## **B.A.(HONOURS)**

# CHOICE BASED CREDIT SYSTEM (CBCS) KHARIAR (AUTONOMOUS) COLLEGE, KHARIAR



## **ECONOMICS**

**ACADEMIC SESSION -2018-2021** 

## Syllabus for B.A. (Hons.) Economics

## **Course Structure for B.A. (Hons.) Economics:**

There are a total of fourteen economics core courses that students are required to take across six semesters. All the core courses are compulsory. In addition to core courses in economics, a student of B.A. (Hons.) Economics will choose four Discipline Specific Elective (DSE) Courses. The Discipline Specific Elective (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 Discipline Specific Elective (DSE) Courses in the fifth and sixth semesters to allow the students some minimal element of choice.

The syllabi for the Discipline Specific Elective (DSE) Courses are provisional and subject to revision.

<u>Contact Hours</u>: Each course has 5 lectures and 1 tutorial (per group) per week. The size of a tutorial group is 8-10 students.

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

<u>Eligibility for admission to B.A. (Hons) Economics</u>: Given the quantitative requirements of the program, only students who have passed mathematics at the Class XII level are eligible for admission.

Semester-I	Semester-II
<b>Economics Core Course 1 : Introductory Microeconomics</b>	Economics Core Course 3 : Introductory Macroeconomics
Economics Core Course 2 : Mathematical Methods for Economics-I	Economics Core Course 4 : Mathematical Methods for Economics-II
Ability Enhancement Compulsory Course (AECC)-I	Ability Enhancement Compulsory Course (AECC)-II
Generic Elective (GE) Course-I	Generic Elective (GE) Course-II

Semester-III	Semester-IV
<b>Economics Core Course 5 : Intermediate Microeconomics-I</b>	Economics Core Course 8 : Intermediate Microeconomics-II
Economics Core Course 6 : Intermediate Macroeconomics-I	Economics Core Course 9 : Intermediate Macroeconomics-II
<b>Economics Core Course 7 : Statistical Methods for Economics</b>	Economics Core Course 10 : Introductory Econometrics
Skill Enhancement Course (SEC)-I	Skill Enhancement Course (SEC)-II
Generic Elective (GE) Course-III	Generic Elective (GE) Course-IV

Semester-V	Semester-VI
<b>Economics Core Course 11 : Indian Economy-I</b>	Economics Core Course 13 : Indian Economy-II
<b>Economics Core Course 12 : Development Economics-I</b>	Economics Core Course 14 : Development Economics-II
Discipline Specific Elective (DSE) Course-I (From List of	Discipline Specific Elective (DSE) Course-III (From List of
Group-I)	Group-II)
Discipline Specific Elective (DSE) Course-II (From List of	Discipline Specific Elective (DSE) Course-IV (From List of
Group-I)	Group-II)
Group-I (Discipline Specific Elective (DSE) Courses)	Group-II (Discipline Specific Elective (DSE) Courses)
(i) Economics of Health and Education	(viii) Political Economy-II
(ii) Applied Econometrics	(ix) Comparative Economic Development (1850-1950)
(iii) Economic History of India (1857-1947)	(x) Financial Economics
(iv) Topics in Microeconomics-I	(xi) Topics in Microeconomics-II
(v) Political Economy-I	(xii) Environmental Economics
(vi) Money and Financial Markets	(xiii) International Economics
(vii) Public Economics	(xiv) Dissertation/Project

## **SEMESTER-I**

#### CORE ECONOMICS COURSE I: INTRODUCTORY MICROECONOMICS

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### **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.

#### **Course Outline**

#### 1. 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; profits;; rationing; opportunity sets;

#### 2. 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; how prices allocate resources; elasticity and its application;; consumer surplus; producer surplus and the efficiency of the markets.

#### 3. The Households

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;

#### 4. The Firm and Perfect Market Structure

Behaviour of profit maximizing firms and the production process; short run costs and output decisions; costs and output in the long run, Monopoly.

#### 5. Input Markets

Labour and land markets - basic concepts (derived demand, productivity of an input, demand for labour; input demand curves; shifts in input demand curves; competitive labour markets:

- 1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8<sup>th</sup> Edition, 2007.
- 2. N. Gregory Mankiw, *Economics: Principles and Applications*, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4<sup>th</sup> edition, 2007.
- 3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc., New York, International Student Edition, 4<sup>th</sup> Edition, 2007.

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

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

### **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 theundergraduate level, specifically the courses on microeconomic theory, macroeconomictheory, 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 applyingmathematical 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;

#### Module II:Functions of one real variable

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

#### 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: Functions of two or more independent variables

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

#### 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 - Crammer's rule.

- 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**

#### **GENERIC ELECTIVE**

#### INDIAN ECONOMY-I

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### **Unit-1 Introduction to Indian Economy**

Colonialism & British Rule: Exploitation and under development in India, Basic features of Indian economy, Indian economy as a developing economy, Demographic trends in India, Size and growth of population, Occupational structure, Sex composition, Age structure and demographic dividend, Causes of population growth and population policy.

#### **Unit-2 Indian Agriculture**

Role of agriculture in Indian economy, Cause of low productivity, Green revolution and land reforms, Agricultural finance-sources and problems, Agricultural marketing in India.

#### **Unit-3 Industrial Development in India**

Role of industrialization in Indian economy, Small scale & cottage industries, Meaning role, problems and remedies, Industrial policies of 1948, 1956, 1977 and 1991, Problems of industrial development in India, Industrial sickness.

#### **Unit-4 Service Sector in India**

Growth and contribution to GDP, Composition and relative importance of service sector, Factor determining growth of the sector, ICT and IT- spread and policy, Sustainability of services led growth.

#### **Unit-5 Current Challenges Facing Indian Economy**

- Unemployment-Meaning, importance employment Generation programmes, MGNREGS.
- Inequality in income distribution-causes there of Govt. Policy to check its growth.

#### **BASIC READING**

Kapila U. Indian economy since independence, Academic foundation, New Delhi

Misra, S.K. and Puri V.K. Indian economy- Its development experience Himalaya publishing house-Mumbai

Dutt R. and Sundharamj K.P.M. Indian economy. S.Chand and Company Lte. New Delhi

## **SEMESTER-II**

#### Core Economics Course 3: INTRODUCTORY MACROECONOMICS

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

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

- 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

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

### **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 atthe 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

#### 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;

### 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.

- 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**

#### **GENERIC ELECTIVE**

#### INDIAN ECONOMY-II

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### **Unit-1 External sector in India**

Trends, Composition & Direction in exports from and imports of India, Problems of balance of payment, Causes of deficit in Bol & measures to correct it, Trade policy-Export promotion Vs Import substitution, Foreign trade policy of India, WTO and India

#### **Unit-2 Finance market in India**

Commercial banking in India-Nationalisation of Bank, Lead Bank scheme and branch expansion, RBI-function, Monitary policy, Development Banking, IFCI, IDBI, SIDBI and NABARD.

#### **Unit-3 Indian public finance**

Public expenditure-Growth and composition, Causes of growth of public expenditure in India, Tax revenue of central and state governments, Concept of VAT, Deficit financing in India-Revenue, Budget, Fiscal and primary deficits, Purpose and effects of deficit financing. India's fiscal policy-objectives.

#### Unit-4 Economic reforms, Globalisation in India, Foreign capital & MNCs

Genesis of reforms, Macroeconomic stabilization, Structural reform, Appraisal Globalisation and its impact on the Indian economy Foreigh capital-Need, components.

MNCs- Reasons for Growth and Appraisal

#### **Unit-5 Current challenges facing Indian Economy**

- o Infiation- Causes, consequences and anti-inflationary policy
- o Poverty-Poverty line and estimates, Major poverty alleviation programmes.
- o Environmental degradation- Growth and environment, population growth and environment, Environmental policy.

#### **BASIC READINGS:**

Kapila U. Indian economy since independence, Academic foundation, New Delhi

Misra, S.K. and Puri V.K. Indian economy- Its development experience Himalaya publishing house-Mumbai

Dutt R. and Sundharamj K.P.M. Indian economy. S.Chand and Company Lte. New Delhi

Agarawala.A.N. Indian economy, New age publication, New Delhi.

## **SEMESTER-III**

## Core Economics Course 5: MICROECONOMICS I (Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

### 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 consumerand the producer and also covers the behaviour of a competitive firm.

#### **Course Outline**

### Module I: Consumer Theory I

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,

#### 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,

#### 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

#### **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,

#### **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.

- 1. C. Snyder and W. Nicholson (2012): Microeconomic Theory: Basic Principles and Extensions, 11th Edition, Cengage Learning, Delhi, India.
- 2. R. S. Pindyck, D. N. Rubinfeld and P. L. Meheta (2009): Microeconomics, 7th 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 workbookby Varian and Bergstrom may be used for problems.

## Core Economics Course 6: MACROECONOMICS I (Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### **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 ofpolicy 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.

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

Demand for Money – Classical, Neoclassical and Keynesian Approaches, TheKeynesian 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

- 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** (Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### **Course Description**

This is a course on statistical methods for economics. It begins with some basic conceptsand 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, 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,

#### 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; Laspeyer'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; Binomial distribution and poisson distribution and their properties

## 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. Speigel (): *Theory & Problems of Statistics*, Schaum's publishing Series.

### SKILL ENHANCEMENT COURSE (SEC) I: DATA ANALYSIS

(Unit-I will be examined for Mid-Term only and from Unit-II & Unit III for Term End Exam.)

## **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.

#### **Course Outline:**

- **Unit- 1**. Sources of data. Population census versus sample surveys. Random sampling.
- **Unit-2**. Univariate frequency distributions. Measures of central tendency: mean, median and mode; arithmetic, geometric and harmonic mean. Measures of dispersion, skewness and kurtosis.
- **Unit- 3**. Bivariate frequency distribution. Correlation and regression. Rank correlation.

- 1. P.H. Karmel and M. Polasek (1978), Applied Statistics for Economists, 4th edition, Pitman.
- 2. M.R. Spiegel (2003), Theory and Problems of Probability and Statistics (Schaum Series).

## **SEMESTER-IV**

#### Core Economics Course 8: MICROECONOMICS II

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### 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 andreasoning. It covers Market, general equilibrium and welfare, imperfect markets and topics underinformation 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, 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,

#### 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, Computable General Equilibrium Models

#### 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,

#### Module IV: Imperfect Completion

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, Signaling, How many firms Enter? Innovation

#### **Module V: Labour Markets**

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

- 1. C. Snyder and W. Nicholson (2012): Microeconomic Theory: Basic Principles and Extensions, 11th Edition, Cengage Learning, Delhi, India.
- 2. R. S. Pindyck, D. N. Rubinfeld and P. L. Meheta (2009): Microeconomics, 7th Edition, Pearson, New Delhi.
- 3. H. R. Varian (2010): Intermediate Microeconomics: A Modern Approach,8th 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: INTERMEDIATE MACROECONOMICS - II

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### **Course Description**

This course is a sequel to Intermediate 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.

#### **Course Outline**

#### 1. Economic Growth

Harrod-Domar model; Solow model; golden rule; technological progress and elements of endogenous growth.

#### 2. Microeconomic Foundations

- a. Consumption: Keynesian consumption function; Fisher's theory of optimal intertemporal choice; life-cycle and permanent income hypotheses; rational expectations and random-walk of consumption expenditure.
- b. Investment: determinants of business fixed investment; residential investment and inventory investment.
- c. Demand for money.

#### 3. Fiscal and Monetary Policy

Active or passive; monetary policy objectives and targets; rules versus discretion: time consistency; the government budget constraint; government debt and Ricardian equivalence.

#### 4. Schools of Macroeconomic Thoughts

Classicals; Keynesians; New-Classicals and New-Keynesians.

- 1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11<sup>th</sup> edition, 2010.
- N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7<sup>th</sup> edition, 2010.
   Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5<sup>th</sup> edition, 2009.
- 4. Charles I. Jones, *Introduction to Economic Growth*, W.W. Norton & Company, 2<sup>nd</sup> edition, 2002.
- 5. Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Education, Inc., 7<sup>th</sup> edition, 2011.
- 6. Errol. D'Souza, Macroeconomics, Pearson Education, 2009.
- 7. Robert J. Gordon, *Macroeconomics*, Prentice-Hall India Limited, 2011.

## Core Economics Course 10: Public Economics (Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

### 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 itsimplications for allocation, distribution and stabilization. Inherently, this study involves aformal analysis of government taxation and expenditures. The subject encompasses a hostof topics including public goods, market failures and externalities. The paper is dividedinto two sections, one dealing with the theory of public economics and the other with theIndian 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 III: Public Budget

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.

#### **Module V: Public Debt**

Sources, effects, debt burden – Classical, Ricardian and other views, shifting - intergenerational equity, methods of debt redemption, debt management, tax verses debt;

- 1. J. Hindriksand G. Myles (2006): *Intermediate Public Economics*, MIT Press.
- 2. R. A. Musgrave and P. B. Musgave(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.

## **SEMESTER-V**

## Core Economics Course 11: INDIAN ECONOMY I (Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

### **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: tends, sectoral composition;

#### Module IV: Economic Planning in India

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

#### 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.

- 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.

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

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### **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. Ithen proceeds to aggregate models of growth and cross-national comparisons of the growth experience that can help evaluate these models. The axiomatic basis for inequalitymeasurement is used to develop measures of inequality and connections between growthand inequality are explored. The course ends by linking political institutions to growthand inequality by discussing the role of the state in economic development and theinformational and incentive problems that affect state governance.

#### **Module I: Conceptions of Development**

Economic development, Economic growth and development, Factors affecting economic development, Characteristics of economic development, Obstacles to economic development, Criteria of economic development.

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

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

#### Module III:

Strategies of Economics development, Balance growth and unbalanced growth, Big push theory and critical minimum efforts theory.

#### Module IV

Democratic and International measures of economic development

- a) Capital formation of economic development
- b) Monitory policy of and fiscal policy of economic development External measures: Foreign capital and economic development, Foreigh trades and economic development.

#### Module V: 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

- 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. Amartya Sen (2000): Development as Freedom, OUP.
- 5. Daron Acemoglu and James Robinson (2006): *Economic Origins of Dictatorship and Democracy*, Cambridge University Press.

# DISCIPLINE SPECIFIC ELECTIVE(DSE)-1 GROUP-I (I)MONEY AND FINANCIAL MARKETS

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### **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**

#### 1. Money

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

#### 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.

#### 3. Interest Rates

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

#### 4. Banking System

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

#### 5. 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.

- 1. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions*, Pearson Education, 6<sup>th</sup> edition, 2009.
- 2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, *Foundations of Financial Markets and Institutions*, Pearson Education, 3<sup>rd</sup> 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.

#### DISCIPLINE SPECIFIC ELECTIVE(DSE)-II

#### **PUBLIC ECONOMICS**

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### **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.

#### **Course Outline**

#### Unit-I

- a. Meaning, Nature and Scope of Public economics.
- b. Fiscal functions: an overview.
- c. Public Goods: definition, models of efficient allocation, pure and impure public goods, free riding.

#### **Unit-II**

Externalities: the problem and its solutions, taxes versus regulation, property rights, the Coase theorem.

#### Unit-III

Taxation: its economic effects; dead weight loss and distortion, efficiency and equity considerations, tax incidence, optimal taxation.

#### **Unit-IV**

- a. Tax System: structure and reforms
- b. Budget, deficits and public debt

#### Unit- V

- a. Fiscal federalism in India
  - (I) A brief historical account up to 1935
  - (II) Finance commission and its function
  - (III) Centre-State financial relationship: Allocation of revenue resources between centre and state.

- 1. J. Hindriks, G. Myles: Intermediate Public Economics, MIT Press, 2006.
- 2. H. Rosen, T. Gayer: *Public Finance*, 9<sup>th</sup> ed., McGraw-Hill/Irwin, 2009.
- 3. Joseph E. Stiglitz, Economics of the Public Sector, W.W. Norton &

- Company, 3<sup>rd</sup> edition, 2000.
- R.A. Musgrave and P.B. Musgrave, *Public Finance in Theory & Practice*, McGraw Hill Publications, 5<sup>th</sup> edition, 1989.
   John Cullis and Philip Jones, *Public Finance and Public Choice*, Oxford University Press, 1<sup>st</sup> edition, 1998.
- 6. Harvey Rosen, *Public Finance*, McGraw Hill Publications, 7<sup>th</sup> edition, 2005.
- 7. Mahesh Purohit, Value Added Tax: Experiences of India and Other Countries, 2007.
- 8. Kaushik Basu and A. Maertens (ed.), The N e w Oxford Companion to Economics in India, Oxford University Press, 2013.
- 9. M.M. Sury, Government Budgeting in India, 1990.

## **SEMESTER-VI**

#### Core Economics Course 13: INDIAN ECONOMYII

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### **Course Description**

This course examines sector-specific polices and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indianempirical evidence. Given the rapid changes taking place in the country, the reading listwill 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, Industrialsickness; 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 verses import substitution; Balance of Payments of India; India's Trade Policies; Foreign Capital – FDI, Aid and MNCs.

- 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.

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

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### **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.

#### 1. 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.

#### 2. Land, Labor and Credit Markets

The distribution of land ownership; land reform and its effects on productivity; contractual relationships between tenants and landlords; land acquisition; nutrition and labor productivity; informational problems and credit contracts; microfinance; inter-linkages between rural factor markets.

#### 3. Planning and Development

Meaning of planning. Need for planning, Types of planning, role of planning in economic development, Invesment criteria and economic development, the problems of choice of techniques.

#### 4. 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.

#### 5. Globalization

Globalization in historical perspective; the economics and politics of multilateral agreements; trade, production patterns and world inequality; financial instability in a globalized world.

- 1. Debraj Ray, *Development Economics*, Oxford University Press, 2009.
- 2. Partha Dasgupta, *Economics, A Very Short Introduction*, Oxford University Press, 2007.
- 3. Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, *Understanding Poverty*, Oxford University Press, 2006.
- 4. Thomas Schelling, Micromotives and Macrobehavior, W. W. Norton, 1978.
- 5. Albert O. Hirschman, Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States, Harvard University Press, 1970.
- 6. Raghuram Rajan, Fault Lines: How Hidden Fractures Still Threaten the World Economy, 2010.
- 7. Elinor Ostrom, Governing the Commons: The Evolution of Institutions for Collective Action, Cambridge University Press, 1990.
- 8. Dani Rodrik, *The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist*, Oxford University Press, 2011.
- 9. Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (ed.), *Globalization in Historical Perspective*, University of Chicago Press, 2003.

#### (I) INTERNATIONAL ECONOMICS

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

### **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 then builds on the models of open economy macroeconomics developed in courses 08 and 12, focusing on national policies as well as international monetary systems. 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.

(Unit-I will be examined for Mid-Term only and from Unit-II to Unit V for Term End Exam.)

#### **Course Outline**

#### 1. Introduction

What is international economics about? An overview of world trade.

#### 2. Theories of International Trade

The Ricardian, specific factors, and Heckscher-Ohlin models; new trade theories; the international location of production; firms in the global economy outsourcing and multinational enterprises.

#### 3. Trade Policy

Instruments of trade policy; political economy of trade policy; controversies in trade policy.

#### 4. International Macroeconomic Policy

Fixed versus flexible exchange rates; international monetary systems; financial globalization and financial crises.

- 1. Paul Krugman, Maurice Obstfeld, and Marc Melitz, *International Economics: Theory and Policy*, Addison-Wesley (Pearson Education Indian Edition), 9<sup>th</sup> edition, 2012.
- 2. Dominick Salvatore, *International Economics: Trade and Finance*, John Wiley International Student Edition, 10<sup>th</sup> edition, 2011.

## SEMESTER - VI DSE - IV

A Project work is to be undertaken by the student in consultation with the teachers of the department. The student has to prepare the project under the supervision of a teacher of the department. Further, he/she has to submit one Seminar Paper in the department.

- 100 Marks- 75 Marks

Project Work/ Seminar.

A) Dissertation

B) Viva-voce. - 25 Marks.

The project work is to be evaluated by both the Internal & External Examiners and an External Examiner is to be invited to conduct the Project Evaluation and Viva-Voce.