

## **SEMESTER - I**

### **Microeconomics - I**

**Course code: ECO17101CR**

#### **Unit 1: Consumer Choice**

Budget constraint – properties of a budget set, changes in a budget line; Consumer Preferences – assumptions and examples; Well-Behaved Preferences; Marginal rate of substitution; Cardinal utility – constructing a utility function, Marginal Utility and MRS; Optimal Choice.

#### **Unit II: Demand Analysis**

Consumer demand and estimation of utility functions; Slutsky equation; Normal versus inferior goods; Types of demand functions; elasticity; welfare evaluation; Consumer surplus; Equivalent variation and compensating variation; Revealed preference (weak and strong axioms).

#### **Unit III: Theory of Production and Costs**

Production function; Returns to Factor and Scale; Cobb-Douglas and CES; Rate of technical substitution, technical progress; Short run and long run costs- Traditional and Modern Approach; Expansion path; Economies of scale.

#### **Unit IV: Market Structure**

Competitive Markets – demand and supply; demand and supply curves of individual firms; short-run versus long-run; competitive market equilibrium; Monopoly- market equilibrium; Price discrimination – first, second and third degree.

#### **Basic Reading List:**

1. Varian, H. R. (2010), Microeconomic Analysis –EWP and WW Norton and Co, Inc, New York
2. Varian, H. R. (2010), Intermediate Microeconomics – A Modern Approach, EWP and WW Norton and Co, Inc, New York.
3. Whinston, M. and Green (1995), Micro-economic Theory, Oxford University Press.
4. Pindyck, R.S., D. Rubinfeld and P. L. Mehta (2012), Microeconomics, Pearson Education, South Asia.
5. Salvatore, D. (2010), Microeconomics; Theory and Applications, Oxford University Press, New Delhi.
6. Baumol, W.J. (1982), Economic Theory and Operational Analysis, Prentice Hall of India.

**Note: Additional reading list is available with concerned teacher.**

## **SEMESTER - I**

### **Macro Economics-I**

**Course code: ECO17102CR**

#### **Unit I: Sectoral Demand Functions**

Consumption Function and Income Determination; Income Consumption Relationship; Life-cycle and permanent Income Theory of Consumption; Consumption under Uncertainty – the Random walk Model; Investment demand – Neo classical and Keynesian version (MEC approach); acceleration principle; Q theory of Investment.

#### **Unit II: Demand for Money**

Classical Approach to demand for money; Quantity theory for money – Fishers equation, Cambridge Theory, Keynes Liquidity preference approach; post Keynesian approach to demand for money; Bamoul and Tobin; Determinants of Real demand for money ; Seinograge, Optimum level of Seinograge.

#### **Unit III: Theory of Business Cycles**

Anatomy of Cycle; Multiplier – accelerator Interaction; Theories of Trade Cycle – Keynes, Hicks, Samuelsson , Kaldor, Godwin and Real Business cycle Theory .

#### **Unit IV: Theory of Output inflation and unemployment**

The demand and supply of labour; Keynesian unemployment and labour market; involuntary and full employment; neoclassical labour market equilibrium; Friedman's Theory of natural rate of unemployment and output; Philips– Monetarists and Keynesian version.

#### **Basic Reading List:**

1. Froyen, R. T. (2013), Macro Economics: Theories and Policies, Pearson Education,
2. Mankiw, N. G., (2008), Macroeconomics, Worth Publishers.
3. Branson, W.H. (2005), Macroeconomics Theory and Policy, Harper & Row, New York.
4. Romer, D. L. (2011), Advanced Macroeconomics, McGraw Hill Company Ltd. New York.
5. Dornbusch, E. and S. Fischer (1981), Macroeconomics, McGraw Hill International, Auckland.

**Note: Additional reading list is available with concerned teacher.**

## **SEMESTER - I**

### **Mathematics for Economics**

**Course code: ECO17103CR**

#### **Unit I: Basic Concepts**

Set Theory- Sets and set operations, Cartesian product of sets; Relations; Functions; one-to-one and onto functions— demand and supply functions; objective functions, Composite functions, Inverse functions and Binary operations; Logarithm and Exponents.

#### **Unit II: Differentiation**

Limit; Continuity and Differentiability of a function; Differentiation-Partial and Total differentials; Maxima and Minima; Derivatives of Implicit functions; Higher Order Differentiation; Euler's theorem; Uses of Differentiation in Economics; Applications of Differentiation; Constrained Optimization; Langragian Multiplier; Total revenue; total cost and product Curves.

#### **Unit III: Integration**

Integration- Concept and Fundamental Theorems; Indefinite and Definite Integrals; Economic Application of Integrals-Consumer's Surplus, Producer's Surplus, Investment and Capital formation.

#### **Unit IV: Matrix Algebra**

Matrices – Types and Operations; Determinants; Transpose; Ad-joint and Inverse of a matrix; Rank of a matrix; Cramer's rule; Matrix inversion method; Jacobian and Hessain Rule; Simultaneous Equations

#### **Basic Reading List:**

1. Chiang, A.C, (1984), Fundamental Methods of Mathematical Economics, Tata McGraw Hill,
2. Allen, R. G. D, (2003), Mathematical Analysis for Economists, The Macmillan Press, New Delhi.
3. Henderson, M. J., (2006), Microeconomics Theory, Tata McGraw- Hill, New Delhi.
4. Yamane, T., (1995), Mathematics for Economists, Prentice Hall of India, New Delhi.
5. Gupta, S. C. and V. K. Kapoor (2014), Fundamentals of Mathematical Statistics, Himalaya publishing House, New Delhi.

***Note: Additional reading list is available with concerned teacher.***

## **SEMESTER - I**

### **Statistical Methods**

**Course code: ECO17104DCE**

#### **Unit I: Probability and Distribution**

Meaning and definition of Probability; Probability Rules; Addition Rule; Multiplication Rule; Bay's theorem; Conditional probability; Concept of a random variable- Discrete and continuous; Expected values of a random variable; Variance of a random variable; Discrete random variables- Bernoulli; Binomial; Poisson, Continuous random variables- The normal distribution, Chi-square distribution.

#### **Unit II: Theory of Sampling**

Data collection-Primary and Secondary sources; Methods of collecting primary data; Sampling -Types; Small and large samples - Properties and Comparison, Sampling distribution; Central limit theorem; Designing a Household Sample survey.

#### **Unit III: Hypothesis Testing**

Testing of hypothesis- Level of significance and Level of confidence, Confidence limits and Critical Region; Tests of significance- Type I and II errors; Goodness of fit; One tailed and two tailed tests; Hypothesis testing based on Z test, t tests, Chi-square and F tests.

#### **Unit IV: Correlation Regression and Economic Forecasting**

Correlation—meaning and scope; Karl Pearson's Coefficient of Correlation; rank Correlation; Partial and Multiple Correlation; Regression-Meaning and Scope; Simple and Multiple Regression; Forecasting; Nature and decomposition of a time series.

#### **Basic Reading List:**

1. Barrow, M. (2006), Statistics for Economics, Accounting and Business Studies, Prentice Hall.
2. Gupta, S. C. (2011), Fundamentals of Statistics, Himalayan Publishing House, New Delhi.
3. Gupta, S. P. (2012), Statistical Methods, Himalayan Publishing House, New Delhi.
4. Floyd, J. E. (2010), Statistics for Economists: A Beginning,, University of Toronto.
5. Hogg, R.V. and A.T. Craig Hogg, (1970), Introduction to Mathematical Statistics, Macmillan Publishing Co., New York.
6. Hogg, R.V. and E.A. Tanis, (1993), Probability and Statistical Inference, Macmillan Publishing Company, New York.
7. Clarke, G. M. and D. Cooke, (1992), A Basic Course in Statistics, Arnold Publishing House.

***Note: Additional reading list is available with concerned teacher.***

## **SEMESTER - I**

### **Financial Institutions and Markets**

**Course code: ECO17105DCE**

#### **Unit I: Nature and Role of Financial System**

Financial System-Structure; Financial System and economic development—from financial neutrality to financial activism; from financial volatility to financial stability; Role of Government in financial Development; Theories of the impact of Financial Development on Savings and Investment—Prior Saving Theory; Financial Regulation theory; Financial Liberalization theory.

#### **Unit II: Financial Markets**

Classification of Financial Markets - Functions of Financial Markets; Instruments of developed money and capital markets; Characteristics of Financial Instruments; Derivatives Markets-types.

#### **Unit III: Financial Intermediaries and Central Bank**

Financial Intermediaries – Classification, Role and Functions ; Central Banking— Evolution, Role and Functions; Monetary policy— Goals, Tools, Targets and Limitations.

#### **Unit 1V: Financial Instruments and Services**

Mutual Funds - Evolution and Types; Classification of financial services – Merchant banking, Underwriting, Credit Rating, Venture Capital, Factoring, ADRs and GDRs.

#### **Basic Reading List:**

1. Mishkin, F. (2015) The Economics of Money: Banking and Financial Markets, Addison Wesley Longmate, New York.
2. Bhole, L. M. (2009), Financial Institutions and Markets, Tata McGraw Hill, New Delhi.
3. Hubbard, G. R. (1997), Money, the Financial System and Economy, Addison Wesley, New York.
4. Gupta, S. B. (2001), Monetary Economics, S. Chand and Co. Ltd, New Delhi.
5. Bhasin, N. (2009), Monetary Banking and Financial Developments in India, New Century Publications, New Delhi.

**Note: Additional reading list is available with concerned teacher.**

## **SEMESTER - I**

### **Industrial Economics**

**Course code: ECO17106DCE**

#### **Unit I: Firm's Behaviour**

Industrial Economics- Conceptual framework and scope; Organizational pattern of firms— Private sector, Public sector, and Joint sector; Objectives of a firm; Industrial efficiency—Concept, determinants and its measurement; Profitability— Concept and its measurement.

#### **Unit II: Market Structure**

Standard Form of market structure-Conceptual Framework; Workable competition; Market concentration-concepts and its measurement; Market structure and Innovation-concept and relationship Crony Capitalism ; Race to the Bottom.

#### **Unit III: Theories of Industrial Location and Growth**

Downie's theory of growth of firm; Industrial location-- Determinants of Industrial location, Industrial location theories —Webers and Sergent Florence; Diversification - Meanings and objectives, Vertical Integration and Merger.

#### **Unit IV: Investment Decisions and Industrial Financing**

Nature and types of investment decisions; Methods of project evaluation— the payback method; The net present value method, Internal rate of return method; Industrial finance—Need, Types and Sources of Finance; Choice of Funding.

#### **Basic Reading List:**

1. Barthwal, R.R. (2010), Industrial Economics: An Introductory Textbook, (3rd ed.) New Age International. New Delhi
2. Ferguson, P. R. & G. J. Ferguson (1994), Industrial Economics: Issues and Perspectives, Palgrave Macmillan, New York
3. Kuchhal, S.C. (1989), Industrial Economy of India , Chaitanya Publishing House, Allahabad
4. Hay, D.D and D.I. Morris (1991), Industrial Economics Theory and Evidence, Oxford University Press.
5. Ferguson, P. R., H. Dodge and Anselm Haverkamp (1994), Industrial Economics: Issues and Perspectives, New York University Press.

***Note: Additional reading list is available with concerned teacher.***

## **SEMESTER-I**

### **Economics of Social Sector**

**Course No: ECO17107DCE**

#### **UNIT I: Introduction to Social Sector**

Social sector— concept and its constituents; Social exclusion and inclusion; Social Development Index; Social Progress index-2016; Human Capital— the concept and components; Human capital versus physical capital; human capital and human development.

#### **Unit II: Economics of Education**

Meaning and scope of Economics of Education; Education as consumption and Investment goods; Cost of Education— Expenditure on education, private costs and social Costs; direct, indirect and opportunity costs; Benefits of Education— direct and indirect benefits.

#### **Unit III: Economics of Health**

Meaning and Scope of Economics of Health; Concept of medical health and health care; Health as consumption and Investment good; Role of health in economic development; health as human capital; Economic dimension of health care— demand and supply of health care; Government intervention in health care markets— economic rationale and forms.

#### **Unit IV: Issues in Social Sector in India**

Primary education—achievements and concerns; Case for compulsory and free education; Higher education in India—changing perspective; Education and earnings; growth of higher education; New education Policy 2016; Role of private sector in health care; Public sector— Health care issues; National Health Policy 2017.

#### **Basic Reading List:**

1. Blaug, Mark (1972), Introduction to Economics of Education, Penguin, London.
2. Folland, S. (2009), The Economics of Health and Health care, Pearson Prentice Hall, New Delhi
3. Parikh, K. S. (ed) various issues, India Development Report, Oxford University Press, New Delhi.
4. Kundu, A. (2006) India Social Development Index, Oxford University Press, New Delhi.
5. Govinda, R. ( 2002) India Education Report, Oxford University Press, New Delhi.
6. Mishra, R (2003), India Health Report, Oxford University Press, New Delhi.

**Note: Additional reading list is available with concerned teacher.**

## **SEMESTER - I**

### **Introduction to Economics**

**Course code: ECO17108GE**

#### **Unit I: General Economics I**

Introduction— descriptive, economic theory and applied economics; Law of Demand and Supply; Utility- Cardinal and Ordinal measurement; Marginal Utility; Indifference Curve and Consumer's Equilibrium; National Income- Concepts and Measurement; Inflation- types, causes and consequences; Unemployment- types and causes.

#### **Unit II: General Economics II**

Growth and Development – concepts and measures; Public finance—Taxation; Expenditure and Debt; Budget analysis; International Trade— free trade vs protection, Balance of Payments; Introduction to Monetary and Fiscal policy.

#### **Basic Reading List:**

1. Stonier and Hague (1982), A Text book of Economic Theory, Penguin Publication.
2. Dwivedi, D.N. (2007), Microeconomics, Tata McGraw Hill, New Delhi.
3. Ahuja, H.L. (2007), Advanced Economic Theory— Microeconomic Analysis, S. Chand & Company, New Delhi.

**Note: Additional reading list is available with concerned teacher.**



## **SEMESTER - I**

### **Planning and Development**

**Course code: ECO17109GE**

#### **Unit I: Introduction**

Development Planning – Concept and Approaches; Market Economy – Market mechanism and development, Market failures; Rationale and practice of Planning; Government intervention in promoting development; Government Failure, Social Capital and Economic Development.

#### **Unit II: Theory and Practice**

Measuring development- HDI and MDPI; Classical approach to development: an overview; Strategies for development – Balanced vs Unbalanced; Critical minimum effort thesis and Reins- Fei Model; Economic development – Issues in Human capital formation and employment; Poverty inequality and unemployment— An experience of developing economies.

#### **Basic Reading List:**

1. Mishra, S.K. and V. K. Puri, (2016), Economics of Development and Planning, Himalayan Publishing House, New Delhi
2. Thirlwal, A.P. (2003), Growth and Development, Macmillan Press Ltd., U.K.
3. Todaro & Smith (2005), Economic Development, Longman, London.
4. Jhingan, M. L. (2006), The Economics of Development and Planning, Vrinda Publications, New Delhi.

**Note: Additional reading list is available with concerned teacher.**

## **SEMESTER- I**

### **Elementary Microeconomics**

**Course code: ECO171100E**

#### **Unit I: Consumer and Producer Behaviour**

Introduction to Economics; concept and analysis of Demand and Supply; Elasticity of demand & supply; utility – cardinal & ordinal; Marginal utility and the law of diminishing marginal utility; Budget line; indifference curve; Consumer's equilibrium.

#### **Unit II: Market Structure**

Theory of production- production function; Law of diminishing returns; Law of Variable Proportions; Returns to scale; Production Costs – various concepts, Market - concept and Forms; Behaviour of a competitive firm; Short run and long run equilibrium.

#### **Basic Reading List:**

1. Dwivedi, D.N. (2007), Microeconomics, Tata McGraw Hill, New Delhi.
2. Ahuja, H.L. (2007), Advanced Economic Theory— Microeconomic Analysis, S. Chand & Company, New Delhi.
3. Koutsayiannis, A. (1997), Microeconomics, McMillan Press, London

**Note: Additional reading list is available with concerned teacher.**

## **SEMESTER – II**

### **Microeconomics II**

**Course code: ECO17201CR**

#### **Unit I: Oligopoly and Behavioural Economics**

Theory of games; Mixed strategies; Nash equilibrium; sequential games; Oligopoly-quantity leadership; price leadership; collusion and punishment strategies; Introduction to behavioural economics – framing; uncertainty; time; strategic interactions and social norms.

#### **Unit II: Uncertainty and Information**

Contingent consumption; utility functions and probabilities; Expected utility; Risk aversion; Risk spreading; Asymmetric information-Market for lemons; Market signalling; Principle-agent problems; Moral Hazard

#### **Unit III: Distribution**

Neo-classical approach—Marginal productivity theory; Product exhaustion theorem; Elasticity of technical substitution and factor shares; Technical progress and income distribution; Pricing of fixed factors of production. Aggregative distributive dichotomy; justice as fairness – Rawls.

#### **Unit IV: Theory of Exchange and Welfare**

The Edgeworth box; trade, pareto efficient allocations and market trade; the algebra of equilibrium; Walras law; relative prices; efficiency and equilibrium; algebra of efficiency and the theorems of welfare economics; Aggregation of preferences; Social welfare functions; Welfare maximization; Arrow's impossibility theorem.

#### **Basic Reading List:**

1. Varian, H. R (2010), Microeconomic Analysis –EWP and WW Norton and Co, Inc, New York
2. Varian, H. R. (2010), Intermediate Microeconomics – A Modern Approach, EWP and WW Norton and Co. Inc., New York
3. Pindyck, R.S., D. Rubinfeld and P. L. Mehta (2012), Microeconomics, Pearson Education, South Asia.
4. Salvatore, D., (2010), Microeconomics; Theory and Applications, Oxford University Press, New Delhi.
5. Nicholson, W. (1992), Microeconomic Theory: Basic Principals and Extensions, The Driden Press , USA.
6. Baumol, W.J. (1982), Economic Theory and Operational Analysis, Prentice Hall of India

*Note: Additional reading list is available with concerned teacher.*

## **SEMESTER – II**

### **Macroeconomic II**

**Course No: ECO17202CR**

#### **Unit I: Neo-classical and Keynesian models of income determination**

Keynesian IS-LM model; Neoclassical IS-LM model; factors determining the slope and shifts in IS and LM functions; Comparative static analysis in Keynesian and Neo-classical model; monetary and physical policies in Keynesian and Neo-classical models.

#### **Unit II: Three sector macro models**

Aggregate demand and Aggregate supply; Neoclassical three sector model; Keynesian three sector model; Mundell-fleming model; imperfect and perfect capital mobility; relative effectiveness of monetary and fiscal policies under perfect and imperfect capital mobility.

#### **Unit III: Recent developments in macro-economic theory**

Monetarism-central propositions; new classical economics- theory of rational expectations; Lucas imperfect information model; supply side economics- laffer curve, Regan and supply side; success or failure; new Keynesian economics- central propositions; sticky prices, insider- outsider and efficiency wage models.

#### **Unit IV: Macroeconomic policy and debates**

Policy debates in Macroeconomics- dynamic inconsistency- the rule vs. discretion debate; case for central bank independence; inflation targeting – concept and experience, Taylors rule; monetary policy in light of trilemma configuration; Macro level impact of Global financial crises.

#### **Basic Reading List:**

1. Mankiw, N. G. (2008), Macroeconomics, Worth Publishers,
2. Romer, D. L. (2011), Advanced Macroeconomics, McGraw Hill Company Ltd. New York
3. Branson, W. H. (2005), Macroeconomics Theory and Policy, Harper & Row, New York
4. Levacic R. and A. Rebman (1982), Macroeconomics – An Introduction to Keynesian – Neoclassical Controversies, Macmillan Press Ltd., London.
5. Wendy C. and D. Soskice (2007), Macroeconomics – Imperfections, Institutions and Policies, Oxford University Press, New York.
6. Froyen R. (2013), Macroeconomics, Pearson Education, Delhi.
7. Dornbush R., S. Fischer and R. Stratz (2004), Macroeconomics, Tata McGraw-Hill, New- Delhi

***Note: Additional reading list is available with concerned teacher.***

## **SEMESTER- II**

### **History of Economic Thought**

**Course No: ECO17203CR**

#### **Unit I: Ancient and Medieval Economic Thought**

Importance of studying Economic thought; Approaches to the history of economic thought; Greek thought – An Overview of Economic ideas of Plato and Aristotle; Arab Islamic thought— Al-Ghazali and Ibn-Khaldun; Indian Economic thought— Koutilya and Gandhi; Mercantilism – Balance of Trade Doctrine; Modern analysis of Mercantilism; Physiocracy ; Net Product and Quesnay’s Tableau of Economique.

#### **Unit II: Classical Economic Thought**

Classical Thought—Adam Smith— General Philosophy; Doctrine of Harmony and Lassize Faire; Theory of Value; David Ricardo— Theory of Value and Distribution; Malthus— theory of Population, Theory of Gluts; Karl Marx –Chief Tenents; Theory of Surplus Value.

#### **Unit III: Restatements of Classical School of Thought**

J B Say— Concept of Political Economy; Restatements of Smith’s theories; J S Mill— theory of value; Lassize Faire and Protection; Nassau Senior— Four propositions; J Bentham— Social reforms and Utilitarianism.

#### **Unit IV: Marginalism and Neo-Classical School of Thought**

Marginalists school— A Revolution in Theory With special emphasis on Jevons, Menger and Walras; Inadequacies of Classical theory of Value; Classical versus Neoclassical theory of Value; Alfred Marshall— Scope of Political Economy; Philosophy and Method; Distribution of Income. Keynes system of economic thought---General Characteristics.

#### **Basic Reading List:**

1. Stanley, L. Brue and R. R. Grant (1994), The Evolution of Economic Thought, South-Western Cengage Learning, USA.
2. Landreth. H. and D.C Colander ( 2001), History of Economic Thoughts, Houghton Mifflin Company, Boston
3. Guide and Rist (1973), A History of Economic Doctrine. Oxford University Press, New Delhi
4. Haney, L. (1979), History of Economic Thought, Surjeet Publications, New Delhi.
5. Hunt, E. K.(2011) , History of Economic Thought: A Critical Perspective, Armonk, New York.
6. Blaug, M. (2012), Economic History in Retrospect, Cambridge University Press, London.

***Note: Additional reading list is available with concerned teacher***

## **SEMESTER- II**

### **Basic Econometrics**

**Course code: ECO17204DCE**

#### **Unit I: Basic Statistical Concepts**

Normal distribution; Chi-sq, t and F distributions; Estimation of parameters; Properties of estimators; Interval estimation and Hypotheses testing; Tests of significance and confidence interval approach.

#### **Unit II: Basic Regression Analysis**

Nature, meaning and scope of Econometrics; Data Issues; time series, cross section and panel data; Simple and general linear regression model; Assumptions, Estimation through OLS approach; Gauss-Markov theorem; Concepts and derivation of  $R^2$  and adjusted  $R^2$ .

#### **Unit III: Problems in Regression Analysis**

Nature, test, consequences and remedial steps of problems of Heteroscedasticity; Multi-co-linearity and Auto-correlation; Non-normality; Problems of specification error; Errors of measurement.

#### **Unit IV: Qualitative Variables in Regression**

Dummy variable technique—Testing structural stability of regression models; Interaction effects; Seasonal analysis; Piecewise linear regression; Use of dummy variables; Regression with dummy dependent variables; The Linear Probability Model; Logit and Probit models.

#### **Basic Reading List:**

1. Gujarati, D.N. (2009), Basic Econometrics, McGraw Hill, New Delhi.
2. Wooldridge, J. (2012), Introductory Econometrics: A Modern Approach, Cengage Learning.
3. Johnston, J., (2015), Econometric Methods, Tata McGraw Hill, New Delhi.
4. Kennedy, P. (1998), A Guide to Econometrics, MIT Press, New York.
5. Goldberger, A. S. (1998), Introductory Econometrics, Harvard University Press, Cambridge.
6. Maddala, G. S. (1993), Econometric Methods and Applications, Edward Elgar Publishing Ltd. U. K.

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER- II**

### **Monetary Economics**

**Course code: ECO17205DCE**

#### **Unit I: Nature and Role of Money**

Money and Near money; Significance of near money; Monetary standards- Gold Standard and paper standard, Value of money- measurement of value of money; Construction of Price Index Numbers; Difficulties in measuring the changes in value of Money.

#### **Unit II: Theories of Demand for Money**

Demand for money— Classical and Keynes Theories; Baumol-Tobin money demand model; Friedman's wealth theory; Neo-classical theory of money; Keynes' income theory of money.

#### **Unit III: Supply of Money**

Money supply- Approaches to the definition of money supply; components of money supply; The H theory of money supply; Money multiplier process; Determinants of money multiplier; Reserve bank's analysis of money.

#### **Unit IV: Theories of Interest Rates**

Theories of interest rate-Classical; Loanable funds, Liquidity Preference and Neo-Keynesian theory; Term structure and risk structure of interest rates; Theories of term structure of interest rates— Expectations theory, Market segmentation theory, preferred habitat theory.

#### **Basic Reading List:**

1. Lloyd (1979), Money Banking and Economic Activity, Addison Wesley.
2. Mishkin F. (2015), The Economics of Money: Banking and Financial Markets, Addison Wesley Longmate.
3. Bhole, L. M. (2009). Financial Institutions and Markets. Tata McGraw Hill Comp New Delhi.
4. Gupta, S. B (2010), Monetary Economics. S. Chand and Com. Ltd. New Delhi.
5. Hubbard, G. R. (1997), Money, the Financial System and Economy. Addison Wesley.
6. Burton, M. and B. Brown (2009), The Financial System and the Economy Principles of Money and Banking, Prentice Hall of India, New Delhi.

***Note: Additional reading list is available with concerned teacher***

## **SEMESTER - II**

### **Labour Economics**

**Course code: Eco 17206DCE**

#### **Unit I: Labour Market and Employment**

Nature and characteristics of labour market; The classical, New-classical and dual economy labour markets; Demand for labour relating to size and pattern of investment and choice of technology; Supply of labour in relation to growth of labour force; Employment and development relationship.

#### **Unit II: Wage Determination – Theory and Practice**

Classical, Neo-classical and Bargaining theory; Various concepts of wages—minimum wages; living wages and fair wages; Problem of implementation of minimum wages; Wage determination in urban and rural sector – organized and unorganized; Wage and non-wage components and labour remuneration.

#### **Unit III: Industrial Relations and Trade Unions**

Growth of industrialization and emergence of unionism; Theories of labour movement—The Marxian View; Theory of industrial Democracy by Sidney and Beatrice Webb; Growth; structure and pattern of trade unionism in India; Achievements of trade union movement in India; Determinants of industrial disputes.

#### **Unit IV: State and Labour**

Role of state; labour matters and safety nets; labour laws— labour legislations in India, Industrial Disputes Act; Trade Union Act; Employees State Insurance Act; International labour Organisation— role and functions;

#### **Basic Reading List:**

1. Borjas, G. J. (2012), Labour Economics. McGraw -Hill, New York.
2. Pierce, C. (2015), Labour Economics, Prentice Hall India Learning Ltd
3. Mcconnell, C. R., S. L Brue and D.A. Machperson (2003) Contemporary Labour Economics, McGraw-Hill, New York.
4. Joshi, M. V. (2014), Labour Markets and Labour Economics, Atlantic Publications
5. Sapsford, D. (2014), Labour Market Economics, Routledge
6. Sharma, A. K. (2006), Labour Economics, Anmol Publication, New Delhi
7. EhrenBerg, R. G. and R. S. Smith (2012), Modern Labour Economics: Theory and Public Policy; Addison Wesley, NYC.
8. Institute of Human Development, (2014), India Labour and Employment Report: Workers in the Era of Globalization, Academic Foundation.

***Note: Additional reading list is available with concerned teacher.***



## **SEMESTER- II**

### **Agriculture Economics**

**Course code: Eco17207DCE**

#### **Unit I: Introduction**

Nature and scope of agricultural economics; Factors affecting agricultural development— technological, institutional and general; Interdependence between agriculture and industry; terms of trade between agriculture and industry; Approaches to agricultural development— Lewis, Ranis-Fei, Mellor, Schultz.

#### **Unit II: Agricultural Production and Productivity**

Agricultural production – Resource and efficiency in traditional agriculture; Production function analysis in agriculture; Factor combination and resource substitution; Decomposition Model; Cost and supply curves; Size of farm and laws of returns – Farm budgeting and cost concepts; Supply response of individual crops and aggregate supply; Technical change and agricultural productivity.

#### **Unit III: Demand and Supply of Farm Products**

Characteristics of demand for farm products; Concept and measurement of own price; Cross Price and income elasticity's of demand and their interrelationship; Quantity and quality components of demand; Characteristics of supply of farm products; Issues relating to specification of supply response function (Distributed lags, acreage vs. production response etc.).

#### **Unit IV: Agriculture Marketing**

Agriculture Marketing – Concept and Objectives; Differences in Agricultural and Consumer Marketing; Constraints in Agricultural marketing; Agribusiness –Emerging Branches- Non Conventional forms of Agribusiness ; Export potential for farm products; Supporting Services; SCM in agri-business i.e. Cold Chains; Organized procurement.

#### **Basic Reading List:**

1. Mellor, J.W. (1969), The Economics of Agricultural Development, Cornell University Press.
2. Subbarao, K. (1989), Agricultural Marketing and Credit, ICSSR.
3. Heady, E.O. (1961), Economics of Agricultural Production and Resource use, Prentice Hall, New York.
4. Penson, J. B., O. Capps and C.P Rosson, (1996), Introduction to Agricultural Economics, Prentice Hall.
5. Debertin, D. L. (2012), Agricultural Production Economics, Macmillan Publishing Company, New York.
6. Reddy S. S., P. R Ram, N. Sastry and B. Devi, (2006), Agricultural Economics, Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi.

***Note: Additional reading list is available with concerned teacher.***

## **SEMESTER- II**

### **Industrial Organisation**

**Course No: ECO 17208GE**

#### **Unit-I: Introduction**

Industrial economics - need and significance; Organizational structure of a firm - Objectives of firms; Theories of growth of firms; Sales and Growth maximization hypothesis; Profitability – determinants and measurement; Economics of Integration; Diversification and Mergers.

#### **Unit-II Industrial Location and Market Structure**

Theories of Industrial Location- Weber and Sergeant Florence; Market concentration-measurement; Sellers' concentration; Product differentiation; Market structure and innovation- concept and relationship; measurement of innovation; diffusion of new technology.

#### **Basic Reading List:**

1. Barthwal, R. R. (2010), Industrial Economics: An Introductory Textbook, New Age International, New Delhi.
2. Kuchhal, S. C. (1989), Industrial Economy of India, Chaitanya Publishing House, Allahabad.
3. Hay. D. D and D. I. Morries (1991), Industrial Economics Theory and Evidence, Oxford University Press.

*Note: Additional reading list is available with concerned teacher*

## **SEMESTER-II**

### **Elementary Statistics**

**Course code: ECO-17209-GE**

#### **Unit I: Central Tendency and Dispersion**

Measures of central tendency – meaning, objectives and characteristics of average; Types of averages –arithmetic mean, median, mode and geometric mean; Measures of Dispersion – Concept and types; range, quartile deviation; mean deviation and standard deviation.

#### **Unit II: Probability and Random Variable**

Concept of Probability; Elements of probability theory – sample space, events, Compound and independent events; Addition and Multiplication laws of probability; Random variable- discrete and continuous; Binomial Distribution and Normal Distribution.

#### **References:**

1. Barrow M. (2006), Statistics for Economics, Accounting and Business Studies, Prentice Hall.
2. Gupta S. C. (2011), Fundamentals of Statistics, Himalaya Publishing House, Mumbai.
3. Gupta S. P. (2012), Statistical Methods, Himalaya Publishing House, New Delhi.

**Note: Additional reading list is available with concerned teacher**

**SEMESTER- II**  
**Elementary Macro Economics**  
**Course No: ECO172100E**

**Unit 1: Two sector models**

Classical views on full employment; Quantity theory of money; Determination of output and employment; Classical theory of interest rate; Keynes' criticism of classical macroeconomic theory; Concept of aggregate supply and aggregate demand; Determination of equilibrium level of income.

**Unit 2: Inflation and business cycle**

Business cycle – features, phases, causes and consequences; Stabilization policies; Fiscal policy and direct controls; Inflation – Meaning and types; Demand pull and cost push inflation; Causes and effects of inflation.

**Basic Reading List:**

1. Ahuja, H. L. (2009), Macroeconomic -Theory and Policy, S. Chand and Company Ltd. New Delhi.
2. Mithani, D. M. (2014), Macroeconomics, Himalaya Publishing House Pvt. Ltd. Mumbai.
3. Shapiro, E. (2005), Macroeconomic Analysis, Galgotia Publications, New Delhi.

**Note: Additional reading list is available with concerned teacher**

**SEMESTER - III**  
**Economics of Development**  
**Course No: ECO17301CR**

**Unit I: Poverty, Inequality and Development**

Concept and measures of poverty; Chennery-Ahluwalia Welfare Index; Construction of poverty weighted Index of social welfare; Measurement of income inequality-Lorenz curve; properties of a desirable inequality measure; Goulet's and A.K. Sen's concept of development – capabilities approach; Concept and assessment of Development Gap.

**Unit II: Theories of Development**

Myrdal's theory of circular and cumulative causation; The new economic geography-Krugman's theory; Lewis' model of unlimited supply of labour; Organizational dualism and economic development (HlaMynt) – stylized framework of a developed organized and underdeveloped unorganized economy; Kremer's O-Ring theory of economic development.

**Unit III: Sectoral Aspects of Development**

Importance of industry and agriculture in economic development – the model of complementarities between industry and agriculture; Structure of labour markets in developing countries; Theory of Rural-Urban migration and Harris- Todaro model; Choice of techniques and appropriate technology; Choice of techniques and conflict in objectives.

**Unit IV: Role of institutions and Resource Allocation**

Role of market and market failure; Role of state and state failure; Role of community and community failure; Project appraisal- cost- benefit analysis; Technique of shadow pricing- little-mirrlees and UNIDO Approach.

**Basic Reading List:**

1. Thirlwal, A. P. (2014), Growth and Development, Palgrave Macmillan, U.K.
2. Todaro, M.P. and Smith (2013), Economic Development, Pearson Education, Delhi.
3. Meir, G. M. and J. E. Rauch (1997), Leading Issues in Economic Development, Oxford University Press, New York.
4. Sharp, A. M., C. A. Register and R. H. Leftwich (1988), Economics of Social Issues, Universal Bookstall, New Delhi.
5. Gills, M. Perkins, Romer and Snodgrass (1989), Economics of Development, W.W. Norton and Company, New York.
6. Ray, D. (2010), Development Economics, Oxford University Press, New Delhi.

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER - III**

### **International Trade**

**Course code: ECO17302CR**

#### **Unit I: Pure Theories of International Trade**

Classical theories of International trade – brief review; Theory of Reciprocal demand; Heckscher-Ohlin theory; Factor price equalization theorem; Empirical verifications of Heckscher-Ohlin theory— Leontief paradox; Factor intensity reversal.

#### **Unit II: Alternative Theories of International Trade**

International trade under imperfect competitions; Economies of scale and international trade; intra industry trade; Strategic trade theory; Technological gap model; Product cycle model.

#### **Unit III: Theories of Protection and Economic Integration**

Tariff—general equilibrium effects analysis; Optimum tariff; Effective rate of Protection; Stolper-Samuelson theorem; Non Tariff Barriers (NTBs); Regional economic integration— types; Theory of customs union—trade creation and trade diversion.

#### **Unit IV: Growth Effects and Problems of Developing Countries**

Effects of growth on trade; Rybczynski Theorem; Immiserizing growth; Trade problems of developing country; Outward and inward trade strategy; International cartels; Theory of Dumping; Prebisch-Singer Hypothesis.

#### **Basic Reading List:**

1. Soderston, B. and G Reed (1999), International Economics, McMillan Press Ltd., London.
2. Krugman, P. R. and M. Obstfeld (2012), International Economics- Theory and Policy, Addison Wesley, New Delhi.
3. Salvatore, D. (2011), International Economics, Wiley India, New Delhi.
4. Marrewijk, C. V. (2007), International Economics: Theory, Application and Policy, Oxford University Press, New York.
5. Chacholieds, M. (1999), International Economics, Macmillan Publication.
6. Kindleberger, C.P. (1978), International Economics, R. D. Irwin Inc., Illinois.

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER - III**

### **Indian Economic Development**

**Course No: ECO17303CR**

#### **Unit 1: Economic Development since Independence**

Major features of the economy at independence; growth and development under different policy regimes—goals, constraints, institutions and policy framework; an assessment of performance—sustainability and regional contrasts; structural change, savings and investment.

#### **Unit 2: Population and Human Development**

Demographic trends and issues; Migration and Urbanization – concept, extent and issues; education- status and policy interventions; health and malnutrition – extent, issues and policy response.

#### **Unit 3: Growth and Distribution**

Concept of Poverty – absolute and relative – temporary and chronic – measures of poverty – functional impact of poverty; Trends and policies in poverty; inequality and unemployment – extent, incidence and trends; Public policies of employment generation.

#### **Unit 4: Growth dynamics and Macroeconomic Policies**

Changing contours of state & market in Indian economic growth; distribution and structural change – Comparative historical perspective; Trade and investment policy; fiscal and monetary policies; New tax regime - GST.

#### **Basic Reading List:**

1. Nayak, P. (2015), Economic Development of India (Critical Concepts in Economics), London & New York, Routledge, 2015
2. Drèze, J. and A.K. Sen (2013); *An Uncertain Glory India and Its Contradictions*, Princeton University Press.
3. Panagariya, A. (2008), *India the Emerging Giant*, Oxford University Press.
4. Krueger, A. (2003), *Economic Policy Reforms and the Indian Economy*, Oxford University Press.

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER - III**

### **Advanced Econometrics**

**Course No: ECO17304DCE**

#### **Unit I: Dynamic Econometric Models and Panel Data Models**

Autoregressive and distributed lag models- Koyak model; Partial adjustment model; adaptive expectations; Almon approach to distributed-lag models; Instrumental Variable Approach; Panel data- Balanced and unbalanced panel; Methods of Estimation: Fixed effects model and Random effect model.

#### **Unit II: Simultaneous Equations Models**

Simultaneous equations models- Introduction and examples; The simultaneous equation bias and inconsistency of OLS estimators; The identification problem; Rules of identification- order and rank conditions; Methods of estimating simultaneous equation system.

#### **Unit III: Time Series Analysis**

Stochastic Difference equations; Stationarity; Unit roots, Co-integration-spurious regression; Dickey-Fuller test; Engle-Granger test; Random walk model; Error correction mechanism; Casuality test; Granger and Sim's tests; Forecasting with ARIMA modeling; Box-Jenkins methodology; Vector auto-correlation; Problems with VAR modelling – Applications.

#### **Unit IV: Software Application.**

This is an applied course in data analysis anchored on the theory and method of regression. Since the emphasis is on application of methods, this course requires understanding of econometric software and computing skills. The aim of the course is to provide the students with the theoretical tools and practical experience necessary to do applied econometric research and as such the lecture sessions will include a number of illustrations of empirical econometric studies and their possible estimation using the same data sets in workshop sessions. Students will apply the techniques learned in this course using **Stata/E-views/R**.

#### **Basic Reading List:**

1. Gujarati, D. N. (2009), Basic Econometrics, McGraw Hill, New Delhi.
2. Wooldrige, J. (2012), Introductory Econometrics: A modern approach, Cengage Learning
3. Johnston, J. (2015), Econometric Methods, Tata McGraw Hill, New Delhi
4. Kennedy P. (1998), A Guide to Econometrics, MIT Press, New York
5. Goldberger, A. S. (1998), Introductory Econometrics, Harvard University Press, Cambridge, Mass.
6. Maddala, G. S. (1993), Econometric Methods and Applications, Edward Elgar Publishing Ltd. U. K
7. STATA Manual, (2016), STATA Press.

**Note: Additional reading list is available with concerned teacher.**



## **SEMESTER - III**

### **Economics of Conflict**

**Course Code: ECO17305DCE**

#### **Unit I: Theoretical foundations**

Definition Scope and Methodology of Conflict Economics; Production Possibilities and the Guns versus Butter Trade-Off - Production Possibilities Model; Rational Choice and Equilibrium – General; Fundamentals of Game Theory; Extensive and Normal Forms - Solutions and Equilibriums; Chicken and Prisoner's Dilemma Games; Repeated Prisoner's Dilemma.

#### **Unit II: Anatomy of Conflicts**

Political economy of conflict; Economic agendas in armed conflict; Greed and Grievance – The Collier-Hoeffler Model on Civil War Onset; A Bargaining Model of Conflict - Elements of Conflict; Sources of Violent Conflict; A Rational Choice Model of Terrorism; Game Theoretic Perspectives of Terrorism.

#### **Unit III: Armed conflict and developing countries**

The extent, nature and causes and costs of armed conflict in developing countries; Estimating the costs of war – the economists' approach; Stewart's model of costs of war – Analytical framework and application; Economic reconstruction and recovery - Government versus the market in recovery; Major economic recovery tasks; The peace dividend; Key issues in economic recovery; Structural adjustment and stabilization programmes.

#### **Unit IV: Conflict and Economic Welfare - The Kashmir Case**

The Kashmir Conflict – Genesis and major developments since 1947; the conflict – economy linkages; Macro and Micro effects of Kashmir conflict; armed conflict and tourist Preferences; Militarization and land grabs.

#### **Basic Reading List:**

1. Anderton, C. H. & J. R. Carter (2009), Principles of Conflict Economics, A Primer for Social Scientists, Cambridge University Press.
2. Harris, G. (1999), Recovery from Armed Conflict in Developing Countries, Routledge.
3. Bose S. (2003), Kashmir - Roots of Conflict, Paths to Peace, Harvard University Press Cambridge, Massachusetts.
4. Thorner A. (1949), The Kashmir Conflict, Middle East Journal, Vol. 3, No. 1.
5. Darzi, T. A and J. I. Khan, (2013), Unrest and Tourist Preferences: With special reference to Tourism Industry in Kashmir Valley, SAJTH, July 2013, Vol. 6, No. 2.

**Note: Additional reading list is available with concerned teacher**

**SEMESTER - III**  
**J & K Economy**  
**Course No: ECO17306DCE**

**UNIT1: Introduction**

Main Features of Jammu & Kashmir Economy; Political Economy of development and governance; New Kashmir Manifesto - 1944; Agrarian transition and restructuring; Decentralized planning and administration in J&K.

**UNIT 2: Jammu & Kashmir –Macro Economic Scenario**

Behaviour of SGDP and Per Capita SGDP since 1950; Sectoral Composition of SGDP- Inter Temporal Changes and their Implications; Poverty, Inequality and unemployment in the State- Magnitude Dimensions and implications; Issue of fragility and economic uncertainty.

**Unit 3: Agriculture**

Agriculture and its development since 1947; Diversification issues in agriculture; Structural transformation and state of agriculture; Situating J&K agriculture in North Indian states; Horticulture Sectors in J&K-Development and Potential.

**Unit 4: Industry and services**

Industrial Sector in the State - Scope, Issues and Policies; Appraisal of PSU's in Jammu and Kashmir; Role of Private sector in Industrial development; Tourism-Tourism potential in Jammu, Kashmir and Ladakh regions; In-flow after 2010; Revenue and Developmental Initiatives; Sustainability issues in tourism; Cross LOC trade.

**Basic Reading List:**

1. Yasmin E. and Javaid Iqbal (2017), Perspectives on Jammu and Kashmir Economy. Bookwell, New Delhi.
2. DES, Digest of Economics and Statistics, latest issue, Government of J&K, Srinagar.
3. Godbholey Committee Report on Economic Reforms for J&K(1998), Government of J&K, Srinagar.
4. Bhat, M. S. & M. L. Misri (1994), Poverty Planning and Economic Change in J&K, Vikas Publishing House, New Delhi
5. Bakshi, S. R. (2002), History of Economic Development in Kashmir, Gulshan Publishers Srinagar.
6. Khan J. I. (2012), Jammu and Kashmir Economy, The Directorate of Distance Education, University of Kashmir.

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER - III**

### **Gender and Development**

**Course No: Eco17307DCE**

#### **Unit I: Introduction**

Gender — Conceptual and theoretical Framework; Gender stereotyping in Work- Undervaluation of women's work; Gender discrimination—Role of culture and Religion; Gender perspectives of development; Measures of development-GDI and GEM; Feminisation of Economy; Feminisation of poverty; Role of women in Economic development.

#### **Unit II: Women and Labour**

Concept of women's work; Valuation of productive and non productive work; Visible and invisible work; paid and unpaid work economically productive and socially productive work; Gender sensitive national Income estimation; Women in labour market; Factors affecting female entry in labour market; Gender and wage differentials.

#### **Unit III: Women's access to resources**

Women Work and Decision Making; Female work- participation rate and their Economic status in developing countries; Impact of technological development and modernization on women's work participation in various sectors; Factors affecting decision making by women; Property rights, access to and control over economic resources; Assets power of decision making at household and community level.

#### **Unit IV: Gender Development policy in India**

Gender Development Policy in India; Mainstreaming gender into development policies; Gender sensitive governance; Paradigm shifts from women's well being to women's empowerment; Democratic decentralization (Panchayats) and women's empowerment in India; National commission of women; Committee on the Elimination of discrimination Against Women (CEDAW); National policy for the empowerment of women (2001); Gender budgeting.

#### **Basic Reading List:**

1. Raka, R. (2012), Handbook of Gender, Oxford University Press.
2. Pal, B. and B. Vasular (2011), Gender and Discrimination (Health, Nutritional status and Role of Women in India, Oxford University Press.
3. Agarwal, B. (2010), Gender and Green Governance: "The Political Economy of Women's Presence within and Beyond Community Forestry, Oxford University Press.
4. Kochhar, K., S. Das and N. Kumar and S. J. Chandra, (2015), Women Workers in India: Why so few among few, IMF Working Paper, Asia and Pacific Department.
5. Huyers, (2016), Closing the Gender Gap in Agriculture, Gender Technology and Development, Sage Journal, Volume 20 (2).
6. Twelfth Five Year Plan – 2012-17, Planning Commission, Government of India.

***Note: Additional reading list is available with concerned teacher***

**SEMESTER - III**  
**International Economics**  
**Course No: ECO17308GE**

**Unit I: Trade**

An introduction to International trade; Theory of Absolute and Comparative advantage; Factor Endowments theory; Instruments of trade policy; cost and benefits of tariffs; Globalisation and Economic integration.

**Unit II: Finance**

Structure of international financial system; Balance of Payments; Foreign Exchange Market; Structure & Functions; Exchange rates; Types of foreign exchange transaction; Hedging, Speculation and Arbitrage.

**Basic Reading List:**

1. Salvatore, D. (2011), International Economics, Wiley India, New Delhi.
2. Carbaugh, R. J. (2008), International Economics, Cengage Learning, New Delhi.

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER - III**

### **Econometrics**

**Course code: ECO17309GE**

#### **Unit I: Basic Concepts**

Nature, meaning and scope of Econometrics; Data Issues; Time series; Cross section and panel data; Simple and general linear regression; Line of Best Fit; PRF and SRF.

#### **Unit II: Basic Regression Analysis**

Assumptions of OLS; Estimation through OLS approach; Properties of Estimators; Gauss-Markov theorem; Concepts of  $R^2$  and Adjusted  $R^2$ ; Violations of Classical Assumptions.

#### **Basic Reading List:**

1. Gujarati, D.N., (2009), Basic Econometrics, McGraw Hill, New Delhi.
2. Wooldridge, J. (2012), Introductory Econometrics: A Modern Approach, Cengage Learning.
3. Kennedy, P. (1998), A Guide to Econometrics, MIT Press, New York.

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER - III**

### **Financial Markets**

**Course No: ECO173100E**

#### **Unit I: Introduction and Concepts**

Financial System –Structure; Classification of Financial Markets; Instruments of developed money and capital markets; Derivatives market-concept and types.

#### **Unit II: Stock Exchange**

Stock market - evolution; Stock Exchange in India – OTCEI, National Stock Exchange; Bombay Stock Exchange; Stock Exchange Regulations- SEBI; Working and Functions.

#### **Basic Reading List:**

1. Miskin, F. (2015), The Economics of Money: Banking and Financial Markets, Addison Wesley Longmate, New York.
2. Hubbard, G. R. (2007), Money, The Financial System and Economy, Addison Wesley, New York.
3. Bhole, L. M. (2002), Financial Institutions and Markets, Tata McGraw Hill, New Delhi.
4. Gupta, S. B. (2011), Monetary Economics, S. Chand and Co. Ltd, New Delhi.
5. Khan, M. Y. (2009), Indian Financial System. Tata McGraw Hill, New Delhi

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER - IV**

### **Economics of Growth**

**Course No: ECO17401CR**

#### **Unit I: Economic Growth**

Growth-conceptual and theoretical perspectives; Technical progress— embodies and disembodied; Hicks and Harrod; Learning by doing; Production function approach to the analysis of growth; Accounting for sources of growth; Classical theories of growth.

#### **Unit II: Basic Growth Models**

Harrod and Domar models; Neo-classical growth models of Solow and Meade; Cambridge growth model of Mrs. Joan Robinson and Cambridge criticism of neoclassical growth theory.

#### **Unit III: Endogenous Growth Theory**

Contribution of education to growth – Denison's and production function approach; Technology creation through R&D spending; Modelling relationship between technology creation and growth; Endogenous growth models – AK model, Romer model and two sector model of Ujawa.

#### **Unit IV: Growth Theory: International Aspects**

Trade and growth; Models of regional growth and differences- Prebisch and Seers; Dependency theory and unequal exchange; Models of export-led growth; Neoclassical supply side model; Balance of payments; constrained growth model; virtuous circle model.

#### **Basic Reading List:**

1. Weil, D.N. (2009), Economic Growth, Pearson Education, India.
2. Thirwal, A. P. (2011), Growth and Development, Palgrave Macmillan, U.K.
3. Barro, R. J. and Sala-i-Martin (2007), Economic Growth, Prentice Hall of India, New Delhi.
4. Gills, M. Perkins, Romer and Snodgrass, (2009), Economics of Development, W.W. Norton and Company, New York.
5. Todaro M.P. and Smith (2009), Economic Development, Pearson Education, Delhi.

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER - IV**

### **Public Economics**

**Course No: ECO17402CR**

#### **Unit I: Fundamentals of Public Economics**

Public Economics: conceptual framework; scope and schools of thought; Tools of Budget Analysis; Role of government– allocation, distribution and stabilization; Externality theory; Internalising an externality; Coase theorem.

#### **Unit II: Public Goods**

Optimal provision of Private and Public goods; Free Riders Problem; Cost Benefit analysis; Problems of allocating resources-preference revelation and aggregation; Political Economy- Lindahl Pricing; Mechanisms for aggregating Individual preferences: Arrow's Impossibility Theorem; Politico-eco-bureaucracy; Optimal Fiscal federalism and Tibeout model.

#### **Unit III: Public Expenditure and Taxation**

Public expenditure - Wagner's and Wiseman-Peacock hypothesis; Pure theory of public expenditure; Reforms in public expenditure- programme budgeting and zero-base budgeting; Taxation and types; measuring fairness of tax systems; Tax Incidence; Taxation and economic efficiency; Dead-weight loss; Theory of Optimal Taxation.

#### **Unit IV: Fiscal Federalism in India**

Concept and evolution of Fiscal Federalism; Centre-State financial relations; Sources of Revenue; Trends in Resource Transfer from Centre to State; Principles of Multi Unit Finance; Budget Deficit and Its Implications; New tax regime – GST.

#### **Basic Reading List:**

1. Gruber, J. (2016), Public Finance and Public Policy, MIT.
2. Rosen, H. (2013), Public Finance. MIT Press.
3. Stiglitz, J. E. (2015), Economics of Public Sector, Norton, New York.
4. Jha, R. (1998), Modern Public Economics, Routledge London.
5. Musgrave and Musgrave (2005), Public Finance in Theory and Practice, Tata McGraw Hill, New Delhi.
6. Atkinson, A. B. and J. E. Stiglitz, (1980); Lectures on Public Economics, Tata McGraw Hill, New York.
7. Cullis, J. and P. Jones (1998), Public Finance and Public Choice, Oxford University Press.
8. Musgrave R. A. (1959), The Theory of Public Finance, McGraw Hill, Tokyo.

**Note: Additional reading list is available with concerned teacher**



## **SEMESTER - IV**

### **Environmental Economics**

**Course No: ECO17403CR**

#### **Unit I: Fundamentals of Environmental Economics**

Environmental Economics – conceptual framework, scope and rationale; Environment and the human economy – inter-linkages and trade-off; Market failure and environmental degradation – public goods, externalities and Common Property Resource; Sustainability – concept and indicators.

#### **Unit II: Measurement of Environmental Values**

Concept and types of environmental value; Valuation of benefits – Methodological issue; Hedonic pricing approach; Travel cost approach; Contingent valuation technique.

#### **Unit III: Economics of Environmental Regulation**

Rationale for regulation; Coasian approach; Pigovian taxes; Command and control methods; Economic incentives – Effluent and emission taxes; Tradable pollution permits; liability laws.

#### **Unit IV: International Environmental Issues**

Trade, development and climate change; International environmental externalities; Trans-boundary pollution; Global environmental challenges; International response to climate change; Carbon trading and Kyoto Protocol.

#### **Basic Reading List:**

1. Hussain, A.M. (1999), Principals of Environmental Economics, Rutledge, London.
2. Hanley N. (1999), Environmental Economics in Theory and Practice, Macmillan India Ltd, New Delhi
3. Kolstad, C.D. (1999), Environmental Economics, Oxford University Press, New Delhi.
4. Singh K. and Shishodia A. (2011), Environmental Economics: Theory and Application, SAGE Publication India Pvt Ltd., New Delhi
5. Acharya, R. (2013), Trade and Environment, Oxford University Press, New Delhi
6. Batacharya, R.N. (2001), Environmental Economics—An Indian Perspective, Oxford University Press, New Delhi.
7. Pearson, C. S. (2000), Economics and Global Environment, Cambridge University Press.

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER - IV**

### **International Finance**

**Course No: ECO17404DCE**

#### **Unit I: Foreign Exchange Markets**

Structure and functions of foreign exchange markets; Exchange rate determination; Foreign exchange transactions; Forward exchange market; Hedging, speculation and arbitrage; Theories of Exchange rate determination – Purchasing power parity theory; Asset market approach.

#### **Unit II: BOP Adjustments Mechanism**

Balance of Payments; Adjustment under flexible and fixed exchange rate system—price and income adjustments; Monetary approach to balance of payments; Devaluation—elasticity and absorption approaches.

#### **Unit III: International Monetary System**

Types of International monetary system; Evolution, operation and collapse of Bretton Woods system; International Monetary Fund (IMF); International Bank for Reconstruction and Development (IBRD); Fixed and flexible exchange rate system; Euro currency markets; Euro bond market.

#### **Unit IV: International Financial Crisis**

International Debt crisis; International Financial Derivative; Currency crisis—concept and characteristics; First, Second and Third generation models of currency crises; Recent Financial Crises- Causes and consequences.

#### **Basic Reading List:**

1. Soderston, B. and G. Reed (1999), International Economics, McMillan Press Ltd., London.
2. Krugman, P. R. and M. Obstfeld (2012), International Economics- Theory and Policy, Addison Wesley, New Delhi.
3. Salvatore, D. (2011), International Economics, Wiley India, New Delhi.
4. Carbaugh, R. J, (2008), International Economics, Cengage Learning, New Delhi
5. Marrewijk, C. V. (2007), International Economics: Theory, Application and Policy, Oxford University Press, New York.
6. Chacholieds, M. (1999), International Economics, Macmillan Publication.
7. Kindleberger, C. P. (1978), International Economics, R. D. Irwin Inc., Illinois.

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER - IV**

### **Issues in Indian Economy**

**Course No: ECO17405DCE**

#### **Unit 1: Agriculture**

Agricultural policy-costs and prices; Agricultural prices and PDS; Impact of public expenditure on agricultural growth; Agricultural taxation—a debate; Sustainability of agriculture and food security in India; Land acquisition.

#### **Unit 2: Industry and trade**

Structure and composition of Industry – issues of concentration; large vs small industry; Industrial location; Small scale reservation policy; Trends and patterns of industrial growth; Foreign trade regime; protection and foreign competition; Productivity; Import substitution versus export; Competitiveness; Effect on export competitiveness.

#### **Unit 3: Poverty, Inequality and Inflation**

Poverty and exclusion; NREGA; Social security for unorganized sector; Unemployment—types, causes and consequences; Population pressure—economic effects; Inequality—extent, consequences and remedies; Regional imbalance—extent, consequences and remedies; Parallel economy in India—Demonetisation.

#### **Unit 4: Infrastructure and Development**

State of infrastructure – reforms, restructuring, pricing and regulation; Promoting investment in infrastructure – public and private partnership; Sectoral Issues – energy, transport, telecom and urban infrastructure; Human development indicators – review of change since early fifties, wide regional variations; Environmental protection – Sustainable Development Goals.

#### **Basic Reading List:**

1. Pulin, N. (2015), Economic Development of India (Critical Concepts in Economics), London & New York, Routledge.
2. Panagariya, A. (2008), India: The Emerging Giant, Oxford University Press.
3. Krueger, A. (2003), Economic Policy Reforms and the Indian Economy, Oxford University Press.
4. Dandekar, V.M. (2004), The Indian Economy 1947-97; transforming traditional Agriculture Vol. I
5. Kurian, C.T. (1978), Poverty Planning and Social Transformations-An Alternative in Development Planning, Allied Publishers, New Delhi.

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER-IV**

### **Indian Financial System**

**Course No: ECO17406DCE**

#### **Unit I: Introduction**

Indian Financial System—An overview; Macroeconomic dimensions of financial system; Major issues in Indian financial system; Financial Sector Reforms in India—a review; Basel Reforms—implication for Indian Banking.

#### **Unit II: Financial Markets**

Structure, Functions and Organizations; Money Market – Features, Instruments and limitations; Capital Market – instruments and importance; Un-regulated credit markets—types, functions and limitations.

#### **Unit III: Financial Intermediaries**

Financial Intermediaries – Structure, functions and importance; Banking financial intermediaries- types; Commercial banking — liabilities and asset management; RBI's monetary policy and credit controls; Non-Banking Financial intermediaries – types; Development banking--structure and functions.

#### **Unit IV: Stock Exchange and its Regulations**

Stock Exchange – Importance and methods of trading; Organization and working of-OTCEI, National Stock Exchange, Bombay Stock Exchange; SEBI – Working and Functions; Recent Regulation.

#### **Basic Reading List:**

1. Khan, M. Y. (2015), Indian Financial System, Tata McGraw Hill, New Delhi.
2. Bhole, L. M. (2009). Financial Institutions and Markets, Tata McGraw Hill Company New Delhi
3. Bhasin, N. (2009), Monetary Banking and Financial Developments in India, New Century Publications New Delhi
4. Gordon E. and K Natrajan,( 2009), Financial Markets and Institutions, Himalayan Publishing House,New Delhi
5. Machiraju, M. R. (1999), Indian Financial System, Vikas Publishing House, New Delhi.
6. Surry, M. M. (2004), Indian Economy in 21<sup>st</sup> Century, Tax Foundation of India, New Delhi.
7. Reddy, Y. V. (2001), Monetary and Financial Sector Reforms in India, UBS Publishers and Distributors Ltd., New Delhi.

**Note: Additional reading list is available with concerned teacher**

**SEMESTER - IV****Project Work****Course code: ECO17407DCE**

Project Work shall be Discipline Centric to be carried out under the supervision of concerned teacher of the department. The project work shall be submitted in the form of a typed dissertation limited to a maximum of 100 pages. The report will be evaluated by one internal and one external examiner followed by presentation of the work and viva voce. The project report will carry 100 marks (04 credit) comprising 75 marks (03 credit) for dissertation and 25 marks (01 credit) for presentation and viva voce examination.

## **SEMESTER - IV**

### **Public Finance**

**Course code: ECO17408GE**

#### **Unit I: Fundamentals of Public Finance**

Public Finance— definition, scope and schools of thought; Role of government— allocation, distribution and stabilization; Characteristics of Public goods; Merit goods; Free Riders Problem – Market failure Externality theory; Internalizing an externality.

#### **Unit II: Public Expenditure and Taxation**

Budget – types and Tools of Budget Analysis; Public expenditure – concepts; Wagner’s and Wiseman-Peacock hypotheses, Public Revenue – Sources and Types; Taxation – types and incidence; Goods and Services Tax (GST).

#### **Basic Reading List:**

1. Gruber, J. (2016), Public Finance and Public Policy, MIT Press.
2. Lekhi, R. K. (2010), Public Finance, Kalyani Publishers, New Delhi
3. Rosen, H. (2013), Public Finance. MIT Press.
4. Stiglitz, J. E. (2015), Economics of Public Sector, Norton, New York.
5. Musgrave and Musgrave, (2005), Public Finance in Theory and Practice, Tata McGraw Hill, New Delhi.
6. Mundel, S. (1999), Public Finance Policy -Issues for India. Oxford University Press, New Delhi.

***Note: Additional reading list is available with concerned teacher***

## **SEMESTER - IV**

### **Indian Economy: Features and Analysis**

**Course code: ECO17409GE**

#### **Unit I: Basic Features**

Indian Economy—An Introduction, background, main features and geographic size; Endowment of natural resources— land, water, forest and energy with emphasis on recent policies in these areas; Population—size, composition, rural urban migration; Population policy—need and present status.

#### **Unit II: National Income and Planning**

National income and per-capita income; Sectoral and regional distribution; CSO estimates of National Income – old vs new methodology; GDP growth; Concept and evolution of Planning in India.

#### **Basic Reading List:**

1. Dutt, R. & K. P. M. Sundaram, (2016), Indian Economy, S. Chand & Co. New Delhi.
2. Misra, S. K. & V. K. Puri, Indian Economy (2016), Himalayan Publishing House, New Delhi

**Note: Additional reading list is available with concerned teacher**

## **SEMESTER - IV**

### **Banking and Finance in India**

**Course No: ECO174100E**

#### **Unit I: Banking in India**

Commercial banks – Growth and regional distribution; Banking legislation –1949; Nationalization of commercial banks; Co-operative banks – Growth, Structure and Functions; Regional Rural Banks – Role and functions; NABARD, IDBI – structure, working and role.

#### **Unit II: Indian Public Finance**

Union finance – Central sources of income; Trends in revenue and expenditure; State finance – Sources of state revenue; Expenditure of state governments; Public debt since 1951; Types of Budget.

#### **Basic Reading List:**

1. Paul, R. R. (2015), Monetary Economics, Kalyani Publishers, New Delhi.
2. Mundel, S. (1999), Public Finance Policy –Issues for India. Oxford University Press New Delhi.
3. Lekhi, R. K. (2010), Public Finance, Kalyani Publishers, New Delhi.
4. Bhasin, N. (2009), Monetary Banking and Financial Developments in India, New Century Publications, New Delhi.

**Note: Additional reading list is available with concerned teacher**