

**SEMESTER-I, ECONOMICS (H) - CC-I**  
**: INTRODUCTORY MICROECONOMICS**  
**Time - 3hrs F.M.: 100 [ 80 (End sem) +20 (Int) ] Credit- 6**

**Course Description**

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

**Module I: Exploring the subject matter of Economics**

Why study economics? Scope and method 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; Graphs in Economics.

**Module II: Supply and Demand: How Markets Work, Markets 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; Equilibrium between supply and demand; elasticity of demand and determinants; computing price elasticity of demand; income and cross elasticity of demand; consumer surplus; producer surplus; market efficiency and market failure.

**Module III: The Households**

The consumption decision - budget constraint, consumption and income/price changes, properties of indifference curves; Equilibrium, income effect, substitution effect and price effect; Derivation of demand curve; Three applicants - Demand for Giffen goods, wages and labour supply, interest rate and household saving, Superiority of indifference curve analysis over traditional utility analysis.

**Module IV: The Firm and Market Structures**

Short run costs and output decisions; costs and output in the long run; Cost curves and their shapes in the short-run and in the long-run; Economics and diseconomies of scale; Perfect competition and pure competition; Equilibrium of farm and industry under perfect competition both in the short-run and in the long-run; pricing under monopoly; monopoly power; monopoly control.

**Module V:** Equilibrium in the labour market; The supply of labour- the trade-off between work & leisure. Land as a factor of production; Ricardian theory of rent; modern theory of rent, Linkages among factors of production.

**Readings**

1. N. Gregory Mankiw (2012): *Principles of Economics*, 6<sup>th</sup> edition, Cengage Learning India Private Limited, New Delhi
2. William A McEachern and Simrit Kaur (2012): *Micro Econ: A South-Asian Perspective*, Cengage Learning India Private Limited, New Delhi.
3. Karl E. Case and Ray C. Fair (2007): *Principles of Economics*, 8<sup>th</sup> Edition, Pearson Education Inc.
4. Joseph E. Stiglitz and Carl E. Walsh (2007): *Economics*, 4<sup>th</sup> Edition, W.W. Norton & Company, Inc., New York.

**SEMESTER-I, ECONOMICS(H)-CC-II**  
**: MATHEMATICAL METHODS FOR ECONOMICS I**  
**Time - 3hrs F.M.: 100 [ 80 (End sem) +20 (Int) ] Credit- 6**

**Course Description**

This is the first of a compulsory two-course sequence. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.

**Module I: Preliminaries**

Sets and Set Operations, relations; functions and their properties. Number systems.

**Module II: Functions of real variable**

Types of functions- constant, polynomial, rational, exponential, logarithmic; Graphs and graphs of functions; Limit and continuity of functions; Limit theorems

**Module III: Derivative of a function**

Rate of change and derivative; Derivative and slope of a curve; Continuity and differentiability of a function; Rules of differentiation for a function of one variable; Application- Relationship between total, average and marginal functions

**Module IV: differentiation and Integration:**

Partial differentiation techniques; Geometric interpretation of partial derivatives; Partial derivatives in Economics; Elasticity of a function - demand and cost elasticity, cross and partial elasticity. Integration: indefinite integrals, rules, integration by substitution by parts and partial functions. Economic application of integrals, producer surplus and consumer surplus.

**Module V: Matrices and Determinants**

Matrices: concept, types, matrix algebra, transpose, inverse, rank; Determinants: concept, properties, solving problems using properties of determinants, solution to a system of equations - Cramer's rule and matrix inversion method.

**Readings:**

1. K. Sydsaeter and P. J. Hammond (2002): *Mathematics for Economic Analysis*. Pearson Educational Asia
2. A. C. Chiang and K. Wainwright (2005): *Fundamental Methods of Mathematical Economics*, McGraw Hill International Edition.
3. T. Yamane (2012): *Mathematics for Economists*, Prentice-Hall of India

**SEMESTER-I/III, ECONOMICS-GE-I  
: Money Banking**

**Time - 3hrs F.M.:100 [80(Endsem)+20(Int)] Credit- 6**

Unit- I: Concept and function of money, Alternative measures of money supply-their different components (  $M_1, M_2, M_3, M_4$ ), Value of money-Quantity theory-Cash transaction, Cash balance, Keynesian Theory and Friedman's approaches

Unit-II: Inflation, types of inflation, Theories of Inflation Effects of Inflation, Deflation and Stagflation. Phillips Curve, Measures to control inflation, Inflation and unemployment

Unit-III: Financial Intermediaries: Concept & functions of banking and non-banking financial Institutions, Role and functions of Commercial bank, Credit Creation, Balance Sheet, Investment Policy of Commercial Banks, Money market-developed and underdeveloped: Indian Money Market

Unit-IV : Role and Functions of Central Bank, Credit Control Instruments, Objectives of monetary Policy, Limitations of monetary policy, Monetary policy of Reserve Bank of India.

References:

- 1.L.V.Chandler and S.M.Goldfed- The Economics of Money and Banking,7<sup>th</sup> Edition,1977
- 2.G. Crowther- An Outline of money
3. R.G.Sayers- Modern Banking, 1967 Oxford
4. Reserve Bank of India: Functions and Working,1970
5. S.B.Gupta- Monetary Economics, Chand Publication
6. S.K.Basu-a review of Current Banking Theory and Practices(Revised Macmillan)-1994
- 7.M. L. Seth- Money Banking & International Trade
8. R.R. Paul- Money Banking & International Trade, Kalyani Publishers, 2008
9. G. Krishnan Kutty- Money Banking, Concept Publishing Company, New Delhi, 1979

**SEM.-I,ECO.-DSC-2/3-I IS SAME AS SEM-I, ECO.-CC-I**

**SEMESTER-II, ECONOMICS(H)-CC-III  
: INTRODUCTORY MACROECONOMICS**

**Time - 3hrs F.M.: 100 [ 80 (End sem) +20 (Int) ] Credit- 6**

**Course Description**

This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money and inflation.

**Module I: Basic Concepts**

Macro vs. Micro Economics; Why Study Macroeconomics? Limitations of Macroeconomics ; Stock and Flow variables, Equilibrium and Disequilibrium, Partial and General Equilibrium Statics - Comparative Statics and Dynamics ; National Income Concepts - GDP, GNP, NDP and NNP at market price and factor cost; Personal Income and Disposable personal Income; Real and Nominal GDP

**Module II: Measurement of Macroeconomic Variables**

Output, Income and Expenditure Approaches ; Difficulties of Estimating National Income; National Income Identities in a simple 2- sector economy and with government and foreign trade sectors; Circular Flows of Income in 2, 3 and 4-sector; economies; National Income and Economic Welfare ; Green Accounting.

**Module III: Money**

Evolution and Functions of Money, Quantity Theory of Money - Cash Transactions, Cash Balances and Keynesian Approaches, Value of Money and Index Number of Prices

**Module IV: Inflation, Deflation, Depression and Stagflation**

Inflation - Meaning, Causes, Costs and Anti-Inflationary Measures; Classical, Keynesian, Monetarist and Modern Theories of Inflation, Deflation- Meaning, Causes, Costs and Anti-Deflationary Measurers, Depression and Stagflation; Inflation vs. Deflation

**Module V: Determination of National Income**

The Classical Approach - Say's Law, Theory of Determination of Income and Employment with and without saving and Investment; Basics of Aggregate Demand and Aggregate Supply and Consumption- Saving - Investment Functions, The Keynesian Approach - Basics of Aggregate Demand and Aggregate Supply and Consumption, Saving, Investment Functions; The Principle of Effective Demand; Income Determination in a Simple 2-Sector Model; Changes in Aggregate Demand and Income.

**Readings:**

1. N. Gregory Mankiw (2010): *Macroeconomics*, 7th edition, Cengage Learning India Private Limited, New Delhi
2. Richard T. Froyen (2005): *Macroeconomics*, 2<sup>nd</sup> Edition, Pearson Education Asia, New Delhi.
3. Errol D'Souza (2009): *Macroeconomics*, Pearson Education Asia, New Delhi.
4. Shapiro
5. D N Dwivedi

## SEMESTER-II, ECONOMICS(H)-CC-IV

### : MATHEMATICAL METHODS FOR ECONOMICS II

**Time - 3hrs F.M.: 100 [ 80 (End sem) +20 (Int) ] Credit- 6**

#### **Course Description**

This course is the second part of a compulsory two-course sequence. This part is to be taught in Semester II following the first part in Semester I. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this Syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.

#### **Module I: Linear models:**

Input- Output Model: Basic concepts and structure of Leontief's open and static Input-Output model; solution for equilibrium output in a three industry model; The closed model. Linear programming problem; Graphic solution of Linear programming problem. Game theory-the Payoff matrix of a game; Saddle solution; mixed strategies.

#### **Module II :Second and higher order derivatives:**

Technique of higher order differentiation; Interpretation of second derivative; Second order derivative and curvature of a function; Concavity and convexity of functions; Points of inflection

#### **Module III: Differentials and total derivatives:**

Differentials and derivatives; Total differentials; Rules of differentials; Total derivatives; Derivatives of implicit functions

#### **Module IV: Single and multivariable optimisation:**

Optimum values and extreme values; Relative maximum and minimum; Necessary versus sufficient conditions - First and Second derivative tests; Economic applications thereof, First and second order condition for extremum of multivariable functions; Convex functions and convex sets

#### **Module V: Optimisation with Equality Constraints:**

Effects of a constraint; Finding stationary value - Lagrange-Multiplier method(Two variable single constraint case only): First and second order condition;The Bordered Hessian determinant.

#### **Readings:**

1. K. Sydsaeter and P. J. Hammond (2002): *Mathematics for Economic Analysis*. Pearson Educational Asia
2. A. C. Chiang and K. Wainwright (2005): *Fundamental Methods of Mathematical Economics*, McGraw Hill International Edition.
3. T. Yamane (2012): *Mathematics for Economists*, Prentice-Hall of India

**SEMESTER-II/IV, ECONOMICS-GE-II  
: Indian Economy**

**Time - 3hrs F.M.: 100 [ 80 (End sem) +20 (Int) ] Credit- 6**

**Course Description**

Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.

**Module I: Introduction to Indian Economy**

British Rule: exploitation and under development in India; features of Indian economy - natural resources, infrastructure, population;

**Module II: Population and Human Development**

Demographic trends and issues; education; health and malnutrition

**Module III: National Income in India**

National income: trends, sectoral composition and Sectoral Contribution to national income.

**Module IV: Economic Planning in India**

Economic planning: Planning Commission and its functions, Planning exercises in India, Objectives, Strategies and achievements and failure. NitiAyoga.

**Module V: Current Challenges**

Poverty: definition and estimate, poverty line, poverty alleviation programs; Inequality: income and regional inequality - causes and corrective measures; Unemployment: concepts, measurement, types, causes and remedies; Environmental challenges: Land, water and air.

**Readings:**

1. U. Kapila (2010): *Indian economy since Independence*. Academic Foundation, New Delhi
2. S. K. Misra and V. K. Puri (Latest Year): *Indian Economy – Its Development Experience*, Himalaya Publishing House, Mumbai
3. S. Chakraborty (): *Development Planning: The Indian Experience*. Clarendon Press.
4. R. Dutt and K. P. M, Sundharam(Latest Year): *Indian Economy*, S. Chand & Company Ltd., New Delhi.
5. A. Panagariya (2008): *India: the Emerging Giant*, Oxford University Press, New York
6. S. Acharya and R. Mohan (Eds.) (2010): *India's Economy: Performance and Challenges*, Oxford University Press, New Delhi.
7. I. J. Ahluwalia and I. M. D. Little(Eds.) (1998): *India's Economic Reforms and Development: Essays for Manmohan Singh*, Oxford University Press, New Delhi.

## SEMESTER-II, ECONOMICS-DSC-2/3-II

### : MICROECONOMICS I

**Time - 3hrs F.M.: 100 [ 80 (End sem) +20 (Int) ] Credit- 6**

#### **Course Description**

The course is designed to provide a sound training in microeconomic theory to formally analyze the behaviour of individual agents. Since students are already familiar with the quantitative techniques in the previous semesters, mathematical tools are used to facilitate understanding of the basic concepts; this course looks at the behaviour of the consumer and the producer and also covers the behaviour of a competitive firm.

#### **Course Outline**

##### **Module I: Consumer Theory I**

Economic Models: Theoretical Model, Verification of Economic Model, General Feature of Economic Model, Development of Economic Theory of Value, Modern Developments; Consumer Preferences-indifference curves, case of perfect substitutes, complements, neutrals. The marginal rate of substitution, marginal utility and MRR, Estimating utility functions; The Many-Good case; Utility Maximization and Choice: The Two-Good Case (Graphical Analysis), The n-Good Case, Indirect Utility Function; Optimal choice and consumer demand; implications of MRS condition; Income offer curve and Engel curve; ordinary goods and Giffen goods; the offer curve and the demand curve.

##### **Module II: Consumer Theory II**

Slutsky Equation-Income and Substitution Effects: Demand Functions, Changes in Income, Changes in a Good's Price, The Individual's Demand Curve, Compensated (Hicksian) Demand Curves and Functions, Demand Elasticities, Consumer Surplus; Demand Relationships among Goods: The Two-Good Case, Substitutes and Complements, Net (Hicksian) Substitutes and Complements, Substitutability with Many Goods, Composite Commodities; Interpretations of consumer's surplus and producer's surplus; Calculation of consumers surplus and producer's surplus; Calculating gains and losses.

##### **Module III: Production Theory**

Marginal Productivity, Isoquant Maps and the Rate of Technical Substitution, Production with One Variable Input (labour) and with Two-Variable Inputs, Returns to Scale, Four Simple Production Functions (Linear, Fixed Proportions, Cobb-Douglas, CES).

##### **Module IV: Cost Functions**

Definition of Costs, Cost Functions and its Properties, Shift in Cost Curves, Cost in the Short-Run and Long-Run, Long-Run versus Short-Run Cost Curves, Production with Two Outputs - Economies of Scope

##### **Module V: Profit Maximization**

The Nature and Behaviour of Firms, Profit Maximization, Marginal Revenue, Short-Run Supply by Price-Taking Firm, Profit Functions and its Properties, Profit Maximization and Input Demand - Single-Input Case and Two-Input Case.

#### **Readings:**

1. C. Snyder and W. Nicholson (2012): Microeconomic Theory: Basic Principles and Extensions, 11<sup>th</sup> Edition, Cengage Learning, Delhi, India.
2. R. S. Pindyck, D. N. Rubinfeld and P. L. Meheta (2009): Microeconomics, 7<sup>th</sup> Edition, Pearson, New Delhi.
3. H. R. Varian (2010): Intermediate Microeconomics: A Modern Approach, 8<sup>th</sup> Edition, W.W. Norton and Company/Affiliated East-West Press (India). The workbook by Varian and Bergstrom may be used for problems.

**SEMESTER-III ECONOMICS-CC-V  
: MICROECONOMICS I**

**Time- 3 hrs**

**F.M.-80+20**

**Credit- 6**

**Course Description**

The course is designed to provide a sound training in microeconomic theory to formally analyze the behaviour of individual agents. Since students are already familiar with the quantitative techniques in the previous semesters, mathematical tools are used to facilitate understanding of the basic concepts; this course looks at the behaviour of the consumer and the producer and also covers the behaviour of a competitive firm.

**Course Outline**

**Module I: Consumer Theory I**

Economic Models: Theoretical Model, Verification of Economic Model, General Feature of Economic Model, Development of Economic Theory of Value, Modern Developments; Consumer Preferences-indifference curves, case of perfect substitutes, complements, neutrals. The marginal rate of substitution, marginal utility and MRR, Estimating utility functions; The Many-Good case; Utility Maximization and Choice: The Two-Good Case (Graphical Analysis), The n-Good Case, Indirect Utility Function; Optimal choice and consumer demand; implications of MRS condition; Income offer curve and Engel curve; ordinary goods and Giffen goods; the offer curve and the demand curve.

**Module II: Consumer Theory II**

Slutsky Equation-Income and Substitution Effects: Demand Functions, Changes in Income, Changes in a Good's Price, The Individual's Demand Curve, Compensated (Hicksian) Demand Curves and Functions, Demand Elasticities, Consumer Surplus; Demand Relationships among Goods: The Two-Good Case, Substitutes and Complements, Net (Hicksian) Substitutes and Complements, Substitutability with Many Goods, Composite Commodities; Interpretations of consumer's surplus and producer's surplus; Calculation of consumer's surplus and producer's surplus; Calculating gains and losses.

**Module III: Production Theory**

Marginal Productivity, Isoquant Maps and the Rate of Technical Substitution, Production with One Variable Input (labour) and with Two-Variable Inputs, Returns to Scale, Four Simple Production Functions (Linear, Fixed Proportions, Cobb-Douglas, CES).

**Module IV: Cost Functions**

Definition of Costs, Cost Functions and its Properties, Shift in Cost Curves, Cost in the Short-Run and Long-Run, Long-Run versus Short-Run Cost Curves, Production with Two Outputs - Economies of Scope

**Module V: Profit Maximization**

The Nature and Behaviour of Firms, Profit Maximization, Marginal Revenue, Short-Run Supply by Price-Taking Firm, Profit Functions and its Properties, Profit Maximization and Input Demand - Single-Input Case and Two-Input Case.

**Readings:**

1. C. Snyder and W. Nicholson (2012): Microeconomic Theory: Basic Principles and Extensions, 11<sup>th</sup> Edition, Cengage Learning, Delhi, India.
2. R. S. Pindyck, D. N. Rubinfeld and P. L. Meheta (2009): Microeconomics, 7<sup>th</sup> Edition, Pearson, New Delhi.



3. H. R. Varian (2010): Intermediate Microeconomics: A Modern Approach, 8<sup>th</sup> Edition, W.W. Norton and Company/Affiliated East-West Press (India). The workbook by Varian and Bergstrom may be used for problems.

### **SEMESTER-III ECONOMICS-CC-VI**

#### **Core Economics Course 6: MACROECONOMICS I**

**Time- 3 hrs**

**F.M.-80+20**

**Credit- 6**

#### **Course Description**

This course introduces the students to formal modelling of a macro-economy in terms of analytical tools. It discusses various alternative theories of output and employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context. It also introduces the students to various theoretical issues related to an open economy.

#### **Module I: Consumption Function**

Consumption - Income Relationship, Propensities to Consume and the Fundamental Psychological Law of Consumption; Implications of Keynesian Consumption Function; Factors Influencing Consumption Function; Measures to Raise Consumption Function; Absolute, Relative, Permanent and Life - Cycle Hypotheses

#### **Module II: Investment Function**

Autonomous and Induced Investment, Residential Investment and Inventory Investment, Determinants of Business Fixed Investment, Decision to Invest and MEC, Accelerator and MEI Theories of Investment, Multiplier analysis.

#### **Module III: Demand for and Supply of Money**

Demand for Money - Classical, Neoclassical and Keynesian Approaches, The Keynesian Liquidity Trap and its Implications, Supply of Money - Classical and Keynesian Approaches, The Theory of Money Supply Determination and Money Multiplier, Measures of Money Supply in India

#### **Module IV: Aggregate Demand and Aggregate Supply**

Derivation of Aggregate Demand and Aggregate Supply Curves in the IS-LM Framework; Nature and Shape of IS and LM curves; Interaction of IS and LM curves and Determination of Employment, Output, Prices and Investment; Changes in IS and LM curves and their Implications for Equilibrium.

#### **Module V: Inflation, Unemployment and Expectations, and Trade Cycles**

Inflation - Unemployment Trade off and the Phillips Curve - Short run and Long run Analysis; Adaptive and Rational Expectations; The Policy Ineffectiveness Debate; Meaning and Characteristics of Trade Cycles; Hawtrey's Monetary Theory, Hayek's Over-investment Theory and Keynes' views on Trade Cycles

#### **Readings:**

1. N. Gregory Mankiw (2010): *Macroeconomics*, 7th edition, Cengage Learning India Private Limited, New Delhi
2. Richard T. Froyen (2005): *Macroeconomics*, 2<sup>nd</sup> Edition, Pearson Education Asia, New Delhi.
3. Errol D'Souza (2009): *Macroeconomics*, Pearson Education Asia, New Delhi.

### **SEMESTER-III ECONOMICS-CC-VII**

**Core Economics Course 7: STATISTICAL METHODS FOR ECONOMICS**  
**Time- 3 hrs** **F.M.-80+20** **Credit- 6**

#### **Course Description**

This is a course on statistical methods for economics. It begins with some basic concepts and terminology that are fundamental to statistical analysis and inference. It then develops the notion of probability, followed by probability distributions of discrete and continuous random variables and of joint distributions. This is followed by a discussion on sampling techniques used to collect survey data. The course introduces the notion of sampling distributions that act as a bridge between probability theory and statistical inference. The semester concludes with some topics in statistical inference that include point and interval estimation.

#### **Module I: Data Collection and measures of central tendency and dispersion**

Basic concepts: population and sample, parameter and statistic; Data Collection: primary and secondary data, methods of collection of primary data; Presentation of Data: frequency distribution; cumulative frequency; graphic and diagrammatic representation of data; Measures of Central Tendency: mean, median, mode, geometric mean, harmonic mean, their relative merits and demerits; Measures of Dispersion: absolute and relative - range, mean deviation, standard deviation, coefficient of variation, quartile deviation, their merits and demerits; Measures of skewness and kurtosis.

#### **Module II: Correlation Analysis**

Correlation: scatter diagram, sample correlation coefficient - Karl Pearson's correlation coefficient and its properties, probable error of correlation coefficient, Spearman's rank correlation coefficient, partial and multiple correlation.

#### **Module III: Regression Analysis**

Two variable linear regression analysis - estimation of regression lines (Least square method) and regression coefficients - their interpretation and properties, standard error of estimate

#### **Module IV: Time Series and Index Number**

Time Series: definition and components, measurement of trend- free hand method, methods of semi-average, moving average and method of least squares (equations of first and second degree only), measurement of seasonal component; Index Numbers: Concept, price relative, quantity relative and value relative; Laspey's and Fisher's index, family budget method, problems in construction and limitations of index numbers, test for ideal index number.

#### **Module V: Probability theory**

Probability: Basic concepts, addition and multiplication rules, conditional probability; Random variables and their probability distribution; Mathematical

expectations; Theoretical Distribution: normal distribution - Properties and uses, problems using area under standard normal curve

**Recommended books:**

1. Jay L. Devore (): *Probability and Statistics for Engineering and the Sciences*, Cengage learning, 2010.
2. S. C. Gupta (): *Fundamentals of Statistics*, Himalaya Publishing House, Delhi
3. Murray R. Spiegel (): *Theory & Problems of Statistics*, Schaum's publishing Series.

**SEMESTER-IV ECONOMICS-CC-VIII**

**Core Economics Course 8: MICROECONOMICS II**

**Time- 3 hrs**

**F.M.-80+20**

**Credit- 6**

**Course Description**

This course is a sequel to Microeconomics I. The emphasis will be on giving conceptual clarity to the student coupled with the use of mathematical tools and reasoning. It covers Market, general equilibrium and welfare, imperfect markets and topics under information economics.

**Module I: The Partial Equilibrium Competitive Model**

Market Demand, Timing of the Supply Response, Pricing in the Very Short-Run, Short-Run Price Determination, Shifts in Supply and Demand Curves - a Graphical Analysis, Mathematical Model of Market Equilibrium, Long-Run Analysis: Long-Run Equilibrium-Constant Cost Case, Shape of the Long-Run Supply Curve, Long-Run Elasticity of Supply, Comparative Statics An analysis of Long-Run Equilibrium, Producer Surplus in the Long-Run, Economic Efficiency and Welfare Analysis, Meaning of zero profits; Economic rent.

**Module II: General Equilibrium and Welfare**

Perfectly Competitive Price System, A Graphical Model of General Equilibrium with Two Goods, Comparative Statics Analysis, The Edgeworth Box: Pareto Efficient Allocations; Existence of equilibrium and efficiency; The welfare theorems and their implications.

**Module III: Monopoly**

Barriers to Entry, Profit Maximization and Output Choice, Monopoly and resource Allocation, Monopoly, Product Quality and Durability, Price Discrimination, Second Degree Price Discrimination through Price Schedules, Regulation of Monopoly, Dynamic Views of Monopoly.

**Module IV: Imperfect Competition**

Short-Run Decisions: Pricing and Output, Bertrand Model, Cournot Model, Capacity Constraints, Product Differentiation, Tacit Collusion, Longer-Run Decisions: Investment, Entry and Exit, Strategic Entry Deterrence, Signalling, How many firms Enter? Innovation. Kinked-Demand curve analysis of oligopoly.

## **Module V: Labour Markets**

Allocation of Time, A mathematical Analysis of Labour Supply, Market Supply Curve for Labour, Labour Market equilibrium, Wage variation, Monopsony in the Labour Market, Labour Union

### Readings:

1. C. Snyder and W. Nicholson (2012): Microeconomic Theory: Basic Principles and Extensions, 11<sup>th</sup> Edition, Cengage Learning, Delhi, India.
2. R. S. Pindyck, D. N. Rubinfeld and P. L. Meheta (2009): Microeconomics, 7<sup>th</sup> Edition, Pearson, New Delhi.
3. H. R. Varian (2010): Intermediate Microeconomics: A Modern Approach, 8<sup>th</sup> Edition, W.W. Norton and Company/Affiliated East-West Press (India). The workbook by Varian and Bergstrom may be used for problems.

## **SEMESTER-IV ECONOMICS-CC-IX**

### **Core Economics Course 9: MACROECONOMICS II**

**Time- 3 hrs**

**F.M.-80+20**

**Credit- 6**

### **Course Description**

This course is a sequel to Macroeconomics I. In this course, the students are introduced to the long run dynamic issues like growth and technical progress. It also provides the micro-foundations to the various aggregative concepts used in the previous course.

### **Module I: Financial Markets and Reforms**

Features of Financial Markets, Functions of Financial Markets, Banks and Financial Markets, Adverse Selection and Moral Hazard, Risk and Supply of Credit, The Determination of Banks Asset Portfolio, Financial Repression and Major Financial Sector Reforms in India, Lessons from the Global Financial Crisis and the Policy Response in India

### **Module II: Open Economy Macroeconomics**

Balance of payments- Concept, Equilibrium and Disequilibrium, Measures to Correct Disequilibrium, Determination of Foreign Exchange Rate- the PPP Theory and its Implications, Fixed vs. Flexible Exchange Rates, The Short-run open economy Model, the basic Mundell-Fleming Model. International Financial Markets

### **Module III: Modelling Economic Growth**

The Basic Harrod- Domar Model, Joan Robinson and the Golden Rule of Capital Accumulation, The Basic Solow Model, Theory of Endogenous Growth - the Rudimentary A-K Model

### **Module IV: Macroeconomic Policy**

The Goals of Macroeconomic Policy and of Policy Makers, The Budget and Automatic Fiscal Stabilisers, The Doctrine of Balanced Budget and Keynesian Objections; Concepts of Budget, Revenue and Fiscal Deficits, Fiscal Policy: Objectives and Limits to Discretionary Policy, The Crowding -Out Hypothesis and the Crowding - in Controversy Meaning, Scope and Objectives of Monetary Policy, Instruments of Monetary Policy, the Transmission Mechanism of Monetary Policy, Rules vs. Discretion in Monetary Policy, Implications of Targeting the Interest Rate, Limits to Monetary Policy

### **Module V: Schools of Macroeconomic Thought and the Fundamentals of Macroeconomic Theory and Policy**

Classics, Keynes, Monetarists, New Classical and New Keynesians: (i) Keynes vs. the Classics - Aggregate Demand and Aggregate Supply, Underemployment Equilibrium and Wage Price Flexibility, (ii) Monetarists and Friedman's Reformulation of Quantity Theory, Fiscal and Monetary Policy: Monetarists vs. Keynesians, (iii) The New Classical View of Macroeconomics and the Keynesian Countercritique, (iv) The New Keynesian Economics with reference to the Basic Features of Real Business Cycle Models, the Sticky Price Model.

#### **Readings:**

1. N. Gregory Mankiw (2010): *Macroeconomics*, 7th edition, Cengage Learning India Private Limited, New Delhi
2. Richard T. Froyen (2005): *Macroeconomics*, 2<sup>nd</sup> Edition, Pearson Education Asia, New Delhi.
3. Errol D'Souza (2009): *Macroeconomics*, Pearson Education Asia, New Delhi.

## **SEMESTER-IV ECONOMICS-CC-X**

### **Core Economics Course 10: Public Economics**

**Time- 3 hrs**

**F.M.-80+20**

**Credit- 6**

#### **Course Description**

Public economics is the study of government policy from the points of view of economic efficiency and equity. The paper deals with the nature of government intervention and its implications for allocation, distribution and stabilization. Inherently, this study involves a formal analysis of government taxation and expenditures. The subject encompasses a host of topics including public goods, market failures and externalities. The paper is divided into two sections, one dealing with the theory of public economics and the other with the Indian public finances.

#### **Module I: Introduction to public finance**

Public Finance: meaning and scope, distinction between public and private finance; public good versus private good; Principle of maximum social advantage; Market failure and role of government;

#### **Module II: Public Expenditure**



Creating a data file, Defining the variable, Entry of data, Opening an existing file, Inserting variables, Inserting cases, Sorting cases, Spitting file, Selecting cases, Listing cases. Data Transformation: Computing new variables, Recording variables, Ranking cases.

**Module-2: Charts:**

Bar charts, Linecharts, Pie charts, Descriptive statistics: Computing summary measures, Cross tabulations.

**Module-3: Correlation Analysis:**

Bivariate and Partial Correlations. Rank correlation.

**Module-4: Regression Analysis:**

Regression equations, Significance of regression coefficients.

**Reading:**

1. Enjoy Statistics with SPSS – by Kiran Pandya and Smruti Bulsari, New Popular Prakashan, Surat.

**SEM-III DSC-2/3-III IS SAME AS CC-III**  
**SEM-IV DSC-2/3-IV IS SAME AS CC-VI**

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**SEMESTER-5**  
**Core Course 11: INDIAN ECONOMY I**  
**Time- 3 hrs F.M.-80+20 Credit- 6**

**Course Description**

Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post—-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.

**Module I: Introduction to Indian Economy, Population & Human Development**

British Rule: exploitation and under development in India; features of Indian economy – natural resources, infrastructure.

Demographic trends and issues; education; health and malnutrition

**Module II: National Income in India**

National income: trends, sectoral composition and Estimates of National income in India.

**Module III: Economic Planning in India**

Economic planning: Planning Commission and its functions, Planning exercises in India, Objectives, Strategies and achievements and failure. Niti Ayoga.

**Module IV: Current Challenges**

Poverty: definition and estimate, poverty line, poverty alleviation programs; Inequality: income and regional inequality – causes and corrective measures; Unemployment: concepts, measurement, types, causes and remedies; Environmental challenges: Land, water and air.

**Readings:**

1. U. Kapila (2010): *Indian economy since Independence*. Academic Foundation, New Delhi
2. S. K. Misra and V. K. Puri (Latest Year): *Indian Economy — Its Development Experience*, Himalaya Publishing House, Mumbai
3. S. Chakraborty ( ): *Development Planning: The Indian Experience*. Clarendon Press.
4. R. Dutt and K. P. M, Sundharam(Latest Year): *Indian Economy*, S. Chand & Company Ltd., New Delhi.
5. A. Panagariya (2008): *India: the Emerging Giant*, Oxford University Press, New York
6. S. Acharya and R. Mohan (Eds.) (2010): *India's Economy: Performance and Challenges*, Oxford University Press, New Delhi.
7. I. J. Ahluwalia and I. M. D. Little(Eds.) (1998): *India's Economic Reforms and Development: Essays for Manmohan Singh*, Oxford University Press, New Delhi.



**SEMESTER-5**  
**Core Course 12: DEVELOPMENT ECONOMICS I**  
**Time- 3 hrs F.M.-80+20 Credit- 6**

**Course Description**

This is the first part of a two-part course on economic development. The course begins with a discussion of alternative conceptions of development and their justification. It then proceeds to aggregate models of growth and cross-national comparisons of the growth experience that can help evaluate these models. The axiomatic basis for inequality measurement is used to develop measures of inequality and connections between growth and inequality are explored. The course ends by linking political institutions to growth and inequality by discussing the role of the state in economic development and the informational and incentive problems that affect state governance.

**Module I: Conceptions of Development**

Economic development, Economic growth and development, Factors affecting economic development, Obstacles to economic development, Indicators of economic development - National income, Per capita income; Basic needs approach, PQLI, HDI, GDI, Capital formation and economic development, Vicious circle of poverty, circular causation. Alternative measures of development, documenting the international variation in these measures, comparing development trajectories across nations and within them.

**Module II: Theories of Economic Development & Growth**

Classical theory, Marxian theory of capitalist development, Schumpeterian theory of capitalist development, Harrod-Domar model of steady growth, Neo-Classical growth Model – Solow, Rostow's stages of economic growth

**Module III: Growth Models and Empirical studies**

The endogenous growth models, (Romer & Lucas), Human Capital & Growth. Evidence on the determinants of growth, Patterns of Economic Growth, Geography vs institution Debate

**Module IV: Poverty and Inequality: Definitions, Measures and Mechanisms**

Understanding Prosperity and Poverty: Geography, Institutions, and the Reversal of Fortune, Measuring Poverty, Inequality axioms; a comparison of commonly used inequality measures; connections between inequality and development; poverty measurement; characteristics of the poor; mechanisms that generate poverty traps and path dependence of growth processes

**Readings:**

1. Debraj Ray (2009): *Development Economics*, Oxford University Press.
2. Partha Dasgupta (2007): *Economics, A Very Short Introduction*, Oxford University Press.
3. Abhijit Banerjee, Roland Benabou and Dilip Mookerjee (2006): *Understanding Poverty*, Oxford University Press.
4. Amartya Sen (2000): *Development as Freedom*, OUP.
5. Daron Acemoglu and James Robinson (2006): *Economic Origins of Dictatorship and Democracy*, Cambridge University Press.
6. Robert Putnam (1994): *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton University Press.

**SEMESTER-5**  
**DISCIPLINE SPECIFIC ELECTIVE (DSE)-1**  
**BASIC ECONOMETRICS**  
**Time- 3 hrs F.M.-80+20 Credit- 6**

**Module-1: Concept and application of Probability Distributions:**

Probability Distributions: Concepts and definitions, random variable and its type, Mathematical expectation and its properties, Sampling distribution of Sample mean and Sample variance, Theoretical Distribution: Binomial distribution, Poisson distribution, Normal distribution, t-distribution,  $\chi^2$  tests and F-distribution and – their properties, Central Limit theorem, Estimation: Parameter and statistic, estimates and estimators, Point estimator and interval estimator, Properties of a good estimator, Hypothesis Testing: concepts, definition and types, Testing of hypotheses relating to population parameters based on z, t and  $\chi^2$  tests.

**Module-2: Simple Regression Models**

Simple linear Regression Model with two variables- Assumptions, Central Limit Theorem, Least square principle, Goodness of Fit, Point Estimation and interval Estimation, OLS method of Estimation and properties of Estimators, BLUE, Gauss-Markov Theorem, Standard Error of the Regression Coefficients, Concepts and derivation of  $R^2$ , Normality Assumptions, Statistical Inferences, Concept and Application of ANOVA in Regression Analysis.

**Module-3: Multiple Regression Analysis**

Multiple Regression Model, K- variable regression model, OLS estimators and their properties, BLUE, Concepts and derivation of  $R^2$ , and Adjusted  $R^2$ , Statistical Inferences and Testing, Concept and Application of ANOVA in Regression Analysis, Maximum likelihood Estimation

**Module-4: Violation of Classical Assumptions**

Multi co linearity: Sources, Effects, detection and solution, Specification errors- sources, estimation, consequences and remedial measures, Heteroscedasticity- tests, consequences, solution- GLS and WLS, Auto Correlation- sources, Consequences, tests and estimation, Durbin-Watson Test..

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**Readings:**

1. Jay L. Devore, *Probability and Statistics for Engineers*, Cengage Learning, 2010.
2. John E. Freund, *Mathematical Statistics*, Prentice Hall, 1992.
3. Richard J. Larsen and Morris L. Marx, *An Introduction to Mathematical Statistics and its Applications*, Prentice Hall, 2011.
4. D. N. Gujarati and D.C. Porter, *Essentials of Econometrics*, McGraw Hill, 4<sup>th</sup> edition, International Edition, 2009.
5. Christopher Dougherty, *Introduction to Econometrics*, Oxford University Press, 3<sup>rd</sup> edition, Indian edition, 2007.
6. Jan Kmenta, *Elements of Econometrics*, Indian Reprint, Khosla Publishing House, 2<sup>nd</sup> edition, 2008.
7. William G. Cochran, *Sampling Techniques*, John Wiley, 2007.
8. Koutsoyiannis A, "Theory of Econometrics" Rowman & Littlefield Publishers; 2 edition (June 1978)

**OR**  
**SEMESTER-5**  
**DISCIPLINE SPECIFIC ELECTIVE (DSE)-1**

**MONEY AND FINANCIAL MARKETS**

**Course Description**

This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.

**Course Outline**

**Unit-I Money**

Concept, functions, measurement; theories of money supply determination.

**Unit-2 Financial Institutions, Markets, Instruments and Financial Innovations**

- a. Role of financial markets and institutions; problem of asymmetric information – adverse selection and moral hazard; financial crises.
- b. Money and capital markets: organization, structure and reforms in India; role of financial derivatives and other innovations.

**Unit-3 Interest Rates**

Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India.

**Unit-4 Banking System**

- a. Balance sheet and portfolio management.
- b. Indian banking system: Changing role and structure; banking sector reforms.
- c. Functions of Central Banking. current monetary policy of India.

**Readings**

1. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions*, Pearson Education, 6th edition, 2009.
2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, *Foundations of Financial Markets and Institutions*, Pearson Education, 3rd edition, 2009.
3. M. R. Baye and D. W. Jansen, *Money, Banking and Financial Markets*, AITBS, 1996.
4. Rakesh Mohan, *Growth with Financial Stability- Central Banking in an Emerging Market*, Oxford University Press, 2011.
5. L. M. Bhole and J. Mahukud, *Financial Institutions and Markets*, Tata McGraw Hill, 5th edition, 2011.
6. M. Y. Khan, *Indian Financial System*, Tata McGraw Hill, 7th edition, 2011.
7. N. Jadhav, *Monetary Policy, Financial Stability and Central Banking in India*, Macmillan, 2006.
8. R.B.I. – *Report of the Working Group: Money Supply Analytics and Methodology of Compilation*, 1998.
9. R.B.I. Bulletin, Annual Report and Report on Currency and Finance (latest).

**SEMESTER-5**  
**DISCIPLINE SPECIFIC ELECTIVE (DSE)-2**  
**THE ECONOMY OF ODISHA**  
**Time- 3 hrs F.M.-80+20 Credit- 6**

**Module-1:Odisha Economy:**

Basic Characteristics, Structural Change and Occupational structure since independence. Demographic Features of Odisha, Causes and effects of high growth rate of population, Measures to control population. Human Development in Odisha, State Domestic Product: Components and Trends, Fiscal Situation of Odisha, Salient features of Orissa Fiscal Responsibility & Budget Management Act, 2005 (FRBM Act, 2005)

**Module-2: Agriculture in Odisha:**

Importance of Agriculture in Odisha's Economy, Cropping pattern, Causes of low productivity, Measures to increase Agricultural productivity, Agriculture Subsidy in odisha, The State Agriculture Policy 1996, 2008& 2013.

**Module-3: Industrial Development in Odisha:**

Importance of Industrialization in Odisha's Economy, Industrial Structure in Odisha: Base and Composition, Performance Public Sector Enterprises (PSE) in Odisha, Orissa Industrial Policy Resolutions, 2001, 2007& 2015. Policy for Special Economic Zones-2015

**Module-4:Social Sector Development (Health & Education) in Odisha:**

Development of Health and Education Sectors in Odisha. Development Scenario: Odisha vis-à-vis India and other major States.

**Areas of Concern:** Unemployment and Poverty, Development & Displacement in Odisha, Inter-State migration from Odisha – Causes and remedies.

References:

1. Pulin.B.Nayak, Santosh C.Panda & Prasanta K.Panda-Economy of Odisha- Oxford University Press,2016
2. Economic Survey of Odisha(Different years)
3. Statistical Abstract of Odisha- Directorate of Statistics & Economics

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**SEMESTER-5 ECONOMICS( PASS)**  
**DSE-A/B-1: Economic development and policy in India**  
**Time- 3 hrs F.M.-80+20 Credit- 6**

**Course Description:** This paper introduces the students to the essentials of Indian economy with an intention of understanding the basic feature of the Indian economy and its planning process. It also aids in developing an insight into the agricultural and industrial development of India. The students will understand the problems and policies relating to the agricultural and industrial sectors of India and current challenges of Indian economy.

**Module I: Introduction to Indian Economy**

British Rule: exploitation and under development in India; features of Indian economy – natural resources, infrastructure, population; National income: trends, sectoral composition; Economic planning: Planning Commission and its functions, Planning exercises in India, Objectives, Strategies and achievements; A critique of planned development in India.

**Module II: Agricultural Development in India**

Indian Agriculture: nature, importance, trends in agricultural production and productivity, factors determining production, land reforms, new agricultural strategies and green revolution, rural credit; Agricultural marketing and warehousing.

**Module III: Industrial Development in India**

Trends in industrial output and productivities; Industrial Policies of 1948, 1956, 1977 and 1991; Industrial Licensing Policies – MRTP Act, FERA and FEMA; Growth and problems of SSIs, Industrial sickness; Industrial finance; Industrial labour

**Module IV: Tertiary Sector and HRD**

Tertiary Sector: growth and contribution of service sector to GDP of India, share of services in employment; Human development – concept, evolution, measurement; HRD: indicators, importance, Education in India, Indian educational policy; Health and Nutrition.

**Module V: Current Challenges**

Poverty: definition and estimate, poverty line, poverty alleviation programs; Inequality: income and regional inequality – causes and corrective measures; Unemployment: concepts, measurement, types, causes and remedies; Environmental challenges: Land, water and air.

**Recommended books:**

1. Kapila U. Indian economy since Independence. Academic Foundation, New Delhi
2. Misra, S. K. and Puri V. K. Indian Economy — Its Development Experience. Himalaya Publishing House, Mumbai
3. Chakraborty S. Development Planning: The Indian Experience. Clarendon Press.
4. Dutt R. and Sundharam K. P. M. Indian Economy. S. Chand & Company Ltd., New Delhi.
5. Agarawala, A. N. Indian Economy, New Age Publications, New Delhi
6. Panagariya, Arvind (2008): India: the Emerging Giant, Oxford University Press, New York
7. Acharya, S. and Mohan, R. (Eds.) (2010): India's Economy: Performance and Challenges, Oxford University Press, New Delhi.
8. Ahluwalia, I. J. and Little, I. M. D. (Eds.) (1998): India's Economic Reforms and Development: Essays for Manmohan Singh, Oxford University Press, New Delhi

**SEMESTER-5 ECONOMICS ( PASS)**  
**Skill Enhancement Course- SEC--3**  
**BANKING OPERATIONS & FINANCIAL ECONOMICS**  
**Time- 2 hrs F.M.-40+10 Credit- 2**

**Module-1:** Need and Role of Financial Intermediaries in an Economy: Definition, classification and functions of a Bank Structure and Organization of Commercial Banking in India including internal organization and departmental set-up Resource Mobilization: Nature and source of funds, owned funds and borrowed funds, Nature of deposits and deposit accounts Procedure for opening and operating different type of Bank Accounts, Balance sheet of commercial Bank

**Module-2:** Share Capital and Reserves : Procedures and facilities for borrowing from the Reserve Bank of India and other agencies, Deposit and Credit Guarantee, Co-operation for loans; Follow-up of Bank Credit. Use of Fund: Basic consideration; Types of advance, Nature of securities procedure for granting credit facilities of different types, Appraisal of application for loans; Follow-up of Bank Credit.

**Module-3:** Financial Services : Meaning and Importance , Scope of Financial Services , Brief Study of Financial Institutions Development Banks, Merchant Banks, Mutual Funds, DFHI, SEBI. Role and function of Central Bank, Credit Control Instruments, Objectes of Monetary Policy, Money Policy of the Reserve Bank of India.

**Module-4:** Financial Instruments. Money and Capital Market Instruments ,. Financial Markets, Money Market, Capital Market, Stock Exchanges, Call Money Markets, Debt Market, . Financial Services, , Factoring, under writing, Credit Rating

**References:**

- Saxena, R.M. : Development Banking in India, Vora Publishers, Mumbai.
- Vinod Batra : Development Banking in India, Printwell Publishers, Jaipur.
- Tokhi & Sharma : Rural Banking in India, Oxford and IBM, New Delhi.
- Desai SSM : Rural Banking in India, Himalaya Publishing House, Mumbai.
- Subramanya, K.N. : Modern Banking in India, Deep and Deep Publishers, New Delhi
- G.M. Laud : Co-operative Banking in India, Co-operators Book Depot, Bombay.
- Muranjan, S.K. : Modern Banking in India, Karnataka Publications, Mumbai.
- Joseph Anbarasu : Financial Services, Sultan Chand & Sons, New Delhi.
- Boominatha, Manoharan & Ganaraj 3. Avadhani V.A : Marketing of Financial Services, Himalaya Publications, Mumbai.
- Batra, G.S. : Management of Financial Services, Deep & Deep Publications, Batra B.S. New Delhi.
- Srivatsav R.M. : Indian Financial System, Rishi Publishers, Hyderabad.

**(ECONOMICS PASS )**

**SEM.-5,ECO.-GE-P-I IS SAME AS SEM-I, ECO.-CC-I**

**SEMESTER-6**  
**Core Course 13: INDIAN ECONOMY II**  
**Time- 3 hrs F.M.-80+20 Credit- 6**

**Course Description**

This course examines sector -specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence. Given the rapid changes taking place in the country, the reading list will have to be updated annually.

**Model I: Agricultural Development in India**

Indian Agriculture: nature, importance, trends in agricultural production and productivity, factors determining production, land reforms, new agricultural strategies and green revolution, rural credit; Agricultural marketing and warehousing.

**Module II: Industrial Development in India**

Trends in industrial output and productivities; Industrial Policies of 1948, 1956, 1977 and 1991; Industrial Licensing Policies – MRTP Act, FERA and FEMA; Growth and problems of SSIs, Industrial sickness ; Industrial finance; Industrial labour

**Module III: Tertiary Sector and HRD**

Tertiary Sector: growth and contribution of service sector to GDP of India, share of services in employment; Human development – concept, evolution, measurement; HRD: indication, importance, education in India, Indian educational policy; Health and Nutrition.

**Module IV: External Sector**

Foreign Trade: role, composition and direction of India's foreign trade, trends of export and import in India, export promotion versus import substitution; Balance of Payments of India; India's Trade Policies; Foreign Capital – FDI, Aid and MNCs.

**Readings:**

1. U. Kapila (2010): *Indian economy since Independence*. Academic Foundation, New Delhi
2. S. K. Misra and V. K. Puri (Latest Year): *Indian Economy — Its Development Experience*, Himalaya Publishing House, Mumbai
3. S. Chakraborty ( ): *Development Planning: The Indian Experience*. Clarendon Press.
4. R. Dutt and K. P. M, Sundharam(Latest Year): *Indian Economy*, S. Chand & Company Ltd., New Delhi.
5. A. Panagariya (2008): *India: the Emerging Giant*, Oxford University Press, New York
6. S. Acharya and R. Mohan (Eds.) (2010): *India's Economy: Performance and Challenges*, Oxford University Press, New Delhi.
7. I. J. Ahluwalia and I. M. D. Little (Eds.) (1998): *India's Economic Reforms and Development: Essays for Manmohan Singh*, Oxford University Press, New Delhi.

**SEMESTER-6**  
**Core Course 14: DEVELOPMENT ECONOMICS II**  
**Time- 3 hrs F.M.-80+20 Credit- 6**

**Course Description**

This is the second module of the economic development sequence. It begins with basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The governance of communities and organizations is studied and this is then linked to questions of sustainable growth. The course ends with reflections on the role of globalization and increased international dependence on the process of development.

**Module I: Demography and Development**

Demographic concepts; birth and death rates, age structure, fertility and mortality; demographic transitions during the process of development; gender bias in preferences and outcomes and evidence on unequal treatment within households; connections between income, mortality, fertility choices and human capital accumulation; migration.

**Module II: Land, Labour and Credit Markets**

The Role of Agriculture in Development, The distribution of land ownership; land reform and its effects on productivity; contractual relationships between tenants and landlords; land acquisition; nutrition and labour productivity; informational problems and credit contracts; microfinance; inter linkages between rural factor markets. Credit, Intermediation, and Poverty Reduction, Risk faced by poor

**Module III: Individuals, Communities, Collective Outcomes & Globalization**

Individual behaviour in social environments, governance in organizations and in communities; individual responses to organizational inefficiency. Globalization in historical perspectives, financial instability in a globalized world, Foreign Aid & Development

**Module IV: Environment and Sustainable Development**

Defining sustainability for renewable resources; a brief history of environmental change; common-pool resources; environmental externalities and state regulation of the environment; economic activity and climate change, Global warming.

**Readings**

1. Debraj Ray (2009): *Development Economics*, Oxford University Press.
2. Partha Dasgupta (2007): *Economics, A Very Short Introduction*, Oxford University Press.
3. Abhijit Banerjee, Roland Benabou and Dilip Mookerjee (2006): *Understanding Poverty*, Oxford University Press.
4. Thomas Schelling (1978): *Micromotives and Macrobehavior*, W. W. Norton.
5. Albert O. Hirschman (1970): *Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States*, Harvard University Press.
6. Elinor Ostrom (1990): *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press.
7. Dani Rodrik (2011): *The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist*, Oxford University Press.
8. Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (ed.) (2003): *Globalization in Historical Perspective*, University of Chicago Press.



**SEMESTER-6**  
**DISCIPLINE SPECIFIC ELECTIVE (DSE)-3**  
**INTERNATIONAL ECONOMICS**

**Time- 3 hrs F.M.-80+20 Credit- 6**

**Module-1: Importance of Trade & Trade Theories:**

Importance of the study of international economics, Inter-regional and international trade; Theories of absolute advantage, comparative advantage & opportunity cost. Heckscher-Ohlin theories

**Module-2: Gains from Trade:**

Gains from trade- their measurement and distribution; Trade as an engine of economic growth, concepts of terms of trade and their importance in the theory of trade; Doctrine of reciprocal demand- its importance and limitations in the theory of trade.

**Module-3: Tariffs & Quotas:**

Types tariffs and quotas; their impact in partial equilibrium analysis; Free trade and policy of tariffs in relation to economic growth with special reference to India, Concept of optimum tariff. Free trade Verses. Protection.

**Module-4 : International Financial Institutions:**

Role & Functions of World Bank, IMF, WTO ,GATT, UNCTAD, European Union, Asian Development Bank.

References:

1. Bo Soderston; International Economics
2. D.M.Mithani: International Economics
3. M.L.Jhingan: International Economics

**SEMESTER-6 (Hons)**

**DISCIPLINE SPECIFIC ELECTIVE (DSE)-4**  
**DISSERTATION/PROJECT**

Dissertation: 60 Marks  
Presentation: 25 Marks  
Viva-voce: 15 Marks

Projects submitted by the student are to be evaluated by the Internal Examiner and External Examiner appointed by University. Students should opt for Supervision of Dissertation from the internal faculties of his own college/Institution. The Supervisor in consultation with the concerned Head of the Department should decide the topic. The presentation should be open to all faculties as well as graduate students of the concerned Department

**SEM.-6,BA ECO.-GE-P-2 IS SAME AS SEM-2, ECO.-CC-3**  
**SEM-6,BA ECO-SEC-4 IS SAME AS BA HONS. SEC-2**  
**SEM-6 ,BA ECO-DSE-A/B-2 IS SAME AS BA HONS. DSC-2**

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