

**SYLLABUS FOR ECONOMICS  
UNDER CHOICE BASED CREDIT SYSTEM  
(Honours, Regular, GE and SEC)**

**2016-19**

**Approved by**

**The Board of Studies in Economics on 20.9.16**



**BERHAMPUR UNIVERSITY, BHANJA BIHAR ,  
BERHAMPUR 760007; ODISHA, INDIA**

# **A. SYLLABUS FOR B.A. (HONORS) ECONOMICS UNDER CHOICE BASED CREDIT SYSTEM OF BERHAMPUR UNIVERSITY, BERHAMPUR**

## **Course Structure for B.A. (Honours) Economics**

A student opting for Honours in Economics at the graduation level shall read fourteen economics core courses across six semesters. All the core courses are compulsory. In addition to core courses in economics, a student of B.A. (Honours) Economics will choose four Discipline Specific Elective (DSE) Courses. The DSE Courses are offered in the fifth and sixth semesters and two such courses will be selected by a student from a set of courses specified for each of these semesters (Groups I and II in the attached table). It is recommended that each college should offer at least three DSE Courses in the fifth and sixth semesters to allow the students some minimal element of choice.

Contact Hours: Each course has 6 credits comprising of 5 lectures and 1 tutorial (per group) per week. The size of a tutorial group is 8-10 students. The total credit hours for B.A.(Hons) shall be 140 credit distributed in six semesters.

Note on Course Readings: The nature of several of the courses is such that only selected readings can be specified in advance. Reading lists will be updated and topic-wise readings will be specified at regular intervals, ideally on an annual basis.

## **Course Structure for B.A. (Honours) Economics**

### **Semester I (20 credit )**

1. **Economics Core Course 1:**  
Introductory Microeconomics
2. **Economics Core Course 2:**  
Mathematical Methods for  
Economics I
3. **AECCI:**  
Environmental Studies
4. **Generic Elective Course (GE) I**

### **Semester III(26 credit)**

1. **Economics Core Course 5:**  
Microeconomics I
2. **Economics Core Course 6:**  
Macroeconomics I
3. **Economics Core Course 7:**  
Statistical Methods for Economics
4. **Skill Enhancement Course (SEC) I:**  
**English**
5. **GEIII**

### **Semester II(20 credit)**

1. **Economics Core Course 3:**  
Introductory Macroeconomics
2. **Economics Core Course 4:**  
Mathematical Methods for  
Economics II
3. **AECCII:**  
MIL (Odia / AE/Telugu )
4. **Generic Elective Course (GE) II**

### **Semester IV( 26 credit)**

1. **Economics Core Course 8:**  
Microeconomics II
2. **Economics Core Course 9:**  
Macroeconomics II
3. **Economics Core Course 10:** Public  
Economics
4. **Skill Enhancement Course (SEC) II**
5. **GEIV**

### **Semester V(24 credits)**

1. **Economics Core Course 11:** Indian Economy I
2. **Economics Core Course 12:** Development Economics I
3. **Discipline Specific Electives (DSE)** (From List of Group I)
4. **Discipline Specific Electives (DSE)** (Any two from List of Group I)

#### **Group I**

1. Odisha Economy
2. Agricultural Economics
3. Data Analysis and Computer Application in Economics

#### **Generic Elective Paper:**

Indian Economy-I  
Indian Economy-II

#### **Skill Enhancement Courses**

1. Data Analysis and Computer Application
2. Financial Economics

### **Semester VI(24 Credit)**

1. **Economics Core Course 13:** Indian Economy II
2. **Economics Core Course 14:** Development Economics II
3. **Discipline Specific Electives (DSE)** (From List of Group II)
4. **Discipline Specific Electives (DSE)** (Any two From List of Group II)

#### **Group II**

1. Dissertation / Project
2. Political Economy of Thought
3. International Economics

**Syllabus for BA(Regular)**  
**Core and Discipline Specific Electives (DSE) Courses in Economics**

**Semester I**

**Core Economics I:**  
Principles of Microeconomics I

**Semester III**

**Core Economics III:**  
Principles of Macroeconomics I

**Semester V**

**Discipline Specific Electives I**  
One of the following:

1. **DSE 1:** Economic Development and Policy in India-I
2. **DSE 2:** Money and Banking

**Semester II**

**Core Economics II:**  
Principles of Microeconomics II

**Semester IV**

**Core Economics IV:**  
Principles of Macroeconomics II

**Semester VI**

**Discipline Specific Electives II**  
One of the following:

1. **DSE-3** Economic Development and Policy in India-II
2. **DSE 4:** Odisha Economy

## **Core Economics Course 1: INTRODUCTORY MICROECONOMICS**

### **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; reading and working with graphs.

### **Module II: The Households: Supply and Demand, How Markets Work, Markets and Welfare**

Markets and competition; demand/supply schedule and demand/supply curve; market versus individual demand/supply; shifts in the demand/supply curve, taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets. The consumption decision - budget constraint, consumption and income/price changes, demand for all other goods and price changes; description of preferences (representing preferences with indifference curves); properties of indifference curves; consumer's optimum choice; income and substitution effects;

### **Module III: The Firm and Market Structures**

Behaviour of profit maximizing firms and the production process; short run costs and output decisions; costs and output in the long run; Monopoly and anti-trust policy; government policies towards competition; imperfect competition

### **Module IV: Input Markets**

Labour and land markets - basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; input demand curves; shifts in input demand curves; competitive labour markets; and labour markets and public policy.

### **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.

## **Core Economics Course 2: MATHEMATICAL METHODS FOR ECONOMICS I**

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

### **Module II: Derivative and integration 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; Integration, formulas of Integration, Definite Integrals Application- Relationship between total, average and marginal functions.

### **Module III: Functions of two or more independent variables**

Partial differentiation techniques; Geometric interpretation of partial derivatives; Partial derivatives in Economics; Elasticity of a function – demand and cost elasticity, cross and partial elasticity

### **Module IV: 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

## **Core Economics Course 3: INTRODUCTORY MACROECONOMICS**

### **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 and Measurement of Macroeconomic Variables**

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 ;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 II: 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 III: 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 Measures; Depression and Stagflation; Inflation vs. Deflation

### **Module IV: 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- The Simple Investment Multiplier; Income Determination in a 3-Sector Model with the Government Sector and Fiscal Multipliers.

### **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

**Core Economics Course 4:  
MATHEMATICAL METHODS FOR ECONOMICS II**

**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.

**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; Differentials and derivatives - Total differentials; Rules of differentials; Total derivatives; Derivatives of implicit functions.

**Module III: 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 extremes of multivariable functions.

**Module IV: 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, Economic applications

**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



## **Core Economics Course 5: MICROECONOMICS I**

### **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.

### **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; Preferences and Utility: Axioms of Rational Choice, Utility, Trades and Substitutions, The Mathematics of Indifference Curves, Utility Functions for Specific Preferences, The Many-Good case; Utility Maximization and Choice: The Two-Good Case (Graphical Analysis), The n-Good Case, Indirect Utility Function, The Lump Sum Principle, Expenditure Minimization, Properties of Expenditure Function

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

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, and Home Production, Attributes of Goods and Implicit Prices.

### **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), Technical Progress; 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 IV: 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.

**Core Economics Course 6:  
MACROECONOMICS I**

**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 and Investment Functions**

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: 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 III: 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 IV: 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.

**Core Economics Course 7:  
STATISTICAL METHODS FOR ECONOMICS**

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

### **Module III: 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; Laspeyres's and Fisher's index, family budget method, problems in construction and limitations of index numbers, test for ideal index number.

### **Module IV: Probability and Theoretical Distribution**

Probability: Basic concepts, addition and multiplication rules, conditional probability; Random variables and their probability distribution; Mathematical expectations; Theoretical Distribution: Binomial, Poisson and 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.

## **Core Economics Course 8: MICROECONOMICS II**

### **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, Price Controls and Shortages, Tax Incidence Analysis

### **Module II: General Equilibrium and Welfare**

Perfectly Competitive Price System, A Graphical Model of General Equilibrium with Two Goods, Comparative Statics Analysis, General Equilibrium Modelling and Factor Prices, A Mathematical Model of Exchange, A Mathematical Model of Production and Exchange, Computable General Equilibrium Models

### **Module III: Monopoly and Imperfect Competition**

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; 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

### **Module IV: 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.

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

### **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 ;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 III: 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 IV: Schools of Macroeconomic Thought and the Fundamentals of Macroeconomic Theory and Policy**

Classics, Keynes, Monetarists, New Classicals 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.

## **Core Economics Course 10: PUBLIC ECONOMICS**

### **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 verses private good; Principle of maximum social advantage; Market failure and role of government;

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

Meaning, classification, principles, cannons and effects, causes of growth of public expenditure, Wagner's law of increasing state activities, Peacock-Wiseman hypotheses

### **Module III: Public Revenue**

Sources of Public Revenue; Taxation - meaning, cannons and classification of taxes, impact and incidence of taxes, division of tax burden, the benefit and ability to pay approaches, taxable capacity, effects of taxation, characteristics of a good tax system, major trends in tax revenue of central and state governments in India

### **Module IV: Public Budget and Public Debt**

Public Budget: kinds of budget, economic and functional classification of the budget; Balanced and unbalanced budget; Balanced budget multiplier; Budget as an instrument of economic policy. Sources, effects, debt burden – Classical, Ricardian and other views, shifting - intergenerational equity, methods of debt redemption, debt management, tax verses debt;

#### **Readings:**

1. J. Hindriks and G. Myles (2006): *Intermediate Public Economics*, MIT Press.
2. R. A. Musgrave and P. B. Musgrave(1989): *Public Finance in Theory and Practices*. McGraw Hill
3. B. P. Herber(1975): *Modern Public Finance*.
4. B. Mishra (1978): *Public Finance*, Macmillan India limited.

## **Core Economics Course 11: INDIAN ECONOMY I**

### **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, Human Development and National Income**

Demographic trends and issues; education; health and malnutrition; National Income in India trends, sectoral composition

### **Module III: Economic Planning in India**

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

### **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.

## **Core Economics Course 12: DEVELOPMENT ECONOMICS I**

### **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 their 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; The endogenous growth models, (Romer & Lucas), Human Capital & Growth. Evidence on the determinants of growth, Patterns of Economic Growth.

### **Module III 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

### **Module IV: Political Institutions and the Functioning of the State**

Public Goods and Economic Development, State ownership and regulation, government failures, Corruption and Development, The determinants of democracy; alternative institutional trajectories and their relationship with economic performance; within-country differences in the functioning of state institutions

**Readings:**

1. Debraj Ray (2009): *Development Economics*, Oxford University Press.
2. ParthaDasgupta (2007): *Economics, A Very Short Introduction*, Oxford University Press.
3. Abhijit Banerjee, Roland Benabou and DilipMookerjee (2006): *Understanding Poverty*, Oxford University Press.
4. AmartyaSen (2000): *Development as Freedom*, OUP.
5. DaronAcemoglu 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.

**Core Economics Course 13:  
INDIAN ECONOMY II**

**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.

## **Core Economics Course 14: DEVELOPMENT ECONOMICS II**

### **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; interlinkages between rural factor markets. Credit Intermediation, and Poverty Reduction, Risk faced by poor

### **Module III: Individuals, Communities and Collective Outcomes**

Individual behaviour in social environments, multiple social equilibria; governance in organizations and in communities; individual responses to organizational inefficiency

### **Module IV: Environment, Sustainable Development and Globalisation**

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; Globalization in historical perspective; the economics and politics of multilateral agreements; trade, production patterns and world inequality; financial instability in a globalized world, Political Economy of Foreign Aid & Development

### **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.

## **Discipline Specific Electives (DSE) :**

### **Group--I** ((Any two from List of Group I)

#### **1. ODISHA ECONOMY**

##### **Module-I: Basics of Odisha Economy:**

Demographic features – size of population, sex ratio, density, Literacy Rate, occupational pattern causes of population growth, population policy.

Features of Odisha Economy –Low percapita income, over population, Predominance of Agriculture, Unemployment, Unutilised resources, Capital deficiency, low level of technology, weak infrastructure.

##### **Module-II: Agriculture**

Importance of agriculture in odisha economy, Causes of low productivity, Green revolution – features , problems & impact.

Land reforms in Odisha - salient features, The Estate Abolition Act – 1952, Bhoodan Movement, Mo – Jami, Mo – Diha campaign, Odisha State Agricultural policies.

##### **Module-III: Industry**

Importance of industrialization, Growth of industries in Odisha, Large scale industries , Small scale industries and cottage industries, Industry and environment.

Industrial Policy – 1991, 2001 and 2007, Public – Private partnership (PPP) mode. Mining and Quarrying.

##### **Module-IV : Planning in Odisha**

Introduction, Objectives, State planning Board, Review of Planning.Planning with NITI Ayog.NITI and Odisha.

Poverty – Head Count Ratio in Odisha, Rangarjan Committee Report on Poverty, Poverty by region, Poverty by Social group Mission Shakti, Measures to remove poverty.

##### **Readings**

1. Government of Odisha – Five year Plans
2. Odisha Economic Survey - 2014-15

3. Power Sector reform in Odisha – “A case study in Restructuring Planning commission of India”. – Planning Commission of India
4. “Odisha Budget (2015-16) at a Glance” (PDF) Finance Department, Govt. of Odisha
5. Vipin Sharma (24, January, 2013) “State of India’s Livelihood report, 2012. SAGE publication. Retrieved , 25 May, 2015
6. Odisha Economy, R.K. Pany & K.K.Pani, Kitab Mahal

## **2. AGRICULTURAL ECONOMICS**

### **Course Objective**

The course aims to deepen student’s understanding of how economic theory can be applied to problems of agricultural sector.

### **Module-I: Introduction**

Definition, scope and nature of agricultural economics; Need for a separate study of agricultural economics. Agricultural Linkages with other sectors, Role of agriculture in economic development, Declining importance of agriculture in Economic development.

### **Module-II: Production Function Analysis**

Factor-Product, Factor-Factor and Product-Product relationships. Types of farm organisations and their comparative production efficiency.

### **Module-III: Transformation of Agriculture**

Schultz thesis of transformation of traditional agriculture, Green Revolution and its Impact on Indian Agriculture. Need for second green revolution. New Agriculture Policy, WTO and Indian Agriculture.

### **Module-IV: Agricultural Credit and Agriculture Price Policy**

Importance of credit, Need for Government intervention, agricultural credit system in India, Co-operative credit: NABARD, Land Development Bank, Regional Rural Banks, commercial banks. Problems of small and medium farmers in getting agricultural finance Need, Objectives, and instruments of agricultural price policy; Shortcomings of price policy, Suggestions for improvement in price policy, Agricultural price policy in India.

### **Readings:**

1. Soni R.N. (2005) : Leading Issues in Agricultural Economics
2. Heady, E O (1964): Economics of Agricultural Production and Resource use. Prentice-Hall of India Pvt. Ltd., New Delhi.
3. Metacalf, D (1969) : The Economics of Agriculture, Penguin
4. Sadhu and Singh : Agricultural Economics.

### **3. DATA ANALYSIS AND COMPUTER APPLICATION IN ECONOMICS**

#### **Course objective**

This course intends to educate a student in the application of simple statistical and mathematical calculations with the help of a computer. There are several specific packages which a student can learn to handle without going deep in the matter of knowing the computer hardware.

#### **Module I: Basic of Computer**

Computer fundamentals – Basic components and organization of a computer: History and generation of computer, Computer devices; Classification of Computers: Data representation, C. Representation, Computer Software-Disk Operating System (MS-DOS) and application software, programming languages and packages.

#### **Module II: Use of computer Office Automation:**

Text editor and word processor, Operative familiarisation of MS WORD Concept & use of spread sheet, operation and use of MS – Excel Basic of Database, table records and fields, Data entry operating principle of MS-access; Document formation and presentation through MS-Power Point.

#### **Module III: Data Analysis and Trend forecasting:**

Basic statistical functions and analysis – mean, median, mode standard deviation, correlation, regression methods & techniques, estimation Linear trend and growth rate

Module-IV: Random variables and probability distributions. Binomial and normal distributions. Estimation of population parameters from sample data. Unbiased estimators for population mean and variance. Basics of index numbers

#### **Readings**

1. Kerny(1993) – Essential of Microsoft, Words Excel, Prentice Hall of India, New India
2. Rajaraman, V. (1996) – Fundamentals of Computers, Prentice Hall (India) New Delhi
3. Schied, F(1983)- Theory and Problems of Computer and Programming, Schaum's outline series, McGraw Hill, New Dehil
4. Ron Mansfield(1994) – Compact guide to Microsoft office, BPH publication, New Delhi
5. B. Ram(1994)- Computer Fundamentals, New Age international New Delhi
6. V.P.Jagi & S Jain (1996) – Computer for Beginners, Academic publisher, New Delhi
7. Suresh. K. Basandra (1993) - Computer to-day, Galgotia Books

## **Discipline Specific Elective (DSE) :**

### **Group-II** (Any two from List of Group II)

#### **1. DISSERTATION/ PROJECT**

The students are required to work on a topic of their interest under the guidance of their faculty member and submit the same for evaluation at the university level. The work must be original and analytical. The teachers are required to teach the art of analysing economic data and derive meaningful conclusions from the proposed work. Several Flagship schemes of the central and state government can be examined under this paper. The teachers must inform the students that all expenses related to data collection, tabulation, analysis, typing and binding will be borne by the candidate. The college/university is in no way related to preparation of the dissertation and submission of the same to the institution.

#### **2. POLITICAL ECONOMY OF THOUGHT**

##### **Module I: Early Period**

Mercantilism: Main characteristics; Thomas Mun – Physiocracy: natural order, primary of agriculture, social classes, Tabacan, Economique, taxation, Turgot – Economic ideas of Petto, Locke & Hume.

##### **Module II: Classical and Marginalists**

Adam Smith – division of labour, theory of value, capital accumulation distribution, views on trade, economic progress; David Ricardo-value, theory of rent, distribution, ideas on economic development and international trade; Thomas R. Malthus – theory of population, theory of gluts; Socialist critics – Sismondi, Karl Marx – dynamics of social change, theory of value, surplus value, profit and crisis of capitalism Economic ideas of J.B. Say, J.S. Mill Historical school – senior, list.

The precursors of marginalism – Gossen. The marginalist revolution; Jevons. Walras & Merger-Marshall as a great synthesizer; role of time, in price determination, economic methods, ideas on consumer's surplus; elasticities, prime and supplementary costs, representative firm, external and internal economies, quasi-rent, Pigou; Welfare, economics, Schumpeter: role of entrepreneur and innovations.

##### **Module III: Keynesian Ideas**

The aggregate economy; liquidity preference theory and liquidity trap, marginal Efficiency of capital and Marginal Efficiency of Investment, wage rigidities, under-employment equilibrium, role

of fiscal policy; deficit spending and public works; multiplier principle, cyclical behavior of the economy, uncertainty and role of expectations, impetus to economic modeling.

#### **Module IV: Indian Economic thought**

Early economic ideas; Kautilya, Modern economic ideas; Naroji, Ranade; Economic ideas of Gandhi, Village Swadeshi, place of machine & Labour, cottage industries, trusteeship, Early approaches to planning (The national planning committee) Gadgil Co-operation as a way of life & strategy of development; J.K. Mehta Wantlessness.

#### **Readings**

1. Ganguli B.N. (1997) – Indian Economic Thought: A 19<sup>th</sup> Century, Perspective, Tata McGraw Hill, New Delhi
2. Gide, C. & G.Rist (1956) – A. History of Economic Doctrines George Harrop & O. London.
3. Grey A. & A.E. Thomson (1980) The Development of Economic Doctrine, Longman Group, London
4. Schumpeter, J.A. (1954) – History of economic analysis, Oxford University Press, New York
5. Scsshadri, G.B. (1997) – Economic Doctrine B.Publishing Corporation Delhi

### **3. INTERNATIONAL ECONOMICS**

#### **Course Description**

This course develops a systematic exposition of models that try to explain the composition, direction, and consequences of international trade, and the determinants and effects of trade policy. It concludes with an analytical account of the causes and consequences of the rapid expansion of international financial flows in recent years. Although the course is based on abstract theoretical models, students will also be exposed to real-world examples and case studies.

#### **Module I: Introduction**

What is international economics about? Distinction between Internal and International Trade, Gains from international trade. Arguments for and against Free Trade and Protection, An overview of world trade. Classical theory of International Trade: Adam Smith's Absolute Advantage Theory; Ricardo's Comparative Cost Theory; Hecksher - Ohlin Theory of International Trade, terms of trade, Secular Deterioration in Terms of Trade.

#### **Module II: Trade Policy**

Instruments of trade policy; political economy of trade policy; controversies in trade policy; firms in the global economy - outsourcing and multinational enterprises

#### **Module III: International Macroeconomic Policy**

Exchange Rate and types of Exchange Rate: Fixed versus flexible exchange rates; Theories of Foreign Exchange Rate: The Mint-Parity Theory, The Purchasing Power Parity Theory, BOP Theory.

#### **Module IV: Balance Of Payment**

BOT, BOP, Current Account, Capital Account, Visible and Invisible, Causes for disequilibrium in Balance of Payments, Methods of correcting the disequilibrium. Devaluation of Currency, Convertibility of Currency: Partial Account and Full Account. Recent trends in balance of Payment in India.

**Readings:**

1. Paul Krugman, Maurice Obstfeld, and Marc Melitz, *International Economics: Theory and Policy*, Addison-Wesley (Pearson Education Indian Edition), 9th edition, 2012.
2. Dominick Salvatore, *International Economics: Trade and Finance*, John Wiley International Student Edition, 10th edition, 2011.
3. C.P. Kindleberger 'International Economics'.
4. Bo Soderstein and Geoffrey Reed 'International Economics' MacMillan.
5. Francis Cherumilam - 'International Economics'
6. Mannur, H.G. 'International Economics', Vikas Publishing House.
7. RBI bulletin, Various issues.

**Syllabus for B.A.(Regular)**  
**Core and Discipline Specific Elective (DSE) Courses in Economics**

<b>Semester I</b>	<b>Semester II</b>
<b>Core Economics I: Principles of Microeconomics–I</b>	<b>Core Economics II: Principles of Microeconomics–II</b>
<b>Semester III</b>	<b>Semester IV</b>
<b>Core Economics III: Principles of Macroeconomics–I</b>	<b>Core Economics IV: Principles of Macroeconomics–II</b>
<b>Semester V</b>	<b>Semester VI</b>
<b>Discipline Specific Elective I</b> <b>One of the following:</b> <b>DSE 1: Economic Development and Policy in India–I</b> <b>DSE 2: Money and Banking</b>	<b>Discipline Specific Elective II</b> <b>One of the following:</b> <b>DSE 3: Economic Development and Policy in India–II</b> <b>DSE 4: Odisha Economy</b>



# **Core Economics I: Principles of Microeconomics–I**

## **Course Description**

This course intends to expose the student to the basic principles in Microeconomic Theory and illustrate with applications.

## **Course Outline**

### **Module I: Introduction**

Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems. Demand and supply: law of demand, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply, shifts of supply versus movements along a supply curve, market supply, market equilibrium. Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus. Elasticity: price elasticity of demand, calculating elasticity, determinants of price elasticity, other elasticities.

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

Budget constraint, concept of utility, diminishing marginal utility, Diamond-water paradox, income and substitution effects; consumer choice: indifference curves, derivation of demand curve from indifference curve and budget constraint.

### **Module III: Production and Costs**

Production: behaviour of profit maximising firms, production process, production functions, law of variable proportions, choice of technology, isoquant and isocost lines, cost minimizing equilibrium condition. Costs: costs in the short run, costs in the long run, revenue and profit maximizations, minimizing losses, short run industry supply curve, economies and diseconomies of scale, long run adjustments.

### **Module IV: Perfect Competition**

Assumptions: theory of a firm under perfect competition, demand and revenue; equilibrium of the firm in the short run and long run; long run industry supply curve: increasing, decreasing and constant cost industries. Welfare: allocative efficiency under perfect competition.

## **Readings:**

Case, Karl E. & Ray C. Fair, *Principles of Economics*, Pearson Education, Inc., 8<sup>th</sup> edition, 2007.

## **Core Economics II: Principles of Microeconomics–II**

### **Course Description**

This is a sequel to Principles of Microeconomics–I covered in the first semester. The objective of the course is the same as in Principles of Microeconomics I.

### **Module I: Market Structures**

**Theory of a Monopoly Firm:** Concept of imperfect competition; short run and long run price and output decisions of a monopoly firm; concept of a supply curve under monopoly; comparison of perfect competition and monopoly, social cost of monopoly, price discrimination; remedies for monopoly: Antitrust laws, natural monopoly.

**Imperfect Competition:** Monopolistic competition: Assumptions, SR & LR price and output determinations under monopolistic competition, economic efficiency and resource allocation; oligopoly: assumptions, oligopoly models, game theory, contestable markets, role of government.

### **Module II: Consumer and Producer Theory**

**Consumer and Producer Theory in Action;** Externalities, marginal cost pricing, internalising externalities, public goods; imperfect information: adverse selection, moral hazard, social choice, government inefficiency.

**Markets and Market Failure;** Market adjustment to changes in demand, efficiency of perfect competition; sources of market failure: imperfect markets, public goods, externalities, imperfect information; evaluating the market mechanism.

### **Module III: Income Distribution and Factor pricing**

Input markets: demand for inputs; labour markets, land markets, profit maximization condition in input markets, input demand curves, distribution of Income.

### **Module IV: International Trade**

Absolute advantage, comparative advantage, terms of trade, sources of comparative advantage, trade barriers, free trade/ protectionism.

### **Readings:**

Case, Karl E. & Ray C. Fair, *Principles of Economics*, Pearson Education, Inc., 8<sup>th</sup> edition, 2007.

## **Core Economics III: Principles of Macroeconomics–I**

### **Course Description**

This course introduces students to the basic concepts in Macroeconomics. Macroeconomics deals with the aggregate economy. In this course the students are introduced to the definition, measurement of the macroeconomic variables like GDP, consumption, savings, investment and balance of payments. The course also discusses various theories of determining GDP in the short run.

### **Module I: Introduction and National Income Accounting**

What is macroeconomics? Macroeconomic issues in an economy. Concepts of GDP and National Income; measurement of national income and related aggregates; nominal and real income; limitations of the GDP concept.

### **Module II: Determination of GDP**

Actual and potential GDP; aggregate expenditure; consumption function; investment function; equilibrium GDP; concepts of MPS, APS, MPC, APC; autonomous expenditure; Concept of multiplier.

### **Module III: National Income Determination in an Open Economy with Government**

Fiscal Policy: impact of changes in government expenditure and taxes; net exports function; net exports and equilibrium national income.

### **Module IV: Money in a Modern Economy**

Concept of money in a modern economy; monetary aggregates; demand for money; quantity theory of money; liquidity preference and rate of interest; money supply and credit creation; monetary policy.

### **Readings:**

1. Case, Karl E. & Ray C. Fair, *Principles of Economics*, Pearson Education, Inc., 8<sup>th</sup> edition, 2007.
2. Sikdar, Shoumyen, *Principles of Macroeconomics*, 2<sup>nd</sup> Edition, Oxford University Press, India

## **Core Economics IV: Principles of Macroeconomics–II**

### **Course Description**

This is a sequel to Principles of Macroeconomics–I. It analyses various theories of determination of National Income in greater detail. It also introduces students to concept of inflation, its relationship with unemployment and some basic concepts in an open economy.

### **Course Outline**

#### **Module I: IS-LM Analysis**

Derivations of the IS and LM functions; IS-LM and aggregate demand; shifts in the AD curve.

#### **Module II: GDP and Price Level in Short Run and Long Run**

Aggregate demand and aggregate supply; multiplier Analysis with AD curve and changes in price levels; aggregate supply in the SR and LR.

#### **Module III: Inflation and Unemployment**

Concept of inflation; determinants of inflation; relationship between inflation and unemployment: Phillips Curve in short run and long run.

#### **Module-IV: Balance of Payments and Exchange Rate**

Balance of payments: current account and capital account; market for foreign exchange; determination of exchange rate.

### **Readings:**

1. Case, Karl E. & Ray C. Fair, *Principles of Economics*, Pearson Education, Inc., 8<sup>th</sup> edition, 2007.
2. Sikdar, Shoumyen, *Principles of Macroeconomics*, 2<sup>nd</sup> Edition, Oxford University Press, India

**Discipline Specific Elective:**  
**Group-I(One of the following):**

**DSE 1: ECONOMIC DEVELOPMENT AND POLICY IN INDIA-I**

**Course Description**

This course reviews major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the post- Independence period.

**Module I: Issues in Growth, Development and Sustainability**

**Module II: Factors in Development**

Capital formation (Physical and Human); technology;institutions.

**Module III: Population and Economic Development; Employment**

Demographic trends; urbanisation.Occupational structure in the organised and the unorganised sectors; open-, underanddisguised unemployment (rural and urban); employment schemes and their impact.

**Module IV: Indian Development Experience**

Critical evaluation of growth, inequality, poverty and competitiveness, pre and postreforms era; savings and investment; mobilisation of internal and external finance; monetary and fiscal policies; centre-state financial relations.

**Readings:**

1. Michael P Todaro and Stephen Smith. *Economic Development*, Pearson, 11<sup>th</sup> edition (2011).
2. Uma Kapila, *Indian Economy since Independence*, Academic Foundation, 19<sup>th</sup> edition (2009).
3. United Nations Development Programme, *Human Development Report 2010*, Palgrave Macmillan (2010).
4. Government of India, *Economic Survey* (latest)
5. Government of India, *Five Year Plan* (latest)
6. Government of India, *Finance Commission Report* (latest)

## **DSE 2: MONEY AND BANKING**

### **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.

### **Module 1: Money**

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

### **Module 2: Financial Institutions, Markets, Instruments and Financial Innovations ; Interest Rates**

Role of financial markets and institutions; problem of asymmetric information – adverse selection and moral hazard; financial crises. Money and capital markets: organization, structure and reforms in India; role of financial derivatives and other innovations .Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India.

### **Module 3: Banking System**

Balance sheet and portfolio management. Indian banking system: Changing role and structure; banking sector reforms.

### **Module 4: Central Banking and Monetary Policy**

Functions, balance sheet; goals, targets, indicators and instruments of monetary control; monetary management in an open economy; 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. L. M. Bhole and J. Mahukud, *Financial Institutions and Markets*, Tata McGraw Hill, 5th edition, 2011.
4. M. Y. Khan, *Indian Financial System*, Tata McGraw Hill, 7th edition, 2011.
5. Various latest issues of R.B.I. Bulletins, Annual Reports, Reports on Currency and Finance and Reports of the Working Group, IMF Staff Papers.

## **Discipline Specific Elective: Group- II (One of the following)**

### **DSE 3: ECONOMIC DEVELOPMENT AND POLICY IN INDIA–II**

#### **Course Description**

Building on the more aggregative analysis of trends in the Indian Economy offered in Economic Development and Policy–I, this course examines sector-specific trends in key indicators and their implications in the post-Independence period.

#### **Course Outline**

##### **Module I: Agriculture: Policies and Performance**

Production and productivity; credit; labour; markets and pricing; land reforms; regional variations.

##### **Module II: Industry: Policies and Performance**

Production trends; small scale industries; public sector; foreign investment.

##### **Module III: Foreign Trade: Trends and Policies**

Balance of trade and balance of payments; India and the World Trade Organisation.

##### **Module IV: Tertiary sector**

Banking, Insurance , Information Technology

#### **Readings:**

1. Uma Kapila, *Indian Economy since Independence*, Academic Foundation, 19<sup>th</sup> edition (2009).
2. Government of India, *Economic Survey* (latest)
3. Government of India, *Five Year Plan* (latest)

## **DSE-4.**

### **ODISHA ECONOMY**

#### **Module-I: Basics of Odisha Economy:**

Demographic features – size of population, sex ratio, density, Literacy Rate, occupational pattern causes of population growth, population policy.

Features of Odisha Economy –Low percapita income, over population, Predominance of Agriculture, Unemployment, Unutilised resources, Capital deficiency, low level of technology, weak infrastructure.

#### **Module-II: Agriculture**

Importance of agriculture in Odisha economy, Causes of low productivity, Green revolution – features , problems & impact.

Land reforms in Odisha - salient features, The Estate Abolition Act – 1952, Bhoodan Movement, Mo – Jami, Mo – Diha campaign, Odisha State Agricultural policies.

#### **Module-III: Industry**

Importance of industrialization, Growth of industries in Odisha, Large scale industries , Small scale industries and cottage industries, Industry and environment.

Industrial Policy – 1991, 2001 and 2007, Public – Private partnership (PPP) mode. Mining and Quarrying.

#### **Module-IV : Planning in Odisha**

Introduction, Objectives, State planning Board, Review of Planning.Planning with NITI Ayog.NITI and Odisha.

Poverty – Head Count Ratio in Odisha, Rangarjan Committee Report on Poverty, Poverty by region, Poverty by Social group Mission Shakti, Measures to remove poverty.

#### **Readings**

1. Government of Odisha – Five year Plans
2. Odisha Economic Survey - 2014-15
3. Power Sector reform in Odisha – “A case study in Restructuring Planning commission of India”. – Planning Commission of India
4. “Odisha Budget (2015-16) at a Glance” (PDF) Finance Department, Govt. of Odisha
5. Vipin Sharma (24, January, 2013) “State of India’s Livelihood report, 2012. SAGE publication. Retrieved , 25 May, 2015
6. Odisha Economy, R.K. Pany & K.K.Pani, Kitab Mahal



# Generic Elective Papers

## INDIAN ECONOMY:PAPER - I

### Module- I

Economic scenario in the pre-British and British period. Structure & Organisation of Villages, Towns, Industries and handicrafts, Meaning of colonization, British rule and the exploitation of India.

### Module- II

Indian Economy at the time of Independence, Economic condition of India at the time of independence. The theory of drains and its pros and cons. Stagnation of Indian industries.

### Module- III

Planning process in India:

Meaning of Economic Planning. Important features of Indian Plans, Planning process in India, Objectives of economic planning, Targets and Achievement of Indian Plans

### Module- IV

Demographic Features of the Indian Economy: Meaning of population explosion, size and growth of Indian population, The problem of over population, Population policy. Poverty: Inequality and Unemployment:

Concept of poverty, Poverty alleviation programmes, Causes of Unemployment, Employment generation programmes.

### 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.

## INDIAN ECONOMY:PAPER - II

### Module- I

**Agriculture:** Role of agriculture in Indian Economy, Land tenure and tenancy reforms, Green revolution, Food problem and agriculture.

### Module- II

**Industries:** Role of Industries in Indian Economy, Types of Industries – Small Scale, Large Scale and Cottage Industries, Industrial Policies – 1948, 1956 & 1991, Industrial sickness.

### Module- III

**Transport & Communication:** Importance of transport in Economic development, Rail-Roads Co-ordination, Postal Communication & Tele Communication, Foreign Trade in India-Composition and direction.

### Module- IV

**Banking and Finance:** The Structure of financial system, Functions of Commercial Bank, Balance Sheet of Commercial Bank, Functions of Reserve Bank of India. Education, Health and Nutrition, Problems of Environment, Environment regulation, Environment and development controversy.

### 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.

# **Skill Enhancement Courses (SEC)**

## **Proposed by the Board of Studies Economics**

### **Skill Enhancement Course (SEC) I: FINANCIAL ECONOMICS**

#### **Course Description**

This course introduces students to the economics of finance. The course does not require any prior knowledge of economics. This course should be accessible to anyone with an exposure to elementary mathematics. The course is designed to impart the essential aspects of financial asset valuation. The students will be introduced to numerical techniques in finance using spreadsheet programmes such as Microsoft Excel. The course will impart skills that will be useful in a variety of business settings including investment banks, asset management companies and in the field of financial and business journalism.

**Module-I:** Introduction to Banking systems, Role of RBI, Non-Banking financial companies. Investment principles.

#### **Module II: Deterministic cash-flow streams**

Basic theory of interest; discounting and present value; internal rate of return; evaluation criteria; fixed-income securities; bond prices and yields; interest rate sensitivity and duration; immunisation; the term structure of interest rates; yield curves; spot rates and forward rates.

#### **Module III: Single-period random cash flows**

Random asset returns; portfolios of assets; portfolio mean and variance; feasible combinations of mean and variance; mean-variance portfolio analysis: the Markowitz model and the two-fund theorem; risk-free assets and the one-fund theorem.

#### **Module IV: Capital Asset Pricing Model (CAPM)**

The capital market line; the capital asset pricing model; the beta of an asset and of a portfolio; security market line; use of the CAPM model in investment analysis and as a pricing formula.

#### **Readings**

1. David G. Luenberger, *Investment Science*, Oxford University Press, USA, 1997.
2. Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, McGraw-Hill, 7<sup>th</sup> edition, 2002.
3. Burton G. Malkiel, *A Random Walk Down Wall Street*, W.W. Norton & Company, 2003.
4. Simon Benninga, *Financial Modeling*, MIT Press, USA, 1997.

## **Skill Enhancement Course (SEC) II: DATA ANALYSIS COMPUTER APPLICATION**

### **Course Description:**

This course introduces the student to collection and presentation of data. It also discusses how data can be summarized and analysed for drawing statistical inferences. The students will be introduced to important data sources that are available and will also be trained in the use of free statistical software to analyse data.

### **Module I :Basic Statistics:**

Basic statistical functions and analysis – mean, median, mode standard deviation, correlation, regression methods & techniques, estimation Linear trend and growth rate: Sources of data. Population census versus sample surveys. Random sampling. Univariate frequency distributions. Measures of central tendency: mean, median and mode; arithmetic, geometric and harmonic mean. Measures of dispersion, skewness and kurtosis. Bivariate frequency distribution. Correlation and regression. Rank correlation.

### **Module II: Data Analysis and Trend forecasting**

Introduction to probability theory. Notions of random experiment, sample space, event, probability of an event. Conditional probability. Independence of events. Random variables and probability distributions. Binomial and normal distributions. Estimation of population parameters from sample data. Unbiased estimators for population mean and variance. Basics of index numbers: price and quantity index numbers.:

### **Module III: Basic of Computer**

Computer fundamentals – Basic components and organization of a computer: History and generation of computer, Computer devices; Classification of Computers: Data representation, C. Representation, Computer Software-Dist Operating System (MS-DOS) and application software, programming languages and packages.

### **Module-IV :Use of computer Office Automation:**

Text editor and word processor, Operative familiarisation of MS WORD Concept & use of spread sheet, operation and use of MS – Excel Basic of Database, table records and fields, Data entry operating principle of MS-access; Document formation and presentation through MS-Power Point.

### **Readings**

1. Kerny(1993) – Essential of Microsoft, Words Excel, Prentice Hall of India, New India
2. Rajaraman, V. (1996) – Fundamentals of Computers, Prentice Hall (India) New Delhi
3. Schied, F(1983)- Theory and Problems of Computer and Programming, Schaum's outline series, McGraw Hill, New Dehil
4. Ron Mansfield(1994) – Compact guide to Microsoft office, BPH publication, New Delhi
5. B. Ram(1994)- Computer Fundamentals, New Age international New Delhi
6. V.P.Jagi & S Jain (1996) – Computer for Beginners, Academic publisher, New Delhi
7. Suresh. K. Basandra (1993) - Computer to-day, Galgotia Books
8. P.H. Karmel and M. Polasek (1978), *Applied Statistics for Economists*, 4th edition;Pitman.
9. M.R. Spiegel (2003), *Theory and Problems of Probability and Statistics* (Schaum Series).