

SEMESTER-I

MICROECONOMICS –I

Course Code: ECO-501-C
Credits: 4

Marks: 100
Internal =50
External=50

Objectives: The aim of the course is to understand and analyze in a comprehensive manner various aspects of consumer behavior and demand analysis, Production theory and theory of cost along with equilibrium of firm and various forms of market.

After the completion of the course the students will be able to

CO1: Develop the capability and understanding of tools used for the analysis of consumer behavior

CO2: To understand the producer behavior, tools of analysis and application of techniques

CO3: Unfold the conditions of market, structure, types and firms behavior

CO4: Particularize various models of oligopoly market

UNIT-I: Consumer Behavior

The nature of Economics, The Boundaries of Economics, Economics issues; Factors of production; Resource allocation; Opportunity cost; Production Possibility Curve; Basic Economic questions; choice and scarcity; Economic Models; Alternative expressions of Economic Model. Theory of Consumer Behavior: Laws of Cardinal Utility Analysis; Laws of Diminishing and Equi-marginal Utility; Indifference Curve Analysis; Consumer's Equilibrium and properties of Indifference Curves; Slutsky Substitution Effect; Hicks-Allen Substitution Effect; Income Compensated Demand Curve; Elasticity of Demand; Revealed Preference theory, Critical evaluation.

UNIT-II: Production and Cost

Production function: Short period and Long Period, Law of variable proportions and returns to scale, Isoquants: Producer's Equilibrium; least cost Combination of Inputs; Maximization of Outputs; Production function of Multi Product firm. The Production possibility curve of the firm. The ISO-revenue curve of the multi-product firm; Equilibrium of the Multi product firm; Technical Progress and production function; Elasticity of Technical Substitution between factors. The Traditional Theory of cost: Short Run Costs; Long Run Costs (the Envelope Curve), Internal and External Economics and dis-economics of scale. Modern Theory of costs (the L-shaped Long Run Average costs Curve).

UNIT-III: Market Analysis-I

Market structures and forms: perfect competition: features: short run and long run equilibrium: Monopoly features; Profit maximizing output of a monopolist; short run and long run equilibrium; Barriers to entry. Price discrimination; Degrees; Price Discrimination in case of dumping; conditions necessary for possibility of price discriminations. Monopolistic competition: Meaning and characteristics: short run equilibrium and long run equilibrium; Excess capacity under monopolistic competition. The relevance of monopolistic competition; Criticism of monopolistic competition.

UNIT–IV: Market Analysis-II

Oligopoly: Characteristics; Non collusive (Cournot's Duopoly Model Bertrand's Duopoly Model. Edgeworth's Model. The kinked demand curve Model and Stackelberg's Model) and Collusive Oligopoly (Cartels aiming at joint profit maximization; Market sharing Cartels; Price leadership Model of Low Cost price leader; The model of Dominant Firm Price Leader. Bilateral Monopoly Model: Wage Determination under collective Bargaining.

Suggested Readings

1. Baumol, W.j. (1982) Economic Theory and Operations Anaylysis, Prentice Hall of India, New Delhi, Delhi.
2. Da Costa GC (1980) Production, Prices and Distribution, Tata Macgraw Hill, New Delhi
3. Hirshleifer, J and A. Glazer (1997) Price Theory and Application, Prentice Hall of India, New Delhi.
4. Jack Hirshleifer, Amihal Glazer (1997) Price Theory and Application, Prentice Hall of India, New Delhi. 5. Koutsoyiannis, A (1979), Modern Microeconomics, (2nd Edition) Macmillan Press, London.
6. Richard G Lipsey: Cohn Harbury, (1992) First Principles of Economics, (2nd Edition), Oxford University Press.
7. Stigler, G. (1996) Theory of Price, (4th Edition), Prentice Hall of India, New Delhi. 8. Varian, H. (2000) Microeconomics Analysis, W.W, Norton, New York
8. Varian, H. (2000) Microeconomics Analysis, W.W, Norton, New York

MACROECONOMICS-I

Course Code: ECO-502-C
Credits: 4

Marks: 100
Internal =50
External=50

Objectives: Macroeconomics deals with the movement, fluctuations and growth in economic aggregates like income, employment interest rates and the price level. It attempts to explain the past behaviour of such variables, predicts the likely future events, and helps policy makers to formulate the appropriate policies for improving the economic welfare of a country. The basic objective of this course is to enhance the understanding of the students regarding economic aggregates and determination of their equilibrium levels, using various schools of thoughts. It also exposes the students to the problem of inflation and its underlying theoretical lines of thought.

After completing this course, the students shall be able to

CO1: Analyze interdependence of different sectors of the economy and work on various forms of national accounting.

CO2: Evaluate the classical line of thought regarding output and employment determination and identify its merits and demerits.

CO3: Assess the effectiveness of the Keynesian economic ideology in the context of developing and developed economies.

CO4: Suggest better solutions to control the inflation problem in developing countries.

Contents:

Unit-I: National Income Accounting

Definition and concepts of national income; Methods of measuring national income; Difficulties in measurement of national income; Circular - Flow of income in two, three and four-sector economy; National income accounting - social accounting and balance of payments accounting. Neo-classical theory of distribution of National Income;

Unit-II: Classical Economics

Say's Law of Market in classical theory; Output and Employment determination in classical theory; Wage-Price Flexibility and Employment; The Pigou Effect/Real Balances Hypothesis; Goods market equilibrium and Money Market Equilibrium in classical theory; Complete classical system; The Neutrality of money and classical dichotomy; Criticism of Classical theory; Keynes's General equilibrium analysis of wage cut and employment.

Unit-III: Keynesian Economics

Keynes's theory of employment; Concept of effective demand; Determinants of effective demand: aggregate supply function and aggregate demand function; Underemployment equilibrium; Concepts of MPC, Multiplier, and MEC; Determination of equilibrium national income in Keynes's theory; Patinkin's views on unemployment as disequilibrium phenomenon; Re-appraisal of Keynes's theory by Clower and Leijonhufvud.

Unit-IV: Theories of Consumption and Inflation

Keynes's psychological law of consumption; Absolute income hypothesis; Permanent income hypothesis; Life cycle income hypothesis; Relative income hypothesis; Inflation: meaning and types; Causes of Inflation; Effects of inflation; Stagflation; Philips Curve: Short-run and long-run; Tobin's Views on Philips curve; Strategies to control inflation

Suggested References

1. Mankiw, N.G. (2018). Principles of Macroeconomics. 7th Edition. Cengage India.
2. Dornbusch, R. and F. Stanley (2018). Macroeconomics. 12th Edition. McGraw Hill Education.
3. Froyen, R.T. (2013). Macroeconomics: Theories and Policies. 10th Edition. Pearson Education India.
4. Mankiw, N.G. (2017). Macroeconomics. 4th edition. Cengage Learning India Pvt. Ltd.
5. Rana & Verma (2014). Macroeconomic analysis. 11th Edition. Vishal Publishing Co.
6. Dwivedi, D.N. (2018). Macroeconomics: Theory and Policy. 5th Edition. McGraw Hill Education.

ECONOMICS OF DEVELOPMENT

Course Code: ECO-503-C
Credits: 4

Marks: 100
External=50
Internal =50

Objective - Topics incorporated in this paper are devoted to conceptual framework of development and its measurement, the theories of growth and development related to strategies, dualism, geography and migration. The other important issues in the context of importance of agriculture, industry, labour market, technology and role of institutions, resource allocation such as market failure, state failure, cost benefit analysis, MNCs etc are also integrated.

After completing this course, the students will be able to:

- CO1.** Evaluate the concept and indicators of development, the measurements of poverty and inequality, and how other measurements of quality of life correlates with per capita income.
- CO2** Analyze the development economic growth theories, international trade development theories, and related economic, geographic and migration development theories. It will acquaint the students with the latest theories of economic development.
- CO3.** Helps in accessing the significance of agriculture in developing countries, international trade, and importance of foreign aid and knowledge of international organizations and their role and strategy.
- CO4.** Developing the conceptual framework of govt. policies and also able to understand how planning, investment criteria, allocation of resources and interrelations of International aspects of development and infrastructure support can develop an economy.

Contents:

UNIT-I: Development, Poverty and Inequality

Meaning and measurement of development: Human development index and other indices of development (PQLI, MDPI, GDI); Sustainable Development, Millennium Development Goals, development gap; concept and measures of poverty - Head Count Ratio, Poverty Gap Ratio, Sen's index; Inequality-meaning and measurement- Lorenz curve and Kuznets' inverted U hypothesis; effects of Inequality; population, poverty and environment

Unit-II: Theories of Development

Partial theories of development -- vicious circle of poverty; Strategies of Development--- Big push, Balanced growth, Unbalanced growth, Critical minimum effort thesis, Low Level Equilibrium trap; Dualism- Lewis Model, Myrdal's theory of circular and cumulative causation, Ranis and Fei model, theory of unequal exchange; The New Economic geography- Krugman's theory; Kremer's O-ring theory of economic development; Migration: migration and urban unemployment,

Unit-III: Sectoral Aspects of Development and Development Strategy

Role of Agriculture in economic development, Transformation of agriculture and rural development, Complementarity between agriculture and industry; Structure of labour market in developing economies; Theory of Rural-Urban migration and Harris-Todaro Model; Choice of techniques and appropriate technology; Financing development from domestic and foreign sources, Role of capital flows, FDI and MNCs, Foreign Aid; Globalisation and economic development.

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 approach and UNIDO Approach; Aid versus Trade, technology Inflow, MNCs activity in developing countries, Burden of borrowing—IMF and World bank Policies in developing countries.

Suggested References:

1. Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.
2. Behrman, S. And T.N. Srinivasan (1995), Handbook of Development Economics, Vol. 3, Elsevier, Amsterdam.
3. Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.
4. Hayami, Y. (1997), Development Economics, Oxford University Press, New York.
5. Higgins, B. (1959), Economic Development, W.W., Norton, New York.
6. Meir, G.M. (1997), Leading Issues in Economic Development (6th Edition). Oxford University Press, New Delhi.
7. Ray, Debraj (2011), Development Economics, Oxford University Press, Delhi.
8. Thirwall, A.P. (2014), Growth and Development, (9th Edition) Macmillan, U.K.
9. Todaro, M.P. (2013), Economic Development, (9th Edition), Longman London.
10. Gills, M. Perkins, Romer and Snodgrass (1989), Economics of development, W. W. Norton and Company, New York.

INDIAN ECONOMIC POLICY AND DEVELOPMENT

Course Code: ECO-504-C
Credits: 4

Marks: 100
External=50
Internal =50

Objective –The Indian economy is a unique amalgam of alternative competing and often conflicting theories and a proper understanding of its working is imperative if the student is to comprehend the ramifications that underlie most of the observed phenomena in the Indian economic set-up. The emphasis of this Course is on overall social, political and economic environment influencing policy decisions.

After the completion of the course the students will be able to

CO1: Make as assessment of Indian economy: features and planning strategy

CO2: Analysis the sectoral growth, contribution and problems

CO3: Understand the social issues, research questions in social issues and challenges

CO5: Particularize, India and external sector with reference to trade and different organizations

UNIT-I: Indian Economy and Planning

Understanding the Indian Economy; The Colonial Period; Post-Independence Economy; Planning for the economy – objectives, strategy and achievements, Relevance of planning in the context of globalization, Objectives and Functions of NITI Aayog, Measurement of national income in India- Trends in sector wise national income & per capital income, Broad demographic features of Indian population; Migration, sustainable development, Human Development Index, Gender Development Index, Human Poverty Index, Gender Empowerment Measurement – Deprived Index

UNIT II: Agriculture and Industry

Agriculture growth in India: growth of productivity: employment: green revolution: reforms and agriculture: Sustainability of agriculture and food security in India: Indian Industry Industrial production—trends, composition and growth during pre-liberalization and post liberalization period; Pre-reform industrial policy—public and private sectors; Regional distribution; New industrial policy—strategy, privatization and disinvestment. Role of FDI and MNC's in industrial development: service sector growth: challenges and employment: reforms and service sector

UNIT III: Poverty, Inequality and Human Capital

Poverty, inequality and unemployment, actualization of employment in the post-reform period, Inter-state disparities in economic growth Incidence of Poverty by region's & Social groups, Employment and reservation, Social infrastructure - Education & Health, Right to Education Act 2009.

UNIT-IV: India and External Sector

The concept of external sector and BOP; Indian foreign trade—composition, volume, direction and trade balance; New trade policy—an analysis; debt flows and external debt; New exchange rate regime—partial and full convertibility, capital account convertibility: India and WTO—Indian agriculture, Indian industry and foreign trade agreements, IPRS, TRIPS, TRIMS, GATS and New EXIM policy; India and SAARC—issues and recent developments; India and ASEAN—prospects for India; Indo-China economic cooperation

Suggested Readings:

1. Economic Bardhan, P.K. (9th Edition) Bardhan, P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi. Hader, J. : Mathematical Theory of Economic Behaviour, AddisonWesley
2. Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-State Perspective, Bookwell, Delhi.Mas-collel A, M.D. Whinston& J.R. Greene: Microeconomics Theory, OUP.
3. Dantwala, M.L. (1996), Dilemmas of Growth: The Indian Experience, Sage Publications, New Delhi.
4. Jalan, B. (1992), The Indian Economy – Problems and Prospects, Viking, New Delhi. (1996), India’s Policy – preparing for the Twenty First Century, Viking, New Delhi.
5. Sandesara, J.C. (1992), Industrial Policy and Planning, 1947-1991: Tendencies, Interpretations and Issues, Sage Publications, New Delhi.
6. Ahluwalia, I.J. (1997), Industrial Policy and Planning, 1947-1991: Tendencies, Interpretations and Issues, Sage Publications, New Delhi.
7. Ahluwalia, I.J. and I.M.D. Little (Eds.) (1999), India’s Economic Reforms and Development (Essays in honour of Manmohan Singh), Oxford University Press, New Delhi.

MATHEMATICAL METHODS FOR ECONOMICS

Course Code: ECO-505-F

Credits: 4

Marks: 100

Internal= 50

External=50

Objective: The aim of this course is to train students in the use of mathematical tools to understand concepts in economics presented in the form of mathematical models and express economic ideas in the same form. The course is intended to enable the students to utilize these tools in subsequent courses.

After completing this course, the student shall be able to:

CO1: Determine the various variables in economic models by learning various methods to solve the equations.

CO2: Apply differentiation tool of Mathematics to optimize the unconstrained and constrained Economic functions

CO3: Use rules of integration to calculate various economic parameters like consumer's surplus and producer's surplus

CO4: Employ input-output analysis and linear programming to solve the economics problems

Contents:

Unit-I : Functions & Equations in Economics

Basic rules of algebra, Fractions, Powers and indices, Functions in Economics: co-ordinates and graphs, variables and functions, functions of more than one variable, exponential and logarithmic functions.

Solving equations, Linear equations, Quadratic equations, simultaneous equations, Use of equations in Economics; demand, supply, cost and production functions, IS-LM Model.

Unit-II: Differentiation in Economics

Differentiation (first and second derivatives), Rules of differentiation, Using differentiation in economics-utility, revenue, cost and production function analysis. Identifying maximum, minimum and turning points-application in Economics-revenue, profit, cost functions, marginal product of labour, Partial differentiation and its application-indifference curve, elasticity, price discrimination, Constrained and unconstrained optimization with first-order and second-order conditions.

Unit-III: Integral calculus, Difference Equations, Differential Equations

Integration and rules of integration, Definite Integral, Application to Consumer's Surplus and Producer's Surplus; Growth Rates and Simple Properties of Time Path of Continuous Variables.

Difference Equations: Linear first-order difference equations and their solution. Applications.

Differential Equations: Linear first-order differential equation and their application in Microeconomic models.

Unit IV: Matrices, Determinants and Linear Programming

Matrices in Economics: addition, subtraction and multiplication. Determinants and its applications: Matrix inversion. Use of equations in Economics; demand, supply, cost and production functions. Introduction to input-output analysis.

Linear Programming – Formulation of a Linear Programming Problem, Solution of Linear Programming through Graphical and Simplex Methods; Formulation of the Dual of a Linear Programme and its Interpretation.

Suggested References

1. Allen, R.G.D.(1974), Mathematical Analysis for Economists, Macmillan Press, London.
2. Archibald, G.C & Lipsey, R (1990) (Third Edition), An Introduction to a Mathematical Treatment of Economics, New, Delhi, All India Traveller Bookseller, Indian Reprint.
3. Chiang, A.C. (1984), Fundamental Methods of Mathematical Economics, 3rd Edition, McGraw Hill. Auckland.
4. Chiang, A.C. and Kevin Wainwright (2005), Fundamental Methods of Mathematical Economics, McGraw-Hill. Boston.
5. Dixit, A.K. (1990), Optimization in Economic Theory, 2nd Edition, Oxford University Press, London.
6. Dowling, Edward T. (1992), Schaum's Outline of Theory and Problems of Introduction Mathematical for Economics, McGraw-Hill, New Delhi.
7. Dowling, Edward T. (2004), Introduction to Mathematical Economics, 3rd Ed. McGraw-Hill.
8. Henderson, J.M& R.E.Quandt, Micro-economic Theory: A Mathematical Approach, McGraw Hill, New Delhi,
9. Hoy, M., J. Livernois, C. Mckenna, R. Rees and T. Stengos (2001), Mathematics for Economics, 2nd Ed. Mit Press
10. M.W. Klein (2002), Mathematical Methods for Economics, 2nd Ed. Addison-Wesley. Pemberton M. and N. Rau, Mathematics for Economists, Manchester University Press, London.
11. Simon, Carl P. and Blume, Lawrence (1994), Mathematics for Economists, First Edition, 1994, W.W. Norton and Company. New York/ London.
12. Sundarm (1996), A First Course in optimization, Oxford University Press, London.
13. Hirshleifer, J.and A. Glazer, Price, Theory and Applications, Prentice Hall., India, New Delhi.
14. Sydsaeter K Hammond, P Seierstad, A , and Strom A (2005), Further Mathematics for Economic Analysis, London, Prentice Hall.
15. Sydsaeter K, Strom A, and Berck P (1999) Economists' Mathematical Manual, New York, Springer Verlag

COMPUTER APPLICATIONS

Course Code: ECO-506-SE

Credits: 4

Marks: 100

Internal= 50

External=50

Objective: The Core Course of Computer Applications is taught using the smart-class room facilities in the Department of Economics. The students are made familiar with the subject using numerous audio, visual mechanisms of teaching. The course is taught in a hands-on manner where the students are given live class-room demonstrations on various aspects of the syllabus. The use of computer lab will be made to allow students practice sessions and self-learning.

After the completion of the course, the students shall be able to

CO1: Know the use of computers

CO2: Work smoothly with Microsoft Word and Microsoft PowerPoint

CO3: Work smoothly with Microsoft Excel

CO4: Use and Handle the PivotTables

Contents:

UNIT-I: Introduction to Computers

Introduction to Computers, Classification of Digital Computer Systems , Generations of Computers, Anatomy of a Digital Computer, CPU, Memory Units, Input Devices, Output Devices, Auxiliary Storage Devices. Computer Hardware and Software, Programming Languages: Machine Languages, Assembly level languages and high-level languages. Operating Systems. Microsoft Office Suite. Browsers & types of browsers

UNIT-II: Introduction to MS Word & MS PowerPoint

Introduction to MS word, Creating a Word Document, Saving a Word Document, Formatting the documents, Working with Headings, Bullets and Numbering, Indentation, working with header and footers, Foot notes, Tables, Layout Design, Adding Graphics. Report writing. Indexing, Entering Table of Contents, Referencing; Manual Referencing, Cross reference, Mendeley Referencing. Track Change (on, acceptance & off) Mail Merge.

MS PowerPoint: Power Point basics, Creating a Power-Point Document, Selecting a theme, Editing the Primary Slide, Inserting/Deleting slides, Creating a Section Working in outlines view, Using Design Templates, Adding Graphics and Animation, Adding organization Charts, Adding Special Effects, Creating Transitions, Slide Show.

UNIT-III: Introduction to MS Excel

Introduction to Excel, Spreadsheets & its uses, Anatomy of a Spreadsheet, Creating & Formatting a Spreadsheet. Worksheet Navigation, Importance of a Cell, Cell Reference (Relative, Absolute, Mixed), Creating tables in Excel. Plotting Graph in Excel: Column, Line, Pie & Bar

Unit-IV: Data Processing Using Excel

Tabulation of Data; Working with Functions like : Sum, Average, Standard Deviation, Count. Using Excel Filters, Data Plotting using Excel. Graphical Presentation of the Tabulated Data. Copying Tables & Graphs to Word & PowerPoint. Arithmetic Mean. Median. Mode. Geometric & Harmonic Mean. Variance & Standard Deviation. Correlation. Scatter Diagram. Correlation Coefficient. Basic Linear Regression using Excel.

Suggested Readings:

1. Anita Goel , “Computer fundamentals” PearsonIndia
2. Medhi J., “Statistical Methods as Introductory Text”
3. Kenneth N Berk& Patrick Carey, “Data Analysis with Microsoft Excel”

SEMESTER-II

MICROECONOMICS –II

Course Code: ECO-550-C
Credits: 4

Marks: 100
Internal =50
External=50

Objective - This course will introduce students to analyze consumer behavior under uncertainty. Introduction to various theories of distribution, welfare economics and general equilibrium in closed systems are analyzed in this course. New developments in the theory of market and economics of information are also focus of this course.

After the completion of the course the students will be able to

CO1: Understanding of consumer behavior under uncertainty

CO2: Make a general assessment of welfare economics, general equilibrium and resource allocation

CO3: Perceive the tools for game theory analysis and its application part

CO4: Develop the capability to understand the alternative goals of firm

Unit – I: Consumer Behaviour under Uncertainty

Expected Utility Theory, Von Neumann - Morgenstern method of constructing utility Index under risky situations, The St. Petersburg Paradox and Bernoulli's Hypothesis, Allais's Paradox and explanations. Attitude towards Risk - Measures of absolute and relative Risk Aversion, certainty equivalent, risk premium, Risk Averter v/s Risk Lover. Risk lover and Gambling. Risk aversion and Insurance. Friedman - Savage hypothesis, Markowitz' hypothesis, The Investor's choice problem Information and consumers' choice, information and insurance - Dealing with asymmetric information. Asymmetric Information - The Market for Lemons & Quality Choice, Adverse Selection, Moral hazard, Signaling, Incentive - Systems.

Unit – II: Behavior of Firm

Critical evaluation of marginal analysis, Baumol's Sales Maximization Model, Price output determination, optimal advertising expenditure, choice of output of various products and Input combinations, Pricing and changes in overhead costs. Williamsons model of managerial discretion, Maris's model of managerial discretion, Full cost pricing rule. Bain's limit pricing theory and its recent developments including Sylos - labini model of the firm Behavioral model of the firm. Information Technology - System Competition, problem of complements, Lock in, Network Externalities and its Effects and implications, Rights Management and Sharing of Intellectual Property.

Unit – III: Distribution Theory and Market Failure

Marginal Productivity Theory of Distribution, Product exhaustion Theorem (Clark- Wicksteed - Walras), Pareto optimal conditions, social welfare function, compensation principle, Scitovsky's Paradox, Neitovasky's Double Criterion, Theory of Second best, Arrow's impossibility Theorem. Externalities - Definitions Externalities and Market Failure, Coase Theorem, Production Externalities- pollution vouchers, Property Rights and the Tragedy of the Commons Public Goods. - Definitions and characteristics, when to provide a public good, optimal Provision for a Public Good, Private Provision for Public Good and the Free - Rider Problem, The Clark - Groves Tax and its problems.

Unit – IV: Game Theory and General Equilibrium

The Payoff Matrix of a Game, Definition of Nash Equilibrium, Pure and Mixed Strategies, Prisoners' Dilemma, Repeated Games - applications, Sequential Games, Sub-game perfect equilibrium - examples - Entry deterrence. Partial and General Equilibrium, The Walrasian System, Existence, Uniqueness and stability of equilibrium. A graphical illustration of the path to General equilibrium, Algebraic treatment of a two-person two good exchange model, graphical treatment of the two factor, two commodity two consumer general equilibrium system, static properties of a general equilibrium state, General equilibrium and allocation of resources.

Suggested Readings:

1. Henderson J and R Quandt: Microeconomics Theory, A Mathematical Approach, McGraw-Hill
2. Hader, J. : Mathematical Theory of Economic Behaviour, AddisonWesley
3. Koutsoyannis, A: Modern Microeconomics, Macmillan.
4. Mas-colell A, M.D. Whinston & J.R. Greene: Microeconomics Theory, OUP.
5. Salvatore, D: Microeconomics, OUP
6. Sen, A: Microeconomics, OUP
7. Varian, H: Intermediate Microeconomics, East West press.

MACROECONOMICS-II

Course Code: ECO-551-C
Credits: 4

Marks: 100
Internal =50
External=50

Objectives: *The objective of this course is to expose the students to advanced level macroeconomic thoughts including classical-Keynesian synthesis, and contributions of new classical and new Keynesian economics to macroeconomic theory. It shall also familiarise the students with theories of business cycles for better understanding of macroeconomic behaviour in the contemporary world.*

After completing this course, the students shall be able to

- CO1:** Analyze RBI's approach to money supply and suggest better ways of regulating supply and demand for money.
- CO2:** Examine the behaviour of goods and money markets within the framework of general equilibrium analysis, identify suitability of monetary and fiscal policies especially developing country context.
- CO3:** Conceptualise the nature of business cycles and offer policy suggestions to minimize their duration and negative economic impact.
- CO4:** Assesses the merits of the new classical critique against Keynesian economics and evaluate the relevance of new Keynesian thought in solving unemployment problem in contemporary economies.

Contents:

Unit-I: Supply and Demand for Money

Functions of money; Four concepts of money supply; High Powered Money; Determinants of money supply; Money multiplier and its derivation; Deposit multiplier; Components of money supply in India; RBI approach to money supply; Demand for money: Classical approach (Fisher's and Cambridge approach); Keynesian Approach (Keynes's Liquidity Preference theory); and Post-Keynesian approach (Baumol's approach, Tobin's approach, Friedman's approach). Determination of rate of interest: money market equilibrium.

Unit-II: Neoclassical and Keynesian Synthesis

IS-LM Model: Derivation of IS and LM curves; Slope and position of IS-LM curves; Factors causing shift in IS-LM curves; Equilibrium in the Product and Money Markets – the combined IS-LM model; Monetary and fiscal policies; Effectiveness of monetary and fiscal policies; Crowd-out and crowd-in effects.

Unit-III: Theories of Business Cycles

Business Cycle: definition and features; Concepts of Accelerator and super-multiplier; Budget multiplier and Foreign Trade multiplier; Theories of trade cycle: Hicks and Samuelson's theories; Kaldor's theory of business cycle; Real business cycle theory; Control of business cycles.

Unit-IV: New Classical and New Keynesian Economics

New Classical critique of Micro foundations of macroeconomics; Theoretical conclusions of the new classical economics; Rational Expectations Hypothesis; Empirical validity of rational expectations hypothesis; Policy implications of the new classical approach; Criticisms of the new classical economics; New Keynesian Economics: Assumptions; Elements of New Keynesian economics: Nominal wage and

price rigidities, Real wage and price rigidities: Implicit Contract theories; Efficiency wage theory, Insider-outsider model; Policy implications of New Keynesian models.

Suggested References

1. Mankiw, N.G. (2018). Principles of Macroeconomics. 7th Edition. Cengage India.
2. Dornbusch, R. and F. Stanley (2018). Macroeconomics. 12th Edition. McGraw Hill Education.
3. Froyen, R.T. (2013). Macroeconomics: Theories and Policies. 10th Edition. Pearson Education India.
4. Mankiw, N.G. (2017). Macroeconomics. 4th edition. Cengage Learning India Pvt. Ltd.
5. Rana & Verma (2014). Macroeconomic analysis. 11th Edition. Vishal Publishing Co.
6. Romer, D. (2018). Advanced Macroeconomics. 5th Edition. McGraw-Hill Education.
7. Dwivedi, D.N. (2018). Macroeconomics: Theory and Policy. 5th Edition. McGraw Hill Education.

INTERNATIONAL ECONOMICS

Course Code: ECO-552-C

Credits: 4

Marks: 100

Internal: 50

External: 50

Objectives: This course introduces students to the principle issues of international trade. The course begins with a brief comparison of the economic status and performance among major trading nations. The course examines alternative trade theories, protectionism, trade restrictions. Trade policies, trade liberalization, free trade agreements, and labour and capital migration. The course examines international finance, including exchange rates, interest.

After completing this course, the student shall be able to:

CO1: Critically examine the various trade theories and empirically test their applicability in the real world

CO2: Examine the BOPs issue through various approaches and in view of the Open Economy Macroeconomics and suggest policies

CO3: Evaluate the various trade policies and their impact on the economy

CO4: Analyze the importance of International Trade Organizations and Trade Agreements and evaluate the growth and working of trade corporations

Contents:

UNIT I: International Trade Theories and Growth Effects

Theories of absolute cost and comparative cost advantage; Opportunity cost and comparative advantage; Factor endowments and the Heckscher-Ohlin theory; Factor Price Equalisation theorem; Leontiff paradox; Other explanations for trade: Availability and Vent for surplus, Theory of overlapping demand, Technological gaps, Product cycle models; Intra-industry trade and its measurement (Balassa index Grubel-Lloyd index, Aquino index). Effects of growth on trade, Rybczynski theorem, Immiserizing growth.

UNIT II: Balance of Payments

Equilibrium and disequilibrium in the balance of payments; Elasticity, absorption, Monetary and Portfolio-balance approach to balance of payments adjustment, Role of Expenditure reducing and expenditure – switching policies in an open-economy; Macroeconomic model under alternative exchange rate regimes, Salter-Swan model.

UNIT III: Trade Protection

Tariff and Non-Tariff instruments of Trade Policy, Learner's Symmetry, Aggregate Measures of Protection, Nominal and Effective Rate of Protection. Effects of Tariff for Small and Large Countries (Partial Equilibrium Analysis), Comparison of Tariff and Quota, Effects of Tariff on Distribution of Gains from Trade (General Equilibrium Analysis), the Optimum Tariff, Metzler's Paradox, Domestic Distortions, Trade Distorting Tariffs.

UNIT IV: International Trading Organisations and global trading system

World trade in the 19 th and 20 th centuries, GATT and trade rounds, Multilateral trading system and the World Trade Organization (WTO) – TRIMS, International trade in services and GATS, TRIPS, Trade and environment, Trade and labour standards, The political economy of protectionism Types and reasons for economic integration, Theory of custom union, Static and Dynamic effects of a Customs Union and free trade areas; Rationale and economic progress of European Union SAARC/SAPTA and ASEAN, regions; Problems and prospects of forming a Customs Union in the Asian Region; Bilateralism vs. Multilateralism.

Suggested References:

1. Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J., New York.
2. Soderston, B.O. (1994), International Economics, The Macmillan Press Ltd., London.
3. Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill,
4. Kogakusha, Japan. Kenen, P.B. (1994), The International Economy, Cambridge University Press, London.
5. Kindlberger, C.P. (1973), International Economics, R.D. Irwin, Homewood. Krugman,
6. P.R. and M. Obstgeld (1994), International Economics: Theory and Policy, Glenview, Foresman.
7. Yeager, L.B. (1976), International Monetary Relations: Theory, History and Policy, Harper and Row, New York.
8. Solomon, R. (1982), The International monetary System, 1945-81, Harper and Row, New York.
9. Tew, B. (1985), The Evolution of the International Monetary System: 1945 – 85, Hutchinson.
10. Aggarwal, M.R. (1979), Regional Economic Cooperation in South Asia, S. Chand and Co., New Delhi.

ENVIRONMENTAL ECONOMICS

Course Code: ECO-553-C
Credits: 4

Marks: 100
Internal=50
External=50

Objective: There is a common notion that economic activities are behind all the environmental evils, but nowadays the environmental factors have started affecting economic variables. The objective of this paper is to let the students know about the basics of environmental issues with its economic implications.

After the completion of this course, the students will be able to:

CO1: Do the proper management of the household waste and can solve the problem of market failure.

CO2: Measure the environmental costs and benefits by employing various tools and techniques of valuation of environmental assets.

CO3: Manage the societal externalities through government policy instruments and regulatory interventions.

CO4: Contribute to social understanding of human practices having environmental implication and international environmental externalities.

UNIT I: Economy-Environment Linkages

Environmental Economics— meaning, scope and rationale; Environment and the economy— inter-linkages and trade-off; Market failure and environmental degradation—public goods, incomplete markets, externalities, non-convexities and asymmetric information and Common Property Resource (CPRs); Sustainability— concept and indicators, The Solow-Hartwick approach to sustainability and green GDP. Management of common property resources; System of integrated environmental and economic accounting (SEEA)

UNIT II: Environmental Valuation

Meaning and types of environmental value; Valuation of benefits—Methodological issue; Hedonic pricing approach, Travel cost approach, Averting behaviour approach, Contingent valuation technique; household health production function method.

UNIT III: Environmental Regulations

Economic approaches for environmental protection; Price & Quantity rationing - pollution charges, ambient charges, product charges, subsidies; Liability rules; Rationale for regulation; Coasian approach; Pigovian taxes: single and multi-polluters case; Command and control methods; Economic incentives— Effluent and emission taxes, Tradable pollution permits; Liability Laws.

UNIT IV: Population Pollution and Environment Policies

International environmental externalities; Trans boundary pollution; Global environmental challenges, International response to climate change—Montreal protocol, Basel convention on hazardous waste, Earth Summit, Rio Declaration on environment and development, Kyoto protocol

Suggested Readings:

1. A.M. Hussain, (1999); Principals of Environmental Economics, Rutledge, London.
2. N. Hanley et el, (1999); Environmental Economics in theory and Practice, Macmillan Ltd, New Delhi
3. C.D. Kolstad, (1999), Environmental Economics, Oxford University Press, New Delhi.
4. R. Acharya, (2013); Trade and Environment, Oxford University Press, New Delhi
5. R.N. Batacharya, (2001); Environmental Economics—an Indian Perspective, Oxford University Press, New Delhi.

STATISTICAL METHODS FOR ECONOMICS

Course Code: ECO-554-F

Credits: 4

Marks: 100

Internal=50

External=50

Objectives: The objective of this course to equip students with tools and techniques of conducting effective research. Also, this course aims to develop student's ability to use various statistical packages for conducting data analysis.

After the completion of this course, the students will be able to:

CO1: Perform the basic statistical operations like computing averages, variances and testing Hypotheses

CO2: Collect data through proper methodology like probability and non-probability choices based on the research problem in hand.

CO3: Use data & analyze the same using the statistical software like SPSS and develop the skill of handling huge data sets.

CO4: Accomplish and analyze cross sectional data, time series data and panel data.

UNIT-I: Data Presentation

Definition, Scope and Limitations of Statistics-Frequency distribution- Representation of data by Frequency polygon, Ogives and Pie Diagram; Measures of Central tendency- Arithmetic Mean, Median, Mode, Geometric Mean and Harmonic Mean and measures of Dispersion- Range, Inter Quartile Range, Quartile Deviation, Mean Deviation, Standard Deviation, Variance and Lorenze Curve.

UNIT-II: Sampling and Sampling Methods

The distinction between populations and samples and between population parameters and sample Statistics; Sample spaces and events; probability axioms and properties; counting techniques; conditional probability and Bayes' rule; independence; Principal steps in a sample survey; methods of sampling; the role of sampling theory; properties of random samples, sample size determination, sampling errors.

UNIT-III: Random Variable and Probability Theory

Defining random variables; probability distributions; expected values of random variables and of functions of random variables; properties of commonly used discrete and continuous distributions (uniform, binomial, normal, poisson and exponential random variables). Density and distribution functions for jointly distributed random variables; computing expected values; covariance and correlation coefficients.

UNIT-IV: Probability Distribution Functions

Normal distribution; z-scores, t- test, F-distributions and chi-square; estimation of parameters; properties of estimators; testing of hypotheses: defining statistical hypotheses; distributions of test statistics; testing hypotheses related to population parameters; Type I and Type II errors; power of a test; tests for comparing parameters from two samples.

Suggested Readings:

1. PANNER SELVAM .R. “Research Methodology”, Prentice Hall of India, New Delhi, 2004.
2. Anderson. T.W, Introduction to Multivariate statistical analysis, Wiley eastern, New York, 2007.
3. Wadehra, B.L. 2000. Law relating to patents, trademarks, copyright designs and geographical indications. Universal Law Publishing.
4. Malhotra, N. K. and Dash, S. (2011), Marketing Research: An Applied Orientation, 6/e, Pearson Education: New Delhi, India.
5. Bollen, P. (1989), Structural Equations with Latent Variables, John Wiley: New York.
6. Zikmund, W. G., and Babin, B. J. (2010), Essentials of Marketing Research, 4/e, SouthWesternCengage Learning: Natorp Boulevard, Mason, OH.
7. Hair, J. F., Black, W.C., Babin, B.J. and Anderson, R.E. (2013), Multivariate Data Analysis: A Global Perspective, 7/e., Pearson Education: New Delhi.
8. SURESH C. SINHA, ANIL K. DHIMAN, ESS ESS, 2006 “Research Methodology”

SEMESTER-III

RESEARCH METHODOLOGY

Course Code: ECO-612-C

Credits: 4

Marks: 100

Internal: 50

External: 50

Objectives - The objective of this course to equip students with tools and techniques of conducting effective research. Also, this course aims to develop student's ability to use various statistical packages for conducting data analysis.

After completing this course, the student shall be able to

CO1: Define Research Problem, find research gap and develop research hypothesis while doing research

CO2: Frame research design as per the type of the research and select appropriate method of sampling technique and data collection in the research work

CO3: Analyse the data collected for the purpose of research

CO4: Develop skills to write research report keeping in view the ethical considerations in research

Contents:

UNIT-I : Introduction

Meaning and objectives of a research, Types of research: Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical. Research methods vs Methodology. Research Process- Defining and formulating the research problem, Selecting the problem, Importance of literature review in defining a problem , Critical literature review – Identifying gap areas from literature review, Development of working hypothesis.

UNIT-II: Research Design, Data Collection and Processing

Research design – Meaning, basic principles and need of a research design, Features of a good design. Important concepts relating to research design, Prediction vs Explanation, Induction vs Deduction, Developing a research plan - Exploration, Description, Diagnosis, Experimentation. Determining experimental design (Types).

Sample design-Determining sample size and sampling methods, Data Collection- Methods of qualitative and quantitative data collection, primary, and secondary data, observation, indepth Interview, focus group discussion, Interviewing and moderation skills in qualitative Data Collection. Data editing, processing & categorization.

UNIT-III: Data Analysis

Hypothesis Testing- Need of a scientific research hypothesis; null and alternative hypothesis; level of significance and p-values; standard statistical tests: t-test, z-test, f-test, and chi-square test; power of test; procedure of hypothesis testing; Regression analysis: OLS method (Key Assumptions and consequences of their violation); Confidence interval and Test of significance approaches; Non-parametric tests: Mann-Whitney and Wilcoxon tests.

UNIT–IV: Presentation of Information & Writing of a Research Report

Report Writing-Significance, steps, layout, understanding bibliography, use of referencing styles -APA, Research Proposal and presentations. Ethical considerations in research- Reproduction of published material – Plagiarism - Citation and acknowledgement - Reproducibility and accountability.

Suggested References:

1. Goode J. William & Hatt K. Paul, Methods of social Research, , New York, McGraw – Hill.
2. Gopal, M.H (1970) An Introduction to Research Procedures in Social Sciences, Bombay, Asia Publishing House.
3. Gosh B.N.– Scientific Method and Social Research – Sterling Publishers (P) Ltd.
4. Gupta S.C. and V.K. Kapoor (1993) Fundamentals of Applied Statistics, S.Chand and Sons
5. Kothari- C.R.(1988) Research Methodology, Methods and Techniques – Willey Eastern Ltd.,
6. Kothari, C.R (2004) Research Methodology: An Introduction, Delhi, New Age
7. Lundberg, George A. : Social Research, Long mans, Green and Co., New Delhi
8. Nachmias David & Nachmias Chava, (1981), Research Methods in the Social Sciences, New York,
9. Rajaram V. (1996), Fundamentals of computers, Prentice Hall of India, New Delhi
10. Ranjeet Kumar (2008) : Research Methodology: A Step by Step Guide for Researchers.
11. Sadhu A.,N. & Amarjit Singh: Research Methodology in Social Sciences, by Himalaya Publishing House.
12. Thanulingom , N. (2000), —Research Methodology|| Himalaya Publishing House.
13. Kumar Ranjit, Research Methodology, Sage Publication, New Delhi

PUBLIC ECONOMICS

Course Code: ECO-613-C
Credits: 4

Marks: 100
Internal=50
External=50

Objective - The paper covers a broad spectrum of public sector economy with a view to examining the issues which underline criteria for welfare judgments, theory of public goods, tax incidence, expenditure incidence and issues of federal finance etc.

After the completion of this course, the students will be able to:

CO1: analyzes the impact of public policy on the allocation of resources and the distribution of income in the economy.

CO2: Use the tools of microeconomics and empirical analysis to study the tax system and implication of tax policies.

CO3: Contribute towards analyzing the impact of government expenditure on various sectors of the economy.

CO4: Make individual and household centric economic decisions in light of government budget incentives and prevention policies.

UNIT – I: Market Efficiency and Public Choice Theories

Efficiency in resource allocation, First best economy, Market failure, Rationale for state intervention, Distributional objectives of the state. Problem of preference revelation and aggregation of preferences, Voting system, Arrow's impossibility theorem; An economic theory of democracy, Provision of public goods, Voluntary exchange models, Impossibility of decentralized provision of public goods (Samuelson and Musgrave contributions), Theory of club goods, Provision of local public goods and merit goods.

UNIT-II: Public Revenue

Properties of a good tax structure; Benefit and ability to pay approaches, Indices of ability to pay, Buoyancy and elasticity of taxes, incidence of taxation: Impact, Incidence and Effects of a tax, Theory of optimal taxation-The Inverse Elasticity Rule and the Ramsey Rule; Efficiency of Taxation-Excess burden and deadweight loss; Tradeoff between equity and efficiency; The problem of double taxation, Tax evasion and the black economy; Tax reforms in India. Goods and Service Tax (GST): Structure, progress and prospects.

UNIT-III Public Expenditure

Structure and growth of public expenditure, Evaluation of Government Expenditure; Reforms in public expenditure programme; Wagner's law of increasing state activities, Wiesman-Peacock hypothesis, Sources of public debt, Debt through created money, public borrowing and price level, approaches of public debt, Compensatory aspect of debt policy, Burden of public debt, Crowding out of private investment and activity, Principles of debt management and repayment; The sustainability of public debt, Ricardian equivalence.

UNIT-IV Government Fiscal Policies

The government budget constraint (GBC); Incorporating the GBC in IS-LM model; Measurement and determinants of deficits; Fiscal policy rules: types and characteristics; Discretionary fiscal policy changes; Seignorage and inflationary finance; Taxation, inflation and interest rates.

Suggested Readings:

1. Musgrave, L.A. (1959), theory of public finance, McGraw HillKogakhusa. Tokyo.
2. Shoup, C.S. (1970), Public Finance, Aldine, Chicago.
3. Buchanan, J.M. (1970), the Public Finance, Richard D, Irwin, Hovewood.
4. Jha, R (1998), Modem Public Economic, Rutledge, London.
5. Atkinson, A.B. and J.E. Siglitz (1980) Lecture on public Economics.
6. Musgrave, R.A. and C.S. Shoup(Ecls.) 1970, Readings in the Economics of taxation, George Allen and Unwin, London.
7. Barman, K. (1986) Public debt management in India, Uppal Publishing House, New Delhi.
8. Chelliah, Raj J, et.al (1981), Trends and issues in India's Federal finance, national institute of Public Finance and Policy, New Delhi.
9. Bhargave, P. K (1982), Centre state Resource transfer in India, The academic press, Furgao.

HISTORY OF ECONOMIC THOUGHT

Course Code: ECO-614-C
Credits: 4

Marks: 100
External=50
Internal =50

Objective: The present course intends to expose the students with the very basic roots of Economics as a discipline and its origin. The course systematically unfolds the various stages and aspects of the subject accumulating in its ultimate development as the core social science subject.

By the end of this course, the students will be;

CO1: Well versed with the philosophical underpinning of the subject

CO2: Able to differentiate between various schools of Economic thought

CO3: Familiar with the dynamic changes of the subject and its steadily changing practical aspect

CO4: Acquainted with the Indian Economic thought and the Islamic Economic thought and practices

UNIT I: Introduction & Opening up of the Debate

Economic thought— importance of studying Economic thought; Political Economy of Past and Present— an overview. Pre Classical Economic Thought: Mercantilism, Physiocracy. Declaration of an Economic Revolution by Adam Smith in 1776; Invisible hand and Division of labor (support and critique) David Ricardo— Theory of Value; Theory of Distribution; Malthus— theory of population, Theory of Gluts. Jean Baptise Say & John Stuart Mill – Concept of political Economy. Nassau William Senior –Four Propositions. J S Mill & Jeremy Bentham Utilitarianism.

UNIT II: Schools of Thought

Marginalist School – It's rise. Thought of Jevons, Menger & Walras. Alfred Marshall & transformation of Economics as a science, His philosophy and methodological shift. Karl Marx & Revolution against Capitalism. Paradigm shift through the revolution initiated by John Maynard Keynes. Austrian school. Chicago School. Behavioralism.

UNIT III: Post War Developments

Critique of Colonialism;.Development Economists and evolution of growth and development_Theories-Myrdal, Kuznets, Paul Streeteen, Harrod, Domar-Development Indicators, HDI, Development_debates, Sustainable development, Institutional Economists-Douglas North; Development and Welfare: A_K Sen

UNIT IV: Islamic & Indian Economic Thought

History of Indian Economic Thought. Islamic Economics Emergence of Modern Indian Economic Thought; Economic Ideas of— V. K. R. V. Rao; D. R. Gadgil; C. N. Vakil; Dadabhai Naroji; Gandhian Economic Thought and its Relevance in 21st Century. Dominat school of economic thought in Contemporary India

Suggested Readings

1. Eric, R. 1975. A History of Economic Thought.
2. Oxford University Press, New Delhi.
3. Guide and Rist, 1973. A History of Economic Doctrine. Oxford University Press, New Delhi
4. 'The Big Three in Economics_ Smith, Marx & Keynes' by M.E.Sharpe
5. Hunt, E. K. 2004. History of Economic Thought - A critical Perspective.Shubhi Publications, Gurgoan, India
6. . Sen A. K. 1991. Poverty and Famines: An Essay on Entitlements and Deprivations, Oxford University Press Oxford

ECONOMETRICS-I

Course Code: ECO-615-C
Credits: 4

Marks: 100
Internal =50
External=50

Objective - Applications of economic theory need a reasonable understanding of economic relationship and relevant statistical methods. The econometric methods thus become a very powerful tool for understanding of applied economic relationships and undertaking meaningful research in economics. This paper accordingly is devoted to equip the students with basic tools of econometrics, enabling them to construct econometric models, estimate the parameters and interpret the results. Many of the methods introduced in this course are also used in business, finance and many other disciplines.

After completing this course, the students shall be able to

CO1: Formulate regression models to estimate relationship between economic variables.

CO2: Identify econometric issues with data and resolve them using various econometric techniques.

CO3: Use dummy variable models and binary response variable models to analyze qualitative variables.

CO4: Estimate complex linkages using simultaneous equations and perform two stage least square analyses for endogenous variables.

Contents:

Unit-I: Basic Econometrics

Nature, meaning and scope of econometrics; Methodology of Econometrics; Types of Data for Econometrics; Concepts of Population and Sample Regression Functions; Simple and general linear regression model – Assumptions, Estimation, The Ordinary Least Square (OLS) Method; Properties of OLS estimators: GaussMarkov Theorem.

Unit-II: Multiple Regression Models and Econometric Issues

Multiple Regression Model: Assumptions and Estimation; Coefficient of Determination (R-square) and Adjusted R-square; Multi-collinearity: meaning, consequences, detection, and remedial measures; Heterocedasticity: meaning, causes, detection, and remedial measures; Autocorrelation: meaning, causes, detection (Durbin-Watson Test), and remedial measures.

Unit-III: Dummy Variable and Qualitative Response Models

Dummy Variable: meaning: Uses of Dummy Variable Technique: Testing of structural stability of regression models; Interaction Effects, Seasonal analysis, Piecewise linear regression; Regression with Qualitative Response Variables: Linear Probability Model, Logit, Probit and Tobit Models.

Unit-IV: Simultaneous Equation Models

Simultaneous Equation Models: Introduction and Examples; the simultaneous equation bias and inconsistency of OLS estimators; The Identification Problem: under-identification and over-identification; Rules of identification – order and rank conditions; Methods of estimating simultaneous equation system: the Method of Two Stage Least Squares (2SLS).

Suggested References

1. Gujarati, D.N (2005). Basic Econometrics, Tata Mcgraw Hill, New Delhi.
2. Baltagi, B.H. (2011). Econometrics. Berlin: Springer.
3. P. Kennedy, (1998) 4th ed; A Guide to Econometrics, MIT Press, New York.
4. G.S Maddala (ed.), (1993), Econometric Methods and Application (2 Volumes).
5. Greene, W.H. (2003). Econometric Analysis. Upper Saddle River, N.J: Prentice Hall

Discipline Centric Electives (DCE)

SEMESTER – III

SOCIAL SECTOR ECONOMICS

Course Code: ECO-617-DCE
Credits: 4

Marks: 100
Internal =50
External=50

Objective: The paper aims to explain the applicability of economic theory in design and implementation of the public policy related to the management of social sectors. The course aims to familiarize students with the Economics of Education and Economics of Health.

After completing this course, the student shall be able to:

CO1: Examine the interlink between social sector development and the welfare

CO2: Analyse the importance of education sector for development

CO3: Do the economic evaluation of the health sector

CO4: Explore the issues in education and health sector of Indian Economy and make policy suggestions

UNIT I: Social sector linkages

Importance of social sector, Interlinks between Social Sector, Welfare Economics and Environment. Social Development and Deprivation. Provision of Public goods, impure and mixed goods. Methods of pricing in public utilities. Common property resources.

UNIT II: Economics of Education

Economics of education; Nature, definition and scope; Educational production function; Education, productivity and income; Educational indicators; Education and economic development; Educational costs and benefits-Educational cost functions, cost-benefit model; Theories of public expenditure on education, models and methodologies>Returns to education; Educational planning and manpower.

UNIT III: Economics of Health

Economics of Health-Concept, dimensions and indicators; Determinants of health status; Economic appraisal in health care-Cost-benefit and cost effectiveness approaches; Health planning and management; Primary health care and health for all; Community health care; Environment and health; International health organizations-WHO and other United Nations agencies.

UNIT IV: Human Development in India

India's educational system- Problems and suggestions; Human capital in India; National policy on education and health; Health programmes and infrastructure; Financing of education and health programmes in India; Expenditure on health and education during post reform period; Health care system in India; Health, poverty and economic growth in India; NGOs and Human Resource Development.

Suggested References:

1. Mark Blaug, Economics of Education: Selected, Readings, vol. I & II, Penguin Books, London
2. Schultz, T.W, Investment in Human Capital, Free Press, London
3. Ritzen, J.M.M, Education, Economic Growth and Income Distribution, Holland, Amsterdam.
4. Folland, Goodman, andStano, The Economics of Health and Health Care, Prentice Hall, New Jersey.
5. Thomas E. Getzen, Health Economics.

6. MahbubulHaq, Quality of Life.
7. Martha Nussbaum & Amartya Sen, Quality of Life.
8. Park and Park, Textbook of Preventive and Social Medicine, Banarsidas Bhanot, Jabalpur.
9. Human Development Report.
10. National Human Development Report.
11. Report on National Commission on Macroeconomics and Health.
12. Economic Survey.
13. Phelps, C Health Economics, Addison Wesley, New York, 1997
14. Berman PA and ME Khan, Paying for India's Health Care, Sage Publications, New Delhi, 1995.
15. Mills A (1993), Economics of Health in Developing Countries, Oxford University Press, Oxford.
16. Arrow KJ (1963) Uncertainty and the Welfare Economics of Medical Care. The American Economic Review; 53(5): 941 – 973
17. Kothari VN and IS Gulati (2000), Disability – Adjusted Life Year as a guide or health Policy, Economic and Political weekly, 11th October, 2002.
18. WHO (2000), World Health Report 2000 – Health Systems: Improving Performance, World Health Organization, Geneva, 1 – 46, 93 – 115.
19. UNDP (1996), Human Development Report 1996, Oxford University Press, Washington D.C 106 –

RURAL ECONOMICS

Course Code: ECO-618-DCE
Credits: 4

Marks: 100
Internal=50
External=50

Objectives: The course on Rural Development attempts to aware students about the dynamics of changes in the rural economy. It includes the study of problems faced by rural population and also includes the critical review of various schemes and projects that benefit the rural population.

After the completion of this course, the students will be able to:

CO1: Make informed about the structure and size of rural economy and the performance of the rural sectors in the economy

CO2: Apply analytical tools to measure rural development through questions whether a particular area, region or nation is on a path of development or retrogression;

CO3: Analyze the performance of different macro-economic variables in rural development.

CO4: Evaluate different rural development polices and their implications.

UNIT I: Structure and Size of Rural Economy

Rural Economics; Concept, Scope, Objectives and Importance of Rural Economics. Characteristics of Rural Economy; Rural Economy of India; Size and Structure of the Rural Economy; The Characteristics of the Rural Sector; The Role of the Agricultural and non-agricultural sector; Rural-Urban Linkages and Disparity.

UNIT II: Rural Development Theories

Measures of Level of Rural Development; Measures of Income Distribution; Concepts and Measures of Rural Poverty; Some Paradigms of Rural Development; The Modernisation Theory; The Dependency Theory of the Marxist School; The Human Capital Model of Development; The Gandhian Model of Rural Development; Development Theories from Other Social Sciences.

UNIT III: Natural Resources and Sectorial Development

Natural Resources; Land and Soil, Water, Fisheries, Forestry and Biodiversity; Diversification of Rural Economy; Non Farm Sector, Rural Industrialisation and Rural Services. Rural Finance; Rural Money Market, RRBs, NABARD. Problems of Rural Economy; Poverty, Unemployment, Inequality and Rural Indebtedness.

UNIT IV: Rural Development Polices

Strategies of Rural Development; Growth oriented strategy, Welfare strategy, Responsive strategy, Holistic strategy, Right-based strategy. Rural Development Programmes; Objectives and Appraisal (SJGSY and MGNREGS).Rural Economy; Vulnerability, Sustainability and Disaster Management. Aligarh Municipal Corporation: Sources of income and items of expenditure.

Suggested Readings:

1. Dandekar V. M. and Rath . N. –Poverty in India, Indian School of Political Economics, Bombay
2. Sharma Anju – Dynamics of Agriculture Development, Concept Pub, New delhi
Government of India – Evolution of Community Development Programme in India Desai,
Vasant - Study of Rural Economics, Himalaya Publishing Company , New Delhi.
3. Krishnamurthy V.T. –Community Development in India
4. KrishanaswamyD.R. –Fundamentals of Co-operation
5. Mathur B.S. - Co-operation in India
6. Parthasarathy – Green Revolution in India
7. Jain P.C. – Agricultural Reforms in India

GENDER ECONOMICS

Course Code: ECO-619-DCE
Credits: 4

Marks: 100
Internal =50
External=50

Objective: The course will help the students to develop an understanding of the ways in which current economic realities especially in developing countries have different effects on men and women. The course addresses gender inequalities in different economic spheres especially under changing patterns of economic activity and globalization.

After completing this course, the student shall be able to:

CO1: Familiarize the students with the reasons compelling towards the creation of this separate sub-field of enquiry.

CO2: Draw clear lines between the nature of women's work and the issues related to it

CO3: Understand the problem in a globalized perspective.

CO4: Opening up the debate contextualizing India.

Contents

UNIT I: Origin, History & Growth of Gender Studies

Gender – Concept & Theoretical Framework. Gender Stereotypes, under-valuation of women's work. Gender Discrimination. Role of religious, social & cultural factors in gender discrimination. Feminist economics basics; Capitalism and gender; Gender and development - issues and approaches. Feminist economics: from CSWEP to IAFFE. Gender feminist economics. Gender Development Index GDI & GEM, Gender Action Plan and Millennium Development Goals.

UNIT II: Gender, Labor & Agriculture

Women's work – Concept, Productive & non-productive work, Visible & invisible work, Paid & Unpaid work, Economically productive & Socially productive work. Impacts of development on gender roles in agriculture; Regional differences in gendered employment and wages in agriculture, new types of rural employment; Women's marginalization in rural employment. The debate of unpaid women's work. Women's participation in the informal economy.

UNIT III: Gender, Development & Globalization

Markets, Globalization & Gender: The rise of Neo-Liberalism, Commercialization of Everyday life, Concentration of Wealth, Inequality and Vulnerability, Global Feminization of Labor, Discrimination of Women in paid employment. Rising inequality & social polarization. Latest positive trends upholding women's rights and equal opportunities.

UNIT IV: Gender & Development in India

Gender development policies in India. Gender sensitive governance. Women's educator & skill development programs in India. Democratic decentralization/Panchayats & Women empowerment in India. Gender budgeting in India. National Commission for women. Committee to eliminate

discrimination against women (CEDAW), Ge Beti-Bachao, Beti Padhao Mission, National Policy for empowerment of women (2001), UJJAWALA, Women Helpline Scheme, One Stop Centre Scheme.

Suggested Readings:

1. Raka R. (2012), 'Handbook of Gender' Oxford University Press.
2. Giandomenica Becchio (2020) "A History of Feminist and Gender Economics" Routledge .
3. Lourdes Benería, Günseli Berik, and Maria S. Floro (2003) "Gender, Development, and Globalization – Economics as if all people matter" Routledge .
4. Statistics and latest research papers analyzing the gender issue in India

POPULATION ECONOMICS

Course Code: ECO-620-DCE
Credits: 4

Marks: 100
Internal =50
External=50

Objectives: The course covers the fundamentals of population studies and its estimation and projection. The course also highlights the issues related to human development and population policy in India.

After completing this course, the students shall be able to:

CO1: Study the composition of population and its implications for a country.

CO2: Carry out comparative analysis of population growth between developing and developed countries.

CO3: Examine the relationship between population growth and economic development.

CO4: Analyse trends in various elements related to population growth.

Contents:

Unit-I

Meaning, Nature and Scope of Population Studies Demographic Processes: mortality (concepts; measurement and determinants of infant mortality), fertility (importance; measures and determinants) and migration (concept and types). Population composition: Sex, Age, Rural, Urban and Educational Structure

Unit-II

Demographic structure in developed and developing countries Population Estimates and Projection Malthus' theory of Population Growth Optimum theory of population Theory of Demographic Transition

Unit-III

Role of population growth in economic development and effects of economic development on fertility and population growth Human Development: Measures and implications of population growth on Human Development

Unit-IV

Changing characteristics of population in India: Growth rates, trend and regional variations in sex ratio; age structure of population; infant and child mortality rates; maternal mortality rates; life expectancy Appraisal of Kerala model Pattern of migration and urbanization in India Factors responsible for high fertility rate in India Population Policy since independence.

Suggested References

1. Agarwal, B., Humphries, J. & Robeyns, I Bonar, James, Malthus and His Works, macmillan, London.
2. Bogue, D.J, Principles of Demography, John Wiley, New York.
3. Bhende, A. & Kanitkar T, Principles of Population Studies, Himalayan Publishing House, New Delhi.
4. Coale A.J. and Hoover EM, Population Growth and Economic Development in Low Income Countries: A Case Study of India's Prospects, Princenton University Press, New Jersey. Coontz,

Sydeny H, Population Theories and the Economic Interpretation, Routledge &Kegan Paul, London.

5. Agarwal S.N, India's Population Problems, Tata McGraw Hill, New Delhi
6. Thomson, Warren S. and Levis, David T, Population Problems, Tata McGraw Hill, New Delhi
Govt. of India- Census of India.

TOURISM ECONOMICS

Course Code: ECO-621-DCE
Credits: 4

Marks: 100
Internal =50
External=50

Objective: Tourism is an important economic sector today. It is contributing effectively to the gross national product (GDP) of many countries in the world, because of its role in the national resources development and generating employment, in addition to its social and cultural importance. The course is aimed to introduce students with the basic concepts of tourism policy and planning

Course Outcomes: After the completion of the course, the students will be able to:

CO1: Correctly explain, define and interpret the basic concepts and critically assess the various theories within tourism economics

CO2: know the detailed elaboration of the complex framework of tourism supply, tourism demand, pricing and policies of tourism product;

CO3: learn about the impact of tourism on the environments

CO4: Know the principles of sustainable tourism and Be able to propose best practices for sustainability in the tourism sector.

UNIT I: Introduction

Nature, scope and application of economics in tourism and hospitality; theory of the firm and business objectives - economic, Behavioural and managerial theories; Entrepreneurship characteristics in tourism and hospitality.

UNIT II: Demand and Supply

Demand for tourism: Concept and definitions of demand for tourism: consumer behaviour and tourism demand: determinants of tourism demand, measurement of tourism demand: elasticity of demand - meaning, types; supply of tourism; patterns and characteristics, elasticity of supply, pricing of tourism product; concept Objectives and policies.

UNIT III: Impact of Tourism

Impact of tourism - economic aspects; the multiplier effect; displacement effect and tourism-tourist spending; costs and benefits of tourism to community; environmental aspects – contingency valuation method.

UNIT IV: Sustainable Tourism Development

Meaning, definition, significance, principles, benefits and issues in sustainable tourism development; standardization and certification for tourism sustainability – ISO 14000 – role of WTTC, UN-WTO, PATA, UNEP, IUCN in sustainable tourism development.

Suggested Readings:

1. Varshney, R.L. and Maheshwari K.L. (2005). Managerial Economics. 11/e, Sultan Chand and Sons, New Delhi.
2. Dwivedi D.N. (2006) Managerial Economics, S. Chand & Sons, New Delhi
3. Milbourne. Cooper, Chris, Fletcher, John, Gilbert, David and Wanhil Stephen,(2001) Tourism Principles and practice, Pitman Publishing, London.
4. O P Khandari&Ashish Chandra, 2004, Tourism, Biodiversity & Sustainable Development Volume – 6
5. Satish C. Nigam, 2006, Eco Tourism & Sustainable Development.
6. O P Khandari&Ashish Chandra, 2004, Tourism, Biodiversity & Sustainable Development Assessing Tourism, Impacts in Asia & Pacific Volume 3
7. Gunn. Clare A. Tourism Planning (New York, Taylor & Francis)

ENERGY ECONOMICS

Course Code: ECO-622-DCE
Credits: 4

Marks: 100
Internal=50
External=50

Objective: The objective is to provide a basic understanding of planning and operation of energy production and energy consumption units. This course explores the theoretical and empirical perspectives on individual and industrial demand for energy, energy supply and energy markets.

After the completion of this course, the students will be able to:

CO1: Evaluate the cost effectiveness of renewable and non-renewable energy projects.

CO2: Understand of structure of energy markets and methods used for pricing energy.

CO3: Utilize spreadsheet functions to evaluate energy requirements.

CO4: Analyze the energy consumption in India.

UNIT I: Sources of Energy

Definition of energy, Energy measures, Economic definition of energy sources, Role of energy, Forms of renewable and non-renewable energy, Conventional and non-conventional energy sources – Oil, gas, coal, nuclear and solar energy, Energy production and distribution

UNIT II: Energy Prices and Markets

Drivers of energy demand, Energy intensity and elasticity, Statistical Techniques for demand forecasting, Energy Pricing – Basic pricing principles, Price determination under perfect competition and Monopoly, OPEC Cartel, Peak load and seasonal pricing, Concentration of energy supply and externalities

UNIT III: Energy Evaluation Methods

Economics of discount rate, Net Present Value, Incremental costs and benefits, Cash flow analysis, Private and social costs, Economic and financial analysis of energy technologies.

UNIT IV: Energy Consumption in India

Overview of energy policy in India, symbioses between technology and policy and the economy, The externalities: environmental, political, cultural, Supply and Demand of Energy – the economics and characteristics of Fuels (coal and others); Key developments and changes in India's energy policy in the context of energy efficiency and environmental concerns.

Suggested Readings:

1. Bhattacharyya, S (2011) Energy Economics: Concepts, Issues, Markets and Governance, Springer
2. Thomas Tietenberg, Environmental and Natural Resource Economics, Seventh Edition, Addison Wesley, Boston, 2006.
3. Robert S. Pindyck and Daniel L. Rubinfeld, Microeconomics, 6th Edition, Prentice Hall of India, 2005.
4. Bohi, D.P. (1981) : Analyzing Demand Behaviour : A Study of Energy Elasticities, Johns Hopkins University Press.

5. Nordhaus, William (1979): The Efficient Use Energy Resources, Yale University Press.
6. Asonofsky, J.A, Rao. "Energy Policy", North Holland, Amsterdam & M. Shakeen (Latest Edition).
7. Pachauri, R.K. "Energy Policy for India", Macmillan Co of India, New Delhi.
8. Kaplan, S. (1983). Energy economics: quantitative methods for energy and environmental decisions. McGraw-Hill College.

MONETARY ECONOMICS

Course Code: - ECO- 623-DCE

Credits: - 4

Max Marks: 100

External = 50

Internal=50

Objective: To familiarise students with the basic concepts, theories and approaches; to enable them to understand monetary policy framework and the challenges confronting the apex monetary authorities so that they are able make a critical analysis of current monetary policy of RBI.

After completing this course, the students will be able to:

CO1. Introduces them to the understanding of theories of demand for money

CO2. Understand the supply aspect of money and its components

CO3. Know the theories of interest rates and its policy

CO4. To make students accustomed with the knowledge of the basic concepts of the monetary theory and policy in order to understand the role and functioning of financial system and monetary mechanisms of an economy, and role of monetary policy.

Unit I: Demand for Money

Introduction- Deriving the Demand for Money; Demand for money— Classical and Keynes Theories; Friedman's wealth theory; Neo-classical theory of money; Keynes' income theory of money; Money, bonds and other Assets;

Unit II: Supply of Money

Money supply- the instruments of money supply; the determinants of money supply; The H theory of money supply; Money multiplier process; Determinants of money multiplier; the money supply in static model; Reserve bank's analysis of money.

Unit III: Theories of Interest Rates

Introduction-Term structure and risk structure of interest rates; theories- Expectations theory, Market segmentation theory, preferred habitat theory; Determinants of the general structure of interest rates; heterogeneity of interest rate determination; interest rate differentials.

Unit IV: Monetary policy

Monetary policy – framework, Objectives, tools and targets; Monetary policy operations in India; Monetary transmission mechanism in India; Challenges to Monetary policy in India; Market stabilization schemes; Analysis of current monetary policy of RBI.

Suggested Readings:

1. Lloyd (1979), Money Banking and Economic Activity, Addison Wesley.
2. Miskin F. (2015), The Economics of Money: Banking and Financial Markets, Addison Wesley Long mate.
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

AGRICULTURAL ECONOMICS

Course Code: ECO-624-DCE
Credits: 4

Marks: 100
Internal =50
External=50

Objectives: The objective of this course is to provide a detailed treatment of issues in agriculture economics to those intending to specialize in this area. Starting with the explanation of theoretical questions, the course tries to enhance the students' awareness of issues that are relevant to agriculture economics and contemporary debates in the literature and enable them to analyse these issues with basic microeconomics concepts.

After completing this course, the students shall be able to:

CO1: Analyze factors affecting agricultural development.

CO2: Examine trends in agricultural production and suggest measures to increase it.

CO3: Assess the supply and demand side dimensions of agricultural production.

CO4: Identify the issues in marketing and find their remedial measures.

Contents:

Unit-I

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, RanisFei, Mellor, Schultz and Boser up

Unit-II

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 – Theoretical and empirical findings; Farm budgeting and cost concepts; Supply response of individual crops and aggregate supply; Technical change and agricultural productivity.

Unit-III

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.); Rigidities in farm supply response.

Unit-IV

Agriculture Marketing –Definition, Scope, 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 and Warehousing Customs Union in the Asian Region; Bilateralism vs. Multilateralism.

Suggested References

- 1.** Bardhan, P. (1984), Land, Labour and Rural Poverty, Oxford University Press, New Delhi.
Chadha, G.K. and A.N. Sharma (1997), Growth, Employment and Poverty: Change and Continuity in Rural India, Vikas Publishing, New Delhi.
- 2.** Ghatak, S. and K. Ingerscent (1984), Agriculture and Economic Development, Selectbooks, New Delhi.
- 3.** Meier, G.M. (1995), Leading Issues in Economic Development, Oxford University Press, New Delhi.
- 4.** Thamarajakshi, R. (1994), Intersectoral Relationship in a Developing Economy. Academic Foundation, Delhi.
- 5.** Soni, R.N. (1995), Leading Issues in Agricultural Economics, Arihant Press, Jalandhar. Kaur, R. (1975), Agricultural Price Policy in Economic Development, Kalyani Publishers, Delhi.
- 6.** Mitra, A. (1977), Terms of Trade and Class Relations, Frank Cass Co. Ltd., London
- 7.** Schultz. T.W. : Transforming Traditional Agriculture.

INTERNATIONAL FINANCE

Course Code: ECO-625-DCE
Credits: 4

Marks: 100
Internal =50
External=50

Objective: The objective of this paper is to acquaint the students with the financial management problems of the multinational corporations and prepare them to tackle these problems

After completing this course, the student shall be able to

CO1: Develop skills in matters related to international financial and investment decisions of an MNC.

CO2: Analyse the Budgeting of MNCs

CO3: Evaluate the management of cross –border financial assets

CO4: Apply tools of risk management of MNCs

UNIT I: Introduction to international Finance

Introduction: Complexities and issues in financial decisions of a multinational firm: Foreign investment decisions: Exchange rate movement and decision to invest: Foreign direct investment theories and strategies: Green field investment vs. acquisitions and mergers.

UNIT II: Budgeting and MNCs

International Capital Budgeting: Multinational considerations and calculation of cash flows; Adjusted present value approach: Cost capital: Assessment and management of political risks. International Working Capital Management: Cash management; Receivables and inventory management. Dividend Policy for Multinational Corporations.

UNIT III: Portfolio Management:

International Portfolio Management: Decision to invest in portfolio: International CAPM; Identification of optimum portfolio. International Project Financing: Concepts, types techniques and key elements; Capital structure decision.

UNIT IV: Risk Management

Currency and Interest Rate Risk Management: Exposure and risk; Transaction, translation and real operating exposure; Exposure management contractual and natural hedging; interest rate risk assessment and management. International Taxation: Key elements and issues; International tax environment; Bilateral treaties and tax heavens.

Suggested References:

1. Apte P.G., Multinational Financial Management, Tata -McGraw Hill, New Delhi, 1998.
2. Baker J.C., International Finance: Management, Markets and Institutions, Prentice Hall, Englewood Cliffs, 1998
3. Eiteman, David K., Arthur Stonehill and Micheal H. Moffett, Multinational Business Finance, Addison-Wesley Publishing Company, Readings Mass., 1998.
4. Eun, Cheol and Bruce Resnick, International Financial Management, McGraw Hill, New York, 1998

SEMESTER-IV

ECONOMICS OF GROWTH

Course Code: ECO-662-C

Credits: 4

Marks: 100

Internal: 50

External: 50

Objective -The central purpose of this course is to make students familiar with the principal arguments and results of the theories and models of economic growth that have occupied a prominent place in the economic theorizing of the post-war era. The fundamental insights of old and new growth theories will be explained with an emphasis on economics.

After the completion of the course the students will be able to

CO1: Enhance the understanding of different growth measurements

CO2: Interpret the application part of the growth models

CO3: Critically develop the insights for analyzing the contemporary growth scenario

CO4: Formulate the assessment of different growth difference and policies to overcome differences at world level

UNIT-I: Growth and Development

Growth and Development Comparison; Factors affecting Growth— Capital, Labour, and Technology; Technical Progress— Hicks, Harrod, and Learning by Doing; Embodied and Disembodied Technical Progress; Production Function Approach to the Determinants of Growth; Total Factor Productivity and Growth Accounting.

UNIT-II: Neo-Classical Growth Theories

Harrod and Domar Models; Neo-Classical Growth Models—Solow, Meade; Cambridge Models of Economic Growth— Mrs. Joan Robinson's Model; Cambridge Criticism of Neo-Classical Analysis of Growth.

UNIT-III: Endogenous Growth Theories

Contribution of education to growth—Denison's approach, Production function approach, Technology creation through R&D; Determinants of R&D spending; Modeling relationship between technology creation and growth; Endogenous Growth Models— AK Model, Romer Model, Two Sector Model of Ujawa.

UNIT-IV: Trade and Growth

Trade as an engine of growth; Gains from trade— Static and Dynamic; Models of Regional Growth and Differences—Prebisch and Seers; Dependency Theory of Development and Unequal Exchange; Balance of Payments Constrained Growth, Dual Gap Analysis.

Suggested Readings:

1. M.P. Todaro and S.C. Smith, (2003), 8th ed; Economic Development, Pearson Education, Delhi.
2. A P Thirwal (1999/2006), 6th/8th ed; Growth and Development, Palgrave Macmillan, U.K.
3. M. Gills, Perkins, Romer, Snodgrass; Economics of Development, W.W.Norton and Company, New York.
4. D.N. Weil, (2009), 2nd ed; Economic Growth, Pearson Education, India.
5. R.J. Barro and Sala-i-Martin, (2007), 2nd ed; Economic Growth, Prentice Hall of India, New Delhi

JAMMU AND KASHMIR ECONOMY

Course Code: ECO-663-C
Credits: 4

Marks: 100
Internal =50
External=50

Objective –: The paper attempts to introduce students to working dynamics of J&K economy. The issues confronting the state economy at a disaggregated level will also be dealt with. The emphasis of the paper is on overall social, political and economic environment influencing policy decisions in contemporary settings in the state

After completing this course, the students will be able to:

- CO1.** Equips the students to analyse the basic features of J&K economy, understand the dynamics of changes in the economy from a theoretical framework and to have a good deal of understanding about the major developments in the Indian economy since independence.
- CO2.** Evaluate the various issues/components of the Economy so that they are able to comprehend and critically appraise current economic problems.
- CO3.** Have a clear understanding of the problems related to the Agriculture, Industry and other sectors of J&K Economy and also enables to evaluate the policies and performance of these sectors.
- CO4.** Impart the various aspects of infrastructural development, strategies of governments of developing infrastructure both the public and private sectors, the role of infrastructure in economic development considering one of its most important historical constituents, namely transportation, airports, power sector, railway infrastructure etc.

Contents:

Unit-I: Introduction

Main Features of Jammu & Kashmir Economy; Political Economy of development and governance; New Kashmir Manifesto-1944; Land Reforms (1950 and 1976); decentralized economy and panchayat raj system; economics of uncertainty and conflict.

Unit-II: Jammu & Kashmir –Economic and Social Scenario

Behaviour of SGDP and Per Capita SGDP since 1950; Sectoral Composition of SGDP: Inter Temporal Changes and their Implications. Poverty- Magnitude and Dimensions; Poverty Alleviation Programmes; unemployment- Magnitude and Dimensions; Education - Major Initiatives, Reforms, Employment linkages.

Unit-III: Agriculture

Agriculture and its development since 1947; Diversification issues in agriculture; Horticulture Sectors in J&K- Development and Potential; Forests in J&K – Problems, Prospects and Developmental Initiatives; Fisheries Sector- Major Initiatives.

Unit-IV: 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 the Industrial Sector; Tourism: Tourism potential in Jammu, Kashmir and Ladakh regions: In-flow, Revenue, and Developmental Initiatives; cross LOC trade; Power Sector - Generation and Reforms, Indus water treaty;

Suggested References:

1. J. Singh, (2004); the Economy of Jammu and Kashmir, Radha Krishnan Anand & Co, Jammu.
2. DES, Digest of Economics and Statistics, Latest issue, Government of J&K, Srinagar.
3. DES, Indicators of Regional Development 2007-08, Government of J&K, Srinagar.
4. DES, Economic Survey 2008-09, Government of J&K, Srinagar.
5. G.M Bhat, (2013); Some Aspects of J & K Economy, Jay Kay, Srinagar.
6. G.M Bhat (Ed), (2007); J & K Economy, P. G. Department of Economics, Srinagar.
7. God Bowley Committee Report on Economic Reforms for J&K.1998, Government of J&K, Srinagar
8. Economic Survey (2016), Directorate of Economics & Statistics, Government of Jammu & Kashmir.

ECONOMETRICS-II

Course Code: ECO-664-C

Credits: 4

Marks: 100

Internal =50

External=50

Objective: The objective of this paper is to expose the students to advanced econometrics methods including panel data models, dynamic models, and time series econometrics. This course is aimed to enable the students to forecast the values of economic variables for future based on the analysis of past and present data. The students will also be introduced to software packages like STATA or SPSS for practical application of basic econometric models.

After completing this course, the students shall be able to

CO1: Leverage balanced and unbalanced panel data for estimation of causal linkages.

CO2: Estimate and analyze dynamic relationships between economic variables using various dynamic models.

CO3: Perform the forecasting of macroeconomic variables using ARIMA and VAR techniques with better levels of accuracy.

CO4: Analyze time series datasets for forecasting and gauging of behavioral patterns of macroeconomic variables.

Contents:

Unit-I: Panel Data Modelling

Panel data: nature and benefits of panel data; Balanced and Unbalanced panel; Pooled panel data; Estimation of Panel data model: Fixed effects model and Random effects model; Choice between Fixed effects vs Random effects model (Hausman test).

Unit-II: Dynamic Econometric Modeling

Reasons for time lags; Role of time lags in regression analysis; Autoregressive and distributed lag models; Estimation of Distributed-lag models: Ad hoc estimation and its limitations; Koyck approach and Almon approach to distributed-lag models; Partial adjustment model, adaptive expectations model,

Unit-III: Basics of Time Series Econometrics

Stochastic process; stationary and non-stationary stochastic processes; white noise process; Random Walk Model (with and without drift); Unit Root stochastic process; Trend stationary and Difference Stationary processes; Integrated Stochastic process; The Phenomenon of Spurious regression; Test of Stationarity; The Unit Root Test: Dickey-Fuller Test; The concept of co-integration; Testing for co-integration: Engle-Granger, Error correction mechanism.

Unit-IV: Time Series Econometrics: Forecasting

Auto-regressive (AR) Process; Moving Average (MA) Process; Auto-regressive and Moving Average (ARMA) Process; Forecasting with Auto Regressive Integrated Moving Average (ARIMA) modeling; Box Jenkins methodology: identification, estimation, diagnostic checking and forecasting; Vector Auto-regression (VAR). Introduction to statistical software (STATA or SPSS) and basic commands for estimation of cross section, panel, and time series data models.

Suggested References

1. Gujarati, D.N (2005). Basic Econometrics, Tata Mcgraw Hill, New Delhi.
2. Baltagi, B.H. (2011). Econometrics. Berlin: Springer.
3. P. Kennedy, (1998) 4th ed; A Guide to Econometrics, MIT Press, New York.
4. G.S Maddala (ed.), (1993), Econometric Methods and Application (2 Volumes).
5. Greene, W.H. (2003). Econometric Analysis. Upper Saddle River, N.J: Prentice Hall
6. W. Enders, (2003) 2nd ed; Applied Econometric Time Series.
7. A.S. Goldberger, (1998), Introductory Econometrics, Harvard University Press, Cambridge, Mass.
8. STATA Manual, STATA Press.

Discipline Centric Electives (DCE)
SEMESTER – IV

ECONOMICS OF INFRASTRUCTURE

Course Code: ECO-666-DCE

Credits: 4

Marks: 100

Internal =50

External=50

Objectives: The objective is to provide a basic understanding of Economics of infrastructure, public policy analysis related to infrastructural issues, structure of transport cost, Postal tariffs and Energy with special reference in Economics.

After completing this course, the student shall be able to

CO1: To bring forth the nature and importance of infrastructure in the process of economic development.

CO2: Open up the debate for transportation as an important determinant of economic development.

CO3: Contextualize the energy needs, uses and outcomes in the process of economic development.

CO4: Opening up the floor to begin the discussion on social infrastructure and its various possible implications to economic development.

UNIT I: Infrastructure & Economic Development

Infrastructure – Nature, Meaning & Concepts. Role of infrastructure in Economic Development. Social & Physical Infrastructure. Economic characteristics of infrastructure. Infrastructure as a public good. Public utilities – Rationale of state provision, Public-private partnership investment The peak – load, off – load problem, dual principle controversy; economics of scale of joint supply; marginal cost pricing vs. other methods of pricing in public utilities; cross – subsidization – free prices, equity and efficiency.

UNIT II: Infrastructure of Transport

Transportation Economics. The structure of Transport Costs and Location of Economic Activities. Demand for Transport. Models of Freight and Passenger Demand. Model choice; cost functions in the transport sector. The supply of transport, Pricing policy; Cost Levels and Structure-Road Transport. Special problems of individual models of transport.

UNIT III: Energy Economics

Energy economics- Concepts, Nature & Characteristics . –Primacy of energy in the process of economic development. Factors determining energy demand. Effects of energy shortages. Energy conservation. Renewable and nonconventional sources of energy. Energy modeling. The search for an optimal energy policy in the Indian context. Current energy usage trends in India. Potential of futuristic energy generation & provision in India.

UNIT IV: Social Infrastructure

Social infrastructure- Meaning, Nature & Concepts. Organization and financing of supply of social services .Private vs. public sector financing. Recent debate on the fixation of pricing of social services. Provision of Social infrastructure in the developed nations. Provision of Social Infrastructure in the developing nations. Role of strong governments in the sustainable provision of social infrastructure. Development of social infrastructure in the successive Indian plans.

Suggested References

1. Crew. M.A& P.R. Kleindorfer, "Public Utility Economics", Macmillan, London.
2. ICSSR(1976), "Economics f Infrastructure Vol. VI, New Delhi".
3. Kneafsey, J.T , "Transportation Economic Analysis", Lexington, Toronts.
4. Asonofsky, J.A, Rao & M. Shakeen (Eds) , "Energy Policy" ,North Holland, Amsterdam.
5. Pachauri, R.K (Ed), "Energy Policy for India, Macmillan Co of India, New Delhi".

FINANCIAL INSTITUTIONS AND MARKETS

Course Code: ECO-667-DCE

Credits: 4

Marks: 100

Internal: 50

External: 50

Objectives: All modern, developed economies have a sophisticated financial system which incorporates both the financial institutions and financial markets. Over the period of time, the financial system has undergone revolutionary changes and rapid development. Financial markets are becoming ever more complex, offering new types of financial instruments. This course aims to enable the learners in developing an understanding of the financial system in the era of liberalisation, privatisation and globalisation.

After completing this course, the student shall be able to

CO1: Evaluate the role of financial system and regulatory authorities

CO2: Analyse the Indian banking system and suggest policies for growth and development

CO3: Examine the working of Indian Non-Banking financial Institutions.

CO4: Explore the working of Indian financial markets and use the knowledge for investment and policy making.

Unit-I: Introduction to financial system and Regulatory Authorities in India

Structure of financial system; Functions of financial sector; Financial system and economic development; Financial intermediation and financial intermediaries; Indicators of financial development; Regulatory financial institutions, RBI- Role and functions; SEBI-Objectives, functions, Insurance Regulatory and Development Authority (IRDA)-objectives and functions.

Unit- II: Banking Sector in India

Indian banking system, Role of Commercial banks in economic development, Banking sector post-independence, Major recommendations of the Chakravarty committee and Narasimham committee, Banking sector reforms in India. Global financial crises (2008), Problem of NPAs in Indian banks.

Unit III: NBFIs in India

NBFIs-Definition, types, growth and their impact on India's economic development; Small savings-Growth and composition; Provident funds, Pension funds; Hire-purchase finance; Lease financing; Merchant banking, Venture capital funds. UTI and Mutual funds-Organisation and schemes; Insurance companies-Types and structure; Credit rating agencies in India-Objectives and functions.

Unit- IV: Financial markets in India

Structure and functions of financial markets; Money market and its constituents-Call money market, Treasury bill market, Commercial bill market, Repo market, commercial paper market; Certificate of deposits market; Capital market-Government securities market; Corporate security market; Primary and secondary market for securities; Discount market; Unregulated credit markets-Types and functions.

Suggested References:

1. Bhole.M.L., and Mahakud.J. (2011) *.Financial institutions and markets* .New Delhi, India:Tata McGraw Hill.
2. Avadhani V.A. (2017). *Investment and Security Markets in India*.New Delhi, India: Himalaya Publishing House.
3. Avadhani V.A. (2014).*Financial Economics, Theory and Practice*.New Delhi, India: Himalaya Publishing House.
4. Melvin, Michael &Norrbinn, S.C. (2012).*International Money and Finance*.Amsterdam, Netherlands :Elsevier Science.
5. Chandeller, L.V. and Goldfeld, S. H. (1977). *The Economics of Money and Banking*. New York, USA: Joanna Cotler Books
6. G. Crowther. (2007). *An Outline of Money*.
7. Gurley and Shaw. (1960). *Money in a Theory of Finance*.Brookings Institution.
8. Sayers, R.S. (1967).*Modern Banking*.NY, USA:Oxford University Press
9. Stoneir and Shapiro. (1968).*Money and Banking*.Holt,Rinehart& Winston of Canada Ltd
10. Kock, D. (1975). *Central Banking*.Wiley Publication.
11. Sen, S.W.(1967).*Central Banking and Undeveloped Money Market*.
12. Basu, C.R.(1978). *Central Banking in Planned Economy and Practice*. US: McGraw-Hill.
13. R.B.I.*Reports on Currency and Finance* (various issues)

URBAN ECONOMICS

Course Code: ECO-668-DCE
Credits: 4

Marks: 100
Internal =50
External=50

Objectives: The objective behind introducing this course is to acquaint the underlying theories, propositions and issues that usually arise in studying an urban situation. The course will equip the student with the basic theoretical premises and analytical tools (borrowed from the standard micro and macroeconomics) that are used by an urban economist.

After the completion of the course, the students will be able to:

CO1: develop the capability and understanding of rural-urban relations, markets and migration

CO2: know urban planning, policies and facilities

CO3: to study the urban environment and its theoretical prospects

CO4: to access urban infrastructure and services

UNIT I: Introduction

Concepts and definitions of urban; Evolution of urban settlements - a historical perspective; Trends and patterns of urbanization, structure of urban economy, rural-urban relation in India; Urban labour market - rural-urban migration - urban informal sector - slums and poverty; Urban Land use and Land Market, gradient analysis

UNIT II: Urban Planning and Policy

Urban Planning: Institutions and Policies

Urban Concentration: policies for dispersal and decentralisation

Urban Transport: Intra-city and intercity problems. Issues relating to port

UNIT III: Urban Environment:

Urban Environment: Problems of pollutions and its management

Urban and regional growth theories: macroeconomic approach and cumulative causation theories. The urban centre within the region: urban hierarchy, urban size distribution and optimum city size debate.

Locational aspects of various urban functions: Weberian Location Theory

UNIT IV: Urban Infrastructure and Services -

Urban Infrastructure and Services - Demand and Supply, management, finance and pricing; Urban infrastructure and services- specific sectors: Housing, Water supply and drainage, waste management and sanitation

Urban local government and finance - the issue of decentralization

Aligarh Municipal Corporation: Sources of income and items of expenditure

Suggested Readings:

1. Evans, A.W., 1984, Urban Economics, Basil Blackwell, London.
2. O'Sullivan, A, 1996, Urban Economics (3rd edn.), IRWIN, London.
3. Hallet, Graham, 1979, Urban Land Economics: Principles and Policy, Macmillan, London.

4. Lewis, J. Parry, 1980, Urban Economics: A Set Approach, Arnold Heineman, New Delhi.
5. Richardson, H.W., 1978, Regional and Urban Economics, Penguin, Middlesex.
6. Richardson, H.W., 1978, Urban Economics, Dryden Press, Hinsdale.
7. O'Sullivan, A, 1996, Urban Economics (3rd edn.), IRWIN, London. (Chapters 1-4) Mills, Edwin and Charles Baker, 1988, India's Urban Development, Oxford University Press: New York
8. Sweezy, P. M. 1962. The Theory of Capitalist Development. Denis Dobson Ltd London.
9. Sen A. K. 1991. Poverty and Famines: An Essay on Entitlements and Deprivations, Oxford University Press Oxford.

REGIONAL ECONOMICS

Course Code: ECO-669-DCE
Credits: 4

Marks: 100
Internal =50
External =50

Objective: The new regime of market oriented economy and multilateral trading system left very few options for any central government in terms of planning and therefore the responsibility of planning for economic development falls on the state government or local government. The understanding of the various aspects of Regional Economics will strengthen the decision making power of the students.

After the completion of the course, the students will be able to:

CO1: understand the regional development and related theories

CO2: examine the regional planning, development and politics

CO3: develops the interests in regional planning at different levels

CO4: access the approaches and models of regional planning

UNIT I:

Regional Development: Concepts, Nature and Scope, Theories of Regional Development; E. Hoover, G.Myrdal, A.O.Hirschmann, Gandhian and Dandekar Approach.

UNIT II:

Regional Planning; Components, Magnitude and Determinants. Regional Development under Structural Adjustment Programmes. Micro-Regional Planning for Empowerment and Sustainable Development. Analyzing Relationship between Regional Development and Politics.

UNIT III:

Structure and Function of Multilevel Planning and Decision Making in Relation to District, Block and Village Level Planning.

UNIT IV:

Approaches of Regional Planning: Participatory, Locality Economic Development (LED), Social Planning Model and Methods of Community Organization

Suggested Readings:

1. Richardson, H.W (1969): Regional Economics, Praeger Publishers, Inc., New York.
2. Bhat, L.S (1972): Regional Planning in India, Statistical Publishing Society, Calcutta.
3. R.P. Mishra and R.N. Achyutha (edited): Micro-level Rural Planning; Principles, Methods and Case Studies, Concept Publishing Co. New Delhi. 1990.

4. Robert J. Stimson, Roger R. Stough Regional Economic Development: Analysis and Practice,(2nd ed. 2006),Springer Publication.
5. Chand, M.andV.KPuri(1983),Regional Planning in India, Allied Publishers,. New Delhi.
6. Hoover, E.M. (1974), An introduction to Regional Economics, Alfred A.Knopf, New York.
7. Isard, W. (1960), Methods Regional Analysis, MIT Press, Cambridge, Mass.

LABOUR ECONOMICS

Course Code: ECO-670-DCE
Credits: 4

Marks: 100
Internal =50
External=50

Objectives: This paper exposes students to theoretical as well as empirical issues relating to the labour market with special reference to India. After doing the course students would have better understanding of the working of labour market and will be able to analyse the implications of labour policies.

After completing this course, the students shall be able to:

CO1: Analyse demand and supply side patterns of labour in developing and developed countries.

CO2: Study the problems pertaining to wages in organized and unorganized sectors of the economy.

CO3: Assess the relevance of trade unions in the contemporary industrialized world.

CO4: Examine the effect of labour regulations on labour market performance.

Contents:

Unit-I:

Nature and characteristics of labour market in developing economies; Paradigm of labour market analysis; 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; Unemployment - Issues related to employment; rationalization and technological change

Unit-II:

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; Profitsharing schemes; Wage differentials and standardization of wages.

Unit-III:

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 and failures of trade union movement in India; Determinants of industrial disputes; Methods of settlement of industrial disputes; Labour participation in management

Unit-IV:

Increasing role of state in determination of labour matters; social safety nets for labour; Important labour legislation in India— The Industrial Disputes Act, the Trade Unions Act; the Factories Act and the Employees State Insurance Act; NEP and labour legislation; Second National Commission on Labour and its recommendations; ILO and its role in promoting labour welfare; Government policy towards agricultural, Woman and child labour.

Suggested References

1. R. A. Lester; Economics of Labor.
2. C. R. Mcconnel and S.L. Bruce; Contemporary Labor Economics.

- 3.** N. Das; Unemployment, Full Employment and India.
- 4.** V. B. Singh (ed.); Industrial Labor in India.
- 5.** V. Rao (ed.); Agricultural Labor in India.
- 6.** L.G. Reynolds; Labor Economics and Labor Relations.
- 7.** T. N. Bhagoliwwal; Economics of Labor and Industrial Relations.
- 8.** Report of the National Commission on Labor, Government of India.

ISLAMIC ECONOMICS

Course Code: ECO-671-DCE
Credits: 4

Marks: 100
Internal =50
External=50

Objective: To make familiar with the theoretical and historical foundations of Islamic Economics. To provide an understanding of Islamic concepts, principles, theories and tools pertaining to central economic problems. To build ethical and holistic world- view in dealing with the economic issues.

After the completion of the course, the students shall be able to:

CO1: To acquaint the students with the basic of Islamic Economics.

CO2: To create a conceptual understanding of the fundamental aspects of Islamic Economics.

CO3: To inculcate among the students Islamic ways of modest living.

Unit I: Introduction to Islamic Economics

Nature, and Importance of Islamic Economics. Origins and development of Islamic economics. Methodology; Tawhid (unity) - the central message of Islam and its potential impact on relationships: Man-man, man-environment and man-God; Theoretical foundations; Principles and characteristics; Ethics based economic system. Islamic Economics Versus Economics of Secular Economy and Mixed Economic.

Unit II: Fundamental Aspects of Islamic Economics

The notion of economic justice; Islamic economics a balance system between capitalism and socialism; Islamic approach to the property right; Economic security in Islam; Sustenance with dignity for all; preventing disparities from increasing and ensuring peace by fostering cooperation.

Unit III: Islamic Doctrines of Modest Living

From family to market; Roles for individuals, families, communities and states; Intra-Family Economic Responsibilities, Inter-Generational Equity through Inheritance; Moderation in Consumption, Condemnation of Greed and amassing Wealth: the main culprits behind the recent financial crises; Encouragement of earning, spending, giving and, by implication, saving and investing; Consumption and consumer behavior; Production preferences; Distribution and re-distribution; Aspects of Islamic public finance and fiscal policy; Emphasis on Poverty alleviation – role of voluntary institutions; Economic development in Islamic framework; Economic freedom, state intervention and economic policies.

Unit IV: Islamic Banking

Case against interest; Emphasis on real economic transaction and prevention of mere financial contracts; Exclusion of gambling, excessive uncertainty (gharar), selling debts and some other prohibitions; Principle of Participatory banking and risk-sharing; Rationale of Islamic banking; Controversy over credit creation; Financial instruments used by Islamic banks; Interface between Islamic and conventional banking; Monetary policy in Islamic system.

Suggested References

1. Chapra, M.U. (2014), *Morality and Justice in Islamic Economics and Finance*, Cheltenham, UK, and Northampton, USA: Edward Elgar. [first 3 articles]
2. Islahi, A. A. (2015) *The Genesis of Islamic Economics Revisited*, paper in the 10th International Conference on Islamic Economics and Finance, Doha, Qatar.
3. Hassan, M.K. and Lewis, M.K. (2014), *Handbook on Islam and Economic Life*, Cheltenham, UK, and Northampton, USA: Edward Elgar.
4. Askari, Hossein, et al. (2009), *New Issues in Islamic Finance and Economics*, Singapore: Wiley.
5. Siddiqi, M.N. (1996), *The Role of the State in the Economy – An Islamic Perspective*, Leicester, UK, Islamic Foundation.
6. Al-Qaradawi, Y. (1981), *Economic Security in Islam* (Translated by Muhammad Iqbal Siddiqi), Lahore: Kazi Publication.

FINANCIAL ECONOMICS

Course Code: - ECO-672-DCE
Credits: 4

Marks: 100
Internal =50
External=50

Objective: This course aims to familiarize students with basics of Allocation/Optimization of scarce resources to make better financial decisions. It also aims to solve real financial/business problems and utilization of financial resources through an efficient and economical way.

After the completion of the course, the students will be able to:

CO1: develop the capability and understanding of financial markets

CO2: access of securities market

CO3: analyse the derivatives and financial ratios of markets

CO4: apply valuation methods in financial markets

Unit I:

Financial Markets and Instruments and the Economy, Real Assets and Financial Assets, Stocks, Rate of Interest, Exchange Rates, Indian Financial Markets, Regulations and SEBI.

UNIT II:

Securities Markets, Operational Efficiency and Efficient Market Hypothesis (EMH), Modern View of Security Analysis, Performance of Securities Market, Price / Earnings Ratios, The Determinants of Equity Prices, Estimating Fair Value

UNIT III:

Derivatives Forward Markets and Future Markets. Mechanics of Futures Markets and Price Determination Hedgers, Speculators, Hedging Strategies, Options and Option Pricing, Options Payoffs, Put-Call Ratio and Parity, Mechanics and Properties of Stock Options

Unit IV:

Introduction to Valuation; Price & Value; Equity Valuation: Intrinsic Value and Market Value; Dividend Discount Models, Capital Asset Pricing Models, and Multi-factor Models. Debt Valuations and Derivative Valuation: Basic framework and Models

Suggested Readings:

1. Alexander, G.J., W.F. Sharpe and J.V. Bailey (2002), Fundamentals of Investments, Third Edition, Prentice-Hall of India Private Limited, New Delhi
2. Chandra, P. (1999), Financial Management: Theory and Practice, Galgotia Publishers
3. Hull, J.C. (2002), Options, Futures, and other Derivatives, Fifth Edition, Prentice-Hall
4. Francis, J.K. (1991), Investments: Analysis and Management, McGraw-Hill
5. R.E.Bailey(2005) The Economics of Financial Markets, Cambridge University Press

6. Bodie, Robert Merton and David Cleeton (2009), Financial Economics, Pearso
7. Bodie, A. Kane and A. Marcus(2008) Investments, McGraw-Hill
8. Financial Economics: A Concise Introduction to Classical and Behavioural Finance, Springer.

INSURANCE ECONOMICS

Course Code: ECO-673-DCE

Credits: 4

Marks: 100

Internal: 50

External: 50

Objective: The importance of insurance as a means of reducing uncertainty and risk in regard to personal and business activities cannot be overemphasized. Insurance industry is an important constituent of financial services industry in India and is a major investment institution. This paper covers the fundamentals of Risk Management, Insurance contract, Life Insurance and General Insurance.

After completing this course, the student shall be able to:

CO1: Analyse the role of insurance in mitigating uncertainty and risk

CO2: Apply the knowledge of insurance contracts in job market and policy making

CO3: Evaluate the role and working of life insurance sector and suggest policies

CO4: Examine the role, types and working of general insurance and apply it in policy making

Unit I: Risk Management in Insurance

Definition of risk; Classification of Risk, Risk Management, Probability and its use in Insurance; Definition of Insurance, Nature of Insurance Risk, Importance of Insurance, Classification of Insurance.

Unit II: Insurance Contracts and Agents

Insurance contract, Principles of an Insurance contract, Concept of Reinsurance, The Agent, Functions of the Agent Historical Framework of Insurance in India.

Unit III: Life Insurance

Definition of life Insurance, Importance of Life Insurance, Plans of life Insurance, Legal aspects of life insurance; Concepts of premium, Annuity, Unit link insurance policies (ULIP), Pension Plans; Performance of the life Insurance Sector in India.

Unit IV: General Insurance

Definition of General Insurance; Types of General Insurance – Fire Insurance, Marine Insurance, Health Insurance, Motor Insurance; Importance of General Insurance; Performance of the General Insurance in India.

Selected References:

1. Bickelhaupt, D (1992), General Insurance, 10th Revised Edition, Irwin (Richard D.) Inc.,U.S Irwin Inc.
2. Black, K.Jr. and H.D. Skipper Jr (2000): Life and Health Insurance , Prentice Hall, Upper Saddle River New Jersey.

3. Cummin.J.D and Derrig.R.A (1991), Managing the Insolvency Risk of Insurance Companies, Springer,Neatherland.
4. Dionne, G and S.E. Harrington (Eds) (1997): Foundations of Insurance Economics-Readings in Economics and Finance, Springer, Neatherlands.
5. Dogman MS (2007), Introductionto Risk Management & Insurance, 7th Edition, Prentice Hall of India.
6. George.E.R and Michael.M (2017), Principles of Risk Management and Insurance, 13th Edition,Pearson, New York.
7. Government of India (1998): Old age and Income security (OASIS) Report (Dave Committee Report)Government of India, New Delhi.
8. Insurance Regulations and Development Authority (2001): IRDA Regulations, New Delhi.
9. Kempler. C, Flamee.M, Yang.C, Windels.P(Eds) (2010), Global Perspectives on Insurance Today,Palgrave Macmillan, USA.
10. Mishra.K (2016), Fundamentals of Life Insurance Theories and Application, 2nd Edition, PHI LearningPrivate Limited, New Delhi.
11. Mishra.M.N and Mishra S.B (2016), Insurance- Principles and Practice, S.Chand Publishers, New Delhi.
12. Pteffer,I& D.R Klock (1974), Perspective of Insurance, Prentice Hall, Engleword Cliff
13. Skipper,Jr. H. D (ed) (1996), International Risk & Insurance: An Environmental Managerial Approach, McGraw-Hill Education.
14. Tacchino K.B and Litta D.A (1993), Planning for Restatement Needs, The Amarican college, BlynMawr
15. Tepathy, N.P.andPal.P (2005), Insurance: Theory and Practice, Prentice Hall of India 2005
16. Thoys. R (2010), Insurance Theory and Practice, 1st Edition, Routledge, India.
17. Vaughan, E.J. and Vaughax.T.W (2007), Fundamentals of Risk Insurance, Wiley, US.
18. William Jr, C.A, Smith.M.L and Young.P.C (1997), Risk Management & Insurance, McGraw Hill, NewYork.

INDUSTRIAL ECONOMICS

Course Code: ECO-674-DCE
Credits: 4

Marks: 100
Internal=50
External=50

Objectives: The aim of this paper is to provide knowledge to the students on the basic issues such as pricing policy, efficiency, demand analysis, forecasting, productivity, capacity utilization and the issues involved in the industrial development in India. The objective is to provide a thorough knowledge about Industrial Economics in cogent and analytical manner particularly in the Indian context.

After the completion of this course, the students will be able to:

CO1: Make informed entrepreneurship choices by understanding the efficient decision making outcomes of firms.

CO2: Apply analytical tools to measure the performance of firms with market power and its welfare implications.

CO3: Evaluate different approaches like (SCP) to study how the structure of the market and the behavior of sellers of different commodities and services affect the performance of markets, and consequently the welfare of the country as a whole.

CO4: Estimate the determinants of industrial efficiency and evaluate cost benefit methods like the net present value method, the internal rate of return method etc.

UNIT-I: Organizational forms and Alternative Motives of the Firms

Meaning and scope of industrial economics, The Organizational pattern of the firm on the basis of ownership, internal organizations of the firm, Business motives-Profit, Sales, Growth and Value maximization of the firm. Size of the firm Optimum firm, Representative firm, Equilibrium firm, factors determining optimum size, reconciliation of optima. Need for the growth of the firm, theories of the growth of the firm: theories of the growth of the firm: Downie's theory Penrose's theory and Marris's theory of the growth of the firm.

Unit –II: Elements of Market Structure

Market Structure: Meaning of the market structure, Sellers concentration and its measurement: the concentration ratio, the Lorenz curve; product differentiations – its sources and its implications, entry conditions, economies of scale; market structure & innovation – the process of innovation – concepts & relationships – its measurement. Industrial location analysis – the general determination of industrial location; Theories of industrial locations Weber & Sergeant Florence.

UNIT – III: Market Conduct and Performance

The structural conduct performance approach relationships between structure, conduct & performance, neoclassical developments of the SCP approach. General situations for pricing decisions. Pricing in practice – cost plus pricing, incremental cost pricing, the target rate of return pricing, acceptance pricing, the going rate pricing, pricing in public enterprises, Diversification and vertical integration, merger – definitions, types & motives, Implication for public policies.

UNIT-IV: Industrial Efficiency: Concepts and Measurement

Industrial productivity – its importance, distinction between production and productivity, factors influencing industrial productivity, Industrial efficiency – meaning of the concept, the determinants of economic efficiency, measurement of the efficiency levels, investment decisions, preparation of the time – profile of the project, methods of project evaluation; - the payback method, the average of accounting rate of return method, the net present value method, the internal rate of return method, ranking of projects; NPV VS IRR.

Suggested Readings:

1. Clement Krouse, Theory of Industrial Economics, Constable, London.
2. Barthwal, R.R, Industrial Economics: An Introductory Text book, Wiley Eastern Ltd, New Delhi.
3. Seth N.K, Industrialization in India.
4. Kuchhal, S.C, Industrial Economy of India, Chaitanya, Allahabad.
5. Varshney, R.L. &Maheshwary, K.L, Managerial Economics
6. Brahmananda P.R, Productivity in the Indian Economy, Himalayan Publication, Bombay.
7. Clark, R, Industrial Economics, Penguin Books, London
8. Hennah, L. and J. Kay (1977). Concentration of Modern Industry, Macmillan, London.
9. Shepherd, W.G. (1979). Economics of Industrial Organization, Prentice Hall.
10. Planning commission, Report on Indus. Planning and Licensing Policy.

ELECTIVE COURSES

ELEMENTARY MICRO ECONOMICS

Course Code: - ECO-007-E
Credits: - 4

Max Marks: - 100
Internal=50
External =50

Objective: Economics as a discipline has two broad branches viz. Microeconomics and Macroeconomics. The objective of this elementary course is to provide a general introduction the Microeconomics to a student who has never studied the subject of Economics

Unit- I: Basic Concepts

Definitions of Economics; Scientific Approach; Pitfalls in Economic reasoning; Law of scarcity, Production Possibility Frontier; Problems of economic organization- market solution, Invisible hand and perfect competition, Economic role of government; Specialization, money and capital.

Unit-II: Consumer Behavior

Elements of demand and supply; Demand curve, shifts in demand curve; Supply – supply curve, shifts in supply curve; Equilibrium of demand and supply; Rationing of prices; Price elasticity of demand and its graphical measurement; Price elasticity of supply, cross elasticity; Utility- concept, law of diminishing marginal utility; Indifference curve and its properties; Budget line; Consumer's equilibrium.

Unit-III: Producer Behavior

Production function; short-run and long-run; Law of variable proportions; Iso-quant and its properties; Returns to scale; Cost- concept and types; Short run and long-run costs; Iso-cost line; Least cost combination of factors; Business organization: advantages and disadvantages of various business forms with special reference to corporate firm

Unit- IV: Market Structure

Perfect competition- concept and features; Monopoly- concept and features, causes and costs of monopoly; Price discrimination- concept and types; Monopolistic competition- concept and features; Duopoly and Oligopoly- concept and features.

Suggested Readings:

1. Samuelson. P & W. Nordhaus (1989) Economics (current Edition McGraw Hill, New Delhi.
2. G.Mankiw (2006) Principles of Microeconomics (Fourth Edition) CENGAGE Learning.
3. Hal.R.Varian (1987) Intermediate Microeconomics: A modern approach (sixth edition). W. W. Norton.

ECONOMICS OF UNDERDEVELOPMENT

Course Code: ECO-008-E
Credits: 2

Max Marks= 50
Internal=25
External =25

Unit-I: Introduction to Economic Development

Concept of Economic Growth and Development, Measures of Economic Development- GNP and HDI, Characteristics of Underdeveloped Economies.

Unit-II: Employment

Meaning of Unemployment, Types of Unemployment- Structural, Frictional, Seasonal, Disguised unemployment meaning and features, Concept of Full Employment, Major Employment Schemes.

Suggested Readings:

1. Samuelson, P., & Nordhaus, W. (1985), "Principles of economics", McCraw-Hills, New York, any edition.
2. Misra, S. K., & Puri, V. K. (2011), "Indian economy", Himalaya Publishing House.
3. Ohri, V.K., & Jain, T. R. (2006), "Indian Economic Development", VK Publications, 4323(3),
21

ENGINEERING ECONOMICS-I

Code: - ECO-009-E
Credits: - 4

Max Marks: - 100
Internal=50
External =50

Unit-I: INTRODUCTION TO ENGINEERING ECONOMICS

Engineering Economics-nature and scope, basic problems of an economy; Concept of efficiency, Theory of Demand – meaning, demand function, Individual and market demand schedule, Law of Demand and its exceptions, Determinants of demand, Elasticity of demand & its measurement (Simple numerical problems to be solved)

Unit-II: SUPPLY

Supply-meaning of supply, Law of supply and its exception, determinants of supply, elasticity of supply, determination of market equilibrium (simple numerical problems to be solved), role of demand & supply in price determination and effect of changes in demand and supply on prices.

Unit-III: VALUE ENGINEERING

Management aspects and functions of management, project management, value engineering functions and aims, Value engineering procedure, Project evaluation, decision making, interest formulae and their applications-time value of money – interest – simple and compound, nominal and effective rate of interest.

Unit- IV: CASH FLOW

Cash flow diagrams, Evaluation of engineering projects-Present worth method. Future worth method, Annual worth method, Methods of comparison of alternatives, Internal rate of return method, Cost benefit analysis for public projects, Examples in all the methods

Suggested Readings:

1. PanneerSelvam. R. “Engineering Economics”, Prentice Hall of India Ltd. New Delhi,2001.
2. SasmitaMishra, “Engineering Economics & Costing”, PHI
3. Sullivan and Wicks, “Engineering Economy”, Pearson.
4. Gupta, “Managerial Economics”, TMH

INDIAN ECONOMY – SECTORIAL ANALYSIS

Code: - ECO-010-E
Credits: - 4

Max Marks: - 100
Internal=50
External =50

Unit-I: Indian Economy

Nature of Indian economy features of Indian Economy, Indian economy before and after independence.

Unit-II: Agriculture

Role of agriculture in Indian Economy, Nature and issues, Trends in agriculture production, Land reforms, Green revolution, Food security.

Unit-III: Industry

Role of industrial sector in Indian economy, Major industries in India, Industrial sickness in India, industrial reforms and policies.

Unit-IV: Service Sector in India

Growth and contribution of service sector share of service sector in employment, information and Communication, foreign trade in services

Suggested Reading:

1. BimalJalan (ed.), “The Indian Economy Problems and Prospects”, Penguin, latest Edition.
2. Dutt, R. & K. P. M. Sundaram. (2016), “Indian Economy”, S.Chand& Co. New Delhi.Misra, S. K. & V. K. Puri, (2016), “Indian Economy”, Himalayan Publishing House, NewDelhi

INDIAN FINANCIAL SYSTEM

Code: - ECO-011-E
Credits: - 2

Max Marks: - 50
Internal=25
External =25

Unit-I: Indian Financial System

Indian Financial system – evolution, characteristics, significance and components; Structure of Indian financial system – main functions. Banking development since independence; banking sector reforms since 1991-92, RBI functions- monetary policy and credit control.

Unit-II: Money and Capital Markets

Meaning and importance of money market, characteristics of organized and unorganized money market in India, reform measure to strengthen the Indian money market. Capital market – meaning and structure, Role of capital market, Reform measures to strengthening the capital market in India.

Suggested Readings:

1. BimalJalan (ed.), “The Indian Economy Problems and Prospects”. Penguin, latest Edition.
2. Dutt, R. & K. P. M. Sundaram, (2016), “Indian Economy”, S. Chand & Co. New Delhi.
3. Misra, S. K. & V. K. Puri, (2016), “Indian Economy”, Himalayan Publishing House, NewDelhi

INTRODUCTORY MACROECONOMICS

Code: - ECO-057-E
Credits: - 4

Max Marks: - 100
Internal=50
External =50

Unit-I: National Income Accounting

Basic issues studied in Macroeconomics, National Income, measurement of Gross Domestic Product; Income method, Expenditure method and Output method, Circular flow, two sector models.

Unit-II: Classical and Keynes Economy

Classical Economy” Assumptions, Says Law of market, Determination of Employment and Income, Keynesian Economy: Aggregate Demand and Aggregate supply: Simple Keynesian model of income determination.

Unit-III: Money

Money:- Evolution, Types of Money, Functions of money; Theories of Demand for Money: Fishers quantity theory of money and Keynes Liquidity preference theory.

Unit-IV: Inflation

Inflation: Causes, Demand pull and cost push, Consequences, Measurements- WPI and CPI

Suggested Readings:

1. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition,2010.
2. N.Gregory Mankiw. Macroeconomics, Worth Publishers, 7th edition,2010.
3. Olivier Blanchard, Macroeconomics, Pearson Education, Inc., 5th edition, 2009.
4. Richard T. Froyen, Macroeconomics, Pearson Education Asia, 2nd edition, 2005.
5. Andrew B. Abel and Ben S. Bernake, Macroeconomics, Pearson Education, Inc., 7th edition2011.

INDIAN FISCAL SYSTEM

Code: - ECO-058-E
Credits: - 4

Max Marks: - 100
Internal=50
External =50

Unit-I: Tax

Tax- meaning, types, Tax Revenue of central and state government. Taxes on income and wealth, indirect taxation – GST and customs Duties, Evaluation of Indian taxstructure.

Unit-II: Public Expenditure

Public expenditure: meaning, types and composition, growth of public expenditure since independence, public expenditure management.

Unit-III: Public Debit

Debt-meaning and scope, Debt obligations of Centre and state, Debt financing-meaning and role, Public debt: problems and issue, Public debt management.

Unit-IV: Fiscal Policy

Fiscal policy-meaning and objectives, Fiscal imbalance, Fiscal responsibility in India.

Suggested Reading:

1. BimalJalan (ed.), “The Indian Economy Problems and Prospects”. Penguin, latestEdition.
2. Dutt, R. & K. P. M. Sundaram, (2016), “Indian Economy”, S. Chand & Co. NewDelhi.
3. Misra, S. K. & V. K. Puri, (2016),“Indian Economy”, Himalayan Publishing House, New Delhi.

ENGINEERING ECONOMICS-II

Code: - ECO-059-E

Credits: - 4

Max Marks: - 100

Internal=50

External =50

Unit-I: COST CONCEPTS

Various concepts of cost – fixed cost, variable cost, average cost, marginal cost, money cost, real cost, opportunity cost, Break-even analysis. Shape of average cost, marginal cost, total cost curves in short run and longrun.

Unit-II: MARKET ANALYSIS

Basic understanding of different market structures, determination of equilibrium price under different markets, types of market – perfect competition, monopoly, oligopoly, monopolistic competition (main features of these markets)

Unit-III: DEPRECIATION

Depreciation – depreciation of capital asset, causes of depreciation, methods of calculating depreciation (straight line method, declining balance method), sinking fund method of depreciation/ annuity method of depreciation, service output method of depreciation, after tax comparison of project.

Unit-IV: REPLACEMENT AND MAINTENANCE ANALYSIS

Replacement and Maintenance analysis – types of maintenance, types of replacement problem, determination of economic life of an asset, replacement of an asset with a new asset – capital recovery with return and concept of challenger and defender, simple probabilistic model for items which fail completely

Suggested Readings:

1. PanneerSelvam. R. “Engineering Economics”, Prentice Hall of India Ltd. New Delhi,2001.
2. SasmitaMishra, “Engineering Economics &Costing”,PHI
3. Sullivan and Wicks, “Engineering Economy”, Pearson.
4. Gupta,“ManagerialEconomics”, TMH

HUMAN DEVELOPMENT

Code: - ECO-060-E
Credits: - 2

Max Marks: 50
Internal=25
External =25

Unit-I: Concept and measurement of Human Development.

Human Development – meaning and importance, Structure of human development, Measurement of HD.

Unit-II: Health and Education

Composition of population, sex ratio, life expectancy, infant mortality, Health care reforms, National Health policy 2017, Education in India, Literacy rate since 1947, Enrolment ratio at primary, secondary and territory levels: gender and education, Education policy in India.

Suggested Reading:

1. BimalJalan (ed.), “The Indian Economy Problems and Prospects”. Penguin, latestEdition.
2. Dutt, R. & K. P. M. Sundaram, (2016), “Indian Economy”, S. Chand & Co. NewDelhi.
3. Misra, S. K. & V. K. Puri, (2016),“Indian Economy”, Himalayan Publishing House, New Delhi

POVERTY, INEQUALITY AND UNEMPLOYMENT- INDIA

Code: - ECO-061-E

Credits: - 2

Max Marks: - 50

Internal=25

External =25

Unit-I: Poverty and Income Inequality

Poverty-absolute and relatives, Incidence of poverty, Multidimensional poverty, alleviation programmes, inequality-concepts and measurements, Income inequalities in India, Causes of income inequalities, Governments policies.

Unit-II: Employment and Unemployment

Unemployment: meaning, types, nature and estimation, causes of unemployment, Major employment programmes.

Suggested Reading:

1. BimalJalan (ed.), "The Indian Economy Problems and Prospects". Penguin, latest Edition.
2. Dutt, R. & K. P. M. Sundaram, (2016), "Indian Economy", S. Chand & Co. New Delhi.
3. Misra, S. K. & V. K. Puri, (2016),"Indian Economy", Himalayan Publishing House, New Delhi.

SUBSIDIARY COURSES

FUNDAMENTALS OF MARKET ECONOMY

Course Code: - ECO-BAH-SCC-01
Credits: - 4

Max Marks: - 100
Internal=50
External =50

Objective: The objective of this course is to explain basic problems of an economic system, market and its functioning and utility maximisation of consumers based on cardinal utility.

Unit-I: The Economic Way of Thinking

Economics- historical perspective and definitions, Scientific Approach, Normative economics and Positive economics; Problems of economic organisation; Economic systems; Principles of microeconomics- principles of individual decision making; Principles of economic interactions- trade off, opportunity cost, efficiency.

Unit-II: Market Adjustments

The evolution of market economies- price system and the invisible hand; The decision takers-households, firms and central authorities; The concept of markets- individual market, separation of individual markets, interlinking of individual markets; Difference among markets- competitiveness, goods and factor markets, free and controlled markets; Market and non-market sectors- public and private sectors, economies-free market, command and mixed markets; Market failure, externality and market power; Different goods- Public goods, common resources and natural monopolies.

Unit-III: Market Competition and Market Sensitivity

Market and competition; Demand and its determinants; Supply and its determinants; Relation of quantity demanded with price (using arguments of income and substitution effects); Relation of quantity supplied with price (using increasing costs argument); Laws of Demand and Supply; Movement along and shift of the curves, Demand and Supply- other factors; Equilibrium and Disequilibrium; Elasticity of demand- concept and types, measurements- arc and point elasticity, demand elasticity and revenue; Elasticity of supply- concept, types and measurements.

Unit-IV: Utility Approach

Utility-concept and approaches, Cardinal and Ordinal, Cardinal-utility and choice; Total utility and marginal utility, utility and choice maximisation; Marginal utility theory of demand, willingness to pay and consumer surplus; Willingness to sell and producer surplus; Market efficiency and dead-weight loss, dead weight loss of taxation; The economic role of government with respect to market: (i) Price ceiling, price floor and market adjustment (with short case studies of agricultural administered price, minimum wage and rent control), (ii) Black markets (iii) Tax and market adjustments (iv) Elasticity and tax incidence.

Suggested Reading:

1. Salvatore, D. (2010), "Microeconomics Theory and Applications", Oxford University Press, NewDelhi.
2. Samuelson, P.A. and W.D. Nordhaus (1998), "Economics", Tata McGraw Hill, NewDelhi.
3. Karl E. Case and Ray C. Fair, (2007), "Principles of Economics", Pearson Education Inc.,

8thEdition.

4. Koutsoyiannis, A. (1990), "Modern Microeconomics", Macmillan Press, London
Walter.
5. N. Gregory Mankiw, (2007), "Economics: Principles and Applications", India edition by
South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th
edition.

CONSUMER BEHAVIOUR, PRODUCTION AND SUPPLY

Course Code: - ECO-BAH-SCC-02

Credits: - 4

Max Marks: - 100

Internal=50

External =50

Objective: This paper introduces utility maximization of consumers based on ordinal utility and rules of profit maximization of firms operating under perfect competition utilizing traditional cost theory during short run and long run.

Unit-I: Consumer Theory-I

Assumptions on preference ordering, indifference curve, marginal rate of substitution and convexity of indifference curve (IC), budget constraint, consumers' equilibrium- interior and corner solution, derivation of demand curves from ICs, composite good convention; Application: cash subsidy versus subsidy in kind.

Unit-II: Consumer Theory-II

Income and price consumption curves; price effect-substitution effect (Hicks and Slutsky), inferior good and Giffen goods, income effect, ordinary and compensated demand curves, Inter-temporal choice (saving and borrowing); Revealed preference theory; Choice under uncertainty- utility function and expected utility, risk aversion and risk preference (concepts only).

Unit-III: Production Theory

Technology, production function and isoquants, short run and long run, production with one and two variable inputs; Total, average and marginal products; Law of diminishing returns, marginal rate of technical substitution, elasticity of substitution; Economies of scale; Types of production function– Cobb-Douglas; Fixed- Coefficient and CES production function.

Unit-IV: Cost Structure and Curves

Cost structure-implicit cost, explicit cost, accounting cost, sunk cost, economic cost, fixed cost, variable cost, total, average and marginal cost; Determinants of short run cost, cost curves, cost minimization and expansion path, Short run versus long run cost curves.

Suggested Reading:

1. Salvatore, D. (2010), "Microeconomics Theory and Applications", Oxford University Press, New Delhi.
2. Samuelson, P.A. and W.D. Nordhaus (1998), "Economics", Tata McGraw Hill, New Delhi.
3. Karl E. Case and Ray C. Fair, (2007), "Principles of Economics", Pearson Education Inc., 8th Edition.
4. Koutsoyiannis, A. (1990), "Modern Microeconomics", Macmillan Press, London Walter.
5. N. Gregory Mankiw, (2007), "Economics: Principles and Applications", India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition.

ANALYSIS OF MARKETS

Course Code: - ECO-BAH-SCC-03
Credits: - 4

Max Marks: - 100
Internal=50
External =50

Objective: Objective of this course is to examine the economic behaviour of firms operating under monopoly and monopolistic competition and factor rewards under perfect and imperfect factor market conditions.

Unit-I: Market Structure-I

Organization, firms and profit maximization; Marginal revenue, marginal cost and profit maximization; Perfect competition- short run competitive equilibrium of the firm, short run supply curve of firm and industry; Output choice and competitive equilibrium in long run; Economic rent and profit; long run industry supply- constant, increasing and decreasing cost; Efficiency of competitive equilibrium; Government intervention and dead-weight loss, Applications- minimum prices and price support.

Unit-II: Market Structure-II

Monopoly and barriers to entry- output determination and price rule; Measures and source of monopoly power; Social costs of monopoly power; Pricing with monopoly power- First, Second and Third degree price discrimination; Monopolistic competition- short run and long run equilibrium, excess capacity; Oligopoly- oligopoly equilibrium as Nash equilibrium; Cournot and Stackelberg models; Competition versus collusion- the Prisoner's dilemma.

Unit-III: Input Market

Basic concepts- derived demand, productivity of an input, marginal product of an input, marginal revenue product; Marginal productivity theory of distribution; Labour market supply of labour, competitive labour markets; Monopsony; Collective bargaining; Land markets and rent.

Unit-IV: Other Issues Related to Market

General equilibrium and Economic Efficiency- Exchange, Product and Welfare; Reasons for market failure; Market with asymmetric information- adverse selection, moral hazards and agency problems (concepts only).

Suggested Reading:

1. Salvatore, D. (2010), "Microeconomics Theory and Applications", Oxford University Press, NewDelhi.
2. Samuelson, P.A. and W.D. Nordhaus (1998), "Economics", Tata McGraw Hill, NewDelhi.
3. Karl E. Case and Ray C. Fair, (2007), "Principles of Economics", Pearson Education Inc., 8thEdition.
4. Koutsoyiannis, A. (1990), "Modern Microeconomics", Macmillan Press, London Walter.

5. N. Gregory Mankiw, (2007), "Economics: Principles and Applications", India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition.

AGGREGATE MARKETS OF MACROECONOMIC MODEL

Course Code: - ECO-BAH-SCC-04
Credits: - 4

Max Marks: - 100
Internal=50
External =50

Objective: This paper is designed to introduce basics of national income accounting and the necessary pre-requisites that ensure equilibrium in labour market, goods market and asset market of an economy.

Unit-I: National Income Accounting

Primary issues in Macroeconomics; Classical, Keynesian and Unified approaches to Macroeconomics; National Income Accounting- Measurement of production, income and expenditure; equivalence of three approaches; Measurement of aggregate savings and its relation to wealth, real GDP, price indexes and inflation; Interest rates.

Unit-II: Labour Market Equilibrium

Production function- properties; Demand for labour and its determinants; Supply of labour- Real wage and labour supply; Labour market equilibrium; Full employment output; Unemployment- measurement, duration, types, Okun's Law, costs and Phillips curve analysis.

Unit-III: Goods Market Equilibrium

Consumption and Savings- factors affecting consumption and savings; Fiscal policy; Investment- Desired capital stock and its determinants; Goods market equilibrium, Goods market equilibrium in open economy- case of small and large economy.

Unit-IV: Asset Market Equilibrium

Economic growth- sources, Growth accounting; Solow model; Asset Market- money and Prices; Long run economic performance; Money- concept, functions, Monetary aggregates, Portfolio allocation decisions- determinants, types of assets and their characteristics; Demand for money- determinants, money demand function; Quantity theory of money; Asset market equilibrium; Monetary growth and inflation

Suggested Readings:

1. Andrew B. Abel and Ben S. Bernanke, (2011), "Macroeconomics", Pearson Education Limited, Edinburgh Gate, Harlo- England, Ninth Edition.
2. Paul Samuelson and Nordhaus, (2005), "Economics" Tata Hill Publishing Company, New Delhi, (18th Ed.).
3. Gregory N. Mankiw, (2010), "Macroeconomics", Worth Publishers, Seventh Edition.

CLASSICAL AND KEYNESIAN APPROACHES TO MACROECONOMICS

Course Code: - ECO-BAH-SCC-05

Credits: - 4

Max Marks: - 100

Internal=50

External =50

Objective: To provide the students with an introduction to the basic macroeconomic tools like IS-LM/AD-AS Model; to appreciate the workings of real and money markets and the nature of equilibrium in each market within the classical and Keynesian framework followed by a discussion on effectiveness of monetary and fiscal policies within the tradition of these two schools.

Unit-I: IS- LM/ AD-AS Model

Business Cycle- concept, cyclical behaviour of economic variables; Business cycle analysis, IS-LM/ AD-AS Model: FE line, IS curve, LM curve, Shift factors in FE, IS and LM curves; General Equilibrium; Price adjustment and attainment of GE, Classical and Keynesian version of IS-LM model, Aggregate demand (AD) and Aggregate supply (AS)- curves, Shift factors, Equilibrium; Monetary neutrality.

Unit-II: Classical Model- Clearing Macroeconomics

Real Business Theory- types of shocks, measurement of productivity shocks, Fiscal policy shocks; Unemployment in Classical model; Money in Classical model; Misperceptions Theory; Monetary policy and Misperceptions Theory.

Unit-III: Keynesianism – Macroeconomics of wage and price rigidity

Real wage rigidity- concept and causes; Efficiency wage model, employment and unemployment in efficiency wage model; Price stickiness- sources; Monetary policy in Keynesian IS-LM model; Fiscal policy; Theory of business cycles and macroeconomic stabilisation; Supply shocks in Keynesian model.

Unit-IV: Macroeconomic Policies

Principles of money supply determinants, Money Multiplier, Monetary policy targets, Tools of monetary policy; Difficulties of making monetary policy; Conduct of monetary policy- Rules vs Discretion, Taylor Rule; Government Budgets, fiscal Policies and AD; Government capital formation; Incentive effects of fiscal policy; Government debt; Budget deficit and national savings, Ricardian equivalence, Budget deficit and money supply-Seignorage.

Suggested Readings:

4. Andrew B. Abel and Ben S. Bernanke, (2011), “Macroeconomics”, Pearson Education Limited, Edinburgh Gate, Harlo- England, NinthEdition.
5. Paul Samuelson and Nordhaus, (2005), “Economics” Tata Hill Publishing Company, New Delhi, (18thEd.).
6. Gregory N. Mankiw, (2010), “Macroeconomics”, Worth Publishers, Seventh Edition.

TRADE, DEVELOPMENT AND FINANCE

Course Code: - ECO-BAH-SCC-06
Credits: - 4

Max Marks: - 100
Internal=50
External =50

Objective: This course is carved out from three distinct specialisations viz International Trade, Public Finance and Development Economics so as to bridge certain gaps of economic theory which are not covered in other five courses constituting the category of core subsidiary courses in Economics.

Unit I: International Trade

Theories of international trade- Absolute Advantage Theory, Comparative Advantage Theory; opportunity Cost Theory; Heckscher-Ohlin Theory; Trade Policies-analysis of tariff and non- tariff barriers; World Trade Organisation-evolution, functions and challenges.

Unit II: Public Finance-I

Public finance-nature, scope and importance; Public goods-definition, models of efficient allocation, pure and impure public goods, free riding; overview of different roles of government. Budget- concept, types and importance; different concepts of budgetary deficits in the Indian context.

Unit III: Public Finance-II

Public revenue-tax and non-tax sources; Tax- types; economic effects- deadweight loss and distortions; efficiency, equity and tax incidence; Public expenditure-meaning and importance; Wagner's law of increasing state activities; Canons of public expenditure; Public debt-concept and sources.

Unit IV: Development Economics

Characteristics of underdevelopment; concept of economic development and its measurement through GDP, PQLI and HDI; Theories of economic development-Ricardo and Schumpeter; Public goods and economic development; State ownership and regulation; government failure, corruption and development.

Suggested Readings

1. P. R. Krugman and M. Obstfeld, (2000), "International Economics- Theory and Policy", Addison Wesley, New Delhi, 5th Edition.
2. D. Salvatore, (2004), "International Economics", Wiley India, New Delhi, 8th Edition
3. Harvey Rosen, (2005), "Public Finance", McGraw Hill Publications, Seventh Edition.
4. Misra, S. K. & V. K. Puri, (2016), "Indian Economy", Himalayan Publishing House, New Delhi.
5. A.P Thirwal, (2005), "Growth and Development", Palgrave Macmillan, Eighth Edition.
6. M.P Todaro, (2010), "Economic Development", Pearson Education Limited. Seventh Edition.