005): Population: An introduction to concepts and issues, Wordsworth Learning. Singapore 9th edition.
3. Bogue, D., (1969): Principles of Demography, John Wiley & Sons, New York.
4. Pathak, K.B. and F.Ram, (1998) Techniques of Demographic Analysis, Mumbai: Himalaya Publishing House.
5. Preston, Samuel H., Heuveline, Patrick, and Guillot, Michel (2001) Demography: Measuring and Modeling Population Processes. Oxford: Blackwell Publishers.
6. Bose, A. (1996), India's Basic Demographic Statistics, B.R. Publishing, Delhi.
7. Agarwal, S.N. (1985) India's Population Problem, Tata McGraw Hill, Mumbai.

OTHERS

ECONS09 - INDUSTRIAL ECONOMICS

Unit I: Industries and Development

Basic concepts of industrial economics- rationale of industrialization, evolution of industries in India, need, importance and role of industries in economic development, industry and agriculture sector linkages, industrial development-experience of developed and developing countries.

Unit II: Industrial Entrepreneurs

Concepts and definition of industrial entrepreneurs, entrepreneurial motivation, types, characteristics and functions of industrial entrepreneurs, role of entrepreneurs in economic development, role of women entrepreneurs in the industrial development, rural entrepreneurship development in India, institutional finance to entrepreneurs development, problems and remedies of industrial entrepreneurs.

Unit III: Location and Dispersion

The general determinants of industrial location- technical factors, economic and infrastructural factors, other factors, theories of industrial location-the central place theory, Renner's theory, Rawstron's principles, Weber's theory, the market area theory of Tord Palander, Central place theory of Losch-trend of industrial location in India.

Unit IV: Industrial Finance

Importance of finance to industrial development, Owned, and external funds for industrial development; Role, and types of institutional finance- functions of IFCI, IDBI, SIDBI, MSFC, ICICI, SFCs, SIDC, commercial banks, etc in industrial development, trend and problems of industrial finance in India.

Unit V: Industrial Development and Problems

Recent trends in industrial growth in India- growth of major industries- Cotton textiles, Iron and Steel; Jute; Sugar; Coal; Cement and engineering goods; Development and problems of small-scale industries in India, Role of public and private sectors in India. Effects of liberalization on industrial development in India, role of MNCs in industrial development, Sick industries and remedies, Industrial policy of India.

Readings

1. Ahluwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
2. Brahmananda, P.R. and V.R. Panchamukhi (Eds) (1987), The Development Process of the Indian Economy, Himalaya Publications
3. Barthwal, R.R. (1992), Industrial Economics: An Introductory Text Book, Wiley Eastern Ltd. New Delhi.
4. Cherunilam, F. (1994), Industrial Economics : Indian Perspective, (3rd Edition), Himalaya Publishing House, Mumbai
5. Kuchhal, S.C. (1980), Industrial Economy of India (5th Edition), Chaitanya Publishing House, Allahabad.
6. Reserve Bank of India, Report on Currency and Finance (Annual). And Government of India, Economic Survey (Annual).

OTHERS

ECONS10 - ECONOMICS OF EDUCATION

Module 1: Theory of Human Capital Formation

Concept of human capital forms of human capital - human capital and economics growth - measures of human capital - limitations of human capital approach

Module 2: Education and Human Capital Formation

Education as an economic good. consumption and investment aspects of education- private and social benefit of education - contribution of education to economic development - the methods of schults and education and human values.

Module 3: Demand For Education

Education and productivity - private and social demand for education- investment in education - rate of return analysis - private and social rates of return - limitations of rate of return approach - rate of return and earnings distribution - equity aspects.

Module 4: Supply of Educational Facilities

Components of educational supply - private and public facilities - pattern of organization and operation of education industry - organization and operation of different limitations of production function analysis.

Module 5: Financing of Education

Private resources in education and their limitations - rationale behind public involvement in education - forms of public financing subsidization, secondary, and post - secondary education in india - trends and issues - The New Education Policy.

Module 6: Education and Manpower Planning

Importance of educational and manpower planning in development and less - development countries - the operation of markets for unskilled and skilled labour - approaches to educational and manpower planning cost benefit approach - O.E.C,D. approach - M.R.P. approach - educational planning in E.D.C's - educational planning in India.

Module 7: Migration and On-the-Job Training

Migration and human capital formation - labour market and migration in India - on-the-job training and skill formation.

Readings

1. Mark Blaug, (2000) Economics of Education
2. K.Venkatasubramanian, (1998) Education and Economic Development of Tn.
3. G.S.Parnes, Planning Education for Economic Social Development.
4. Cohn, (2005) Economics of Education.
5. Tilak (2006), Economics of Inequality in Education
6. Sudha V.Rao (2003), Education and Rural Development
7. Theodore W. Schultz (1999) , Investment in Human Capital
8. Nalla Gounden A.M.(1998), Education And Economic Development