

**M.A. Economics
Semester - I
MICROECONOMICS**

Course Code: ECOCC-101

Credit: 4

Course Objective: it provides theoretical tools to analyse real/practical market situations.

Course Content

UNIT – I: Consumer Behaviour

Measurement of Utility, Cardinal vs. Ordinal Approaches, Indirect Utility Function, Roy's Identity, Shepherds Lemma, Theory of Revealed Preference and logic of Ordering; Strong and weak Ordering and theory of Demand; Hicks Revision of Demand theory and characteristics approach to Demand composite commodity theorem.

UNIT __ II: Theory of Production

Production Function of a Single and Multi Product Firm, Technological Progress and Production Function, Choice of Optimal Input Combinations. Types of Production Function: Cobb-Douglas, CES and Translog Production Function.

UNIT __ III: Cost Function

Meaning and Types of Cost, Traditional and Modern Theory of Cost, Shapes of Cost Curves, Analysis of Economies of Scale. Derivation of Cost Function from Production Function.

UNIT __ IV: Markets Form and Pricing of Product

Types of Market Situations, Relationship between Perfect and Monopoly Situation, Duopoly Market Situation, Cournot's, Stackelberg, Edgeworth and Bertrand Models, Monopolistic Competition: Characteristics, Price and Non-Price Competition.

UNIT __ V: Welfare Economics

Old Welfare Economics: Marshall and Pigou, Pareto and Welfare Economics: Criteria and Optimality, Compensation Principle: Hicks, Kaldor and Scitovsky, Social Welfare Function: Bergson and Samuelson, Arrow on Social Choice and Individual Values.

Suggested Readings:

- Gould and Ferguson: Micro Economic Theory
- A. Koutsoyiannis: Modern Micro economics
- David Krepps: A course in Micro Economics Theory
- Andrew. Mas-Colel, Michael Dennis Whinston, Jerry R. Green: Micro Economics
- Handerson and Quandt: Micro Economic Theory: A mathematical approach
- Pynddick and Rubinfeld: Micro Economics

M.A. Economics
Semester - I
INTERNATIONAL ECONOMICS

Course Code: ECOCC-102

Credits: 04

Course Objective: This course has become even more relevant with rising globalization and liberalization both in the North and in the South. This course aims to provide a deep understanding of the broad principles and theories, which tend to govern the free flow of international trade and movement of capital and labour is a major determinant of development and change at the global level.

Unit 1: Theories of International Trade: Classical Theories of trade, Opportunity costs and trade theories, Empirical testing of theory of comparative cost. Heckscher-Ohlin theory, Theorem of factor price equalization, Leontieff's paradox, Rybczynski theorem, Stopler Samuelson theorem, Kravis and Linder theory, Imitation gap theory, Product cycle theory.

Unit 2: Measurement and gains from trade: International trade and growth, Measurement of gains from trade and their distribution, Offer Curves and Theory of Reciprocal demand, Terms of trade-concept, uses and limitations, Hypothesis of secular deterioration of terms of trade, Immiserising growth, Mill Bastable Test, Technical Progress and international trade.

Unit 3: Balance of Payment: The Current Account Capital Account; Balance of Payment equilibrium and disequilibrium, Adjustment Mechanism in the Balance of Payments- Direct and Indirect mechanisms; Mundell- Fleming model, Marshall- Lerner condition, Depreciation and Devaluation, J curve, Announcement effect.

Unit 4: Foreign exchange markets and exchange rates: Flexible and fixed exchange rates, spot, forward rates, Pegged and Hybrid exchange rates, foreign exchange risks and hedging and market, interest arbitrage and efficiency of foreign exchange markets; exchange rate determination: purchasing power parity. Foreign trade multiplier, Crisis and exchange rate, Currency convertibility

Unit 5: Contemporary issues in International Trade: East Asian crisis, Global Meltdown, BREXIT, Trade war

Suggested Readings:

- Bhagwati, J., International Trade, Selected Readings, Cambridge University Press
- Dominick Salvatore, International Economics: Trade and Finance, John Wiley International Student Edition
- Kindleberger, C.P., International Economics, R.D. Irwin, Homewood. King
- Paul Krugman, Maurice Obstfeld and Marc Melitz, International Economics: Theory and Policy, Addison-Wesley(Pearson Education India Edition)
- Soderston, Bo., International Economics, Macmillan Press Ltd

MA ECONOMICS
SEMESTER-I
Statistical and Econometric Methods

Course Code: ECOCC-103

Course Credit: 4

Objective: To learn the statistical and basic econometric techniques and concepts that aid economic analysis.

Course Learning Outcomes: By the end of the course, successful students are expected to understand basic statistical techniques and be in preparation for learning Econometrics.

COURSE CONTENT

UNIT-I: Index Number

Index numbers; uses and types, tests for consistency, Base shifting, splicing and deflating of index numbers. Time series analysis; introduction and components, method of simple averages, moving averages and ratio to moving averages

Unit-II: Probability and Distribution

Basic concepts and definitions of probability; Laws of addition and multiplication; Conditional probability; Bay's theorem (statement); Binomial, Poisson and Normal distribution; Basic concepts of sampling- random and non-random sampling; concept of an estimator and its sampling distribution.

Unit-III: Simple Regression Analysis

Meaning and assumptions of simple regression analysis; Single linear equation regression model (by OLS Method); Concept of an estimator and its desirable properties; Significance of estimators in the linear relationships

Unit-IV: Testing of Hypothesis

Formulation of statistical hypothesis-Null and alternative, Type I and II errors, Testing of Hypothesis: Standard Error Test, t-test, Goodness of fit: R-square, F- test, Confidence intervals and level of significance.

Unit-V: Application of Simple Linear Model

Application of simple linear models: Production function; Estimation of Cobb-Douglas, CES, Translog and other form of Production Function, Linear and Log-Linear Demand Function, Price and Income Elasticity of Demand, Engel Law, Nerlovian, Taylor & Houthaker Demand Function, Linear Expenditure System

Suggested Readings:

- Gujarati D. Basic Econometric, McGraw-Hill
- Speigal, M. R. Theory and Problems of Statistics, McGraw Hill Book, London
- Croxton, F. E., D. . Cowden and S. Kliein, Applied General Statistics, Prentice Hall, New Delhi.
- Gupta S.C. and V.K. Kapoor, Fundamentals of Applied Statistics, S. Chand and Sons New Delhi.
- Yates, Frank, Sampling Methods for Census and Surveys, Charles, Griffin Co., London.
- Cochran, W. G., Sampling Techniques, John Wiley, New York.
- Hansen, Hurst and Meadow, Sample Survey Methods and Theory, John Wiley New York.
- Gupta S. C. Fundamentals of statistics, Himalaya Publishing house, New Delhi.
- Kamanta J. Elements of Econometrics, Macmillan Publishing Co., Inc. New York.
- Johnston J. Econometric Methods, New York: McGraw Hill, 1971

M.A. Economics
Semester – I
Environmental Economics

Course Code: ECOCC-104

Credit: 4

Course Objective: Students will come to know about the relevance of environmental economics and how market allocate goods & how sometimes market fail to allocate environmental resources optimally and they will come to know how sustainable development of the economy can be attained.

Course Content

Unit I

Introduction, Nature Scope and Methodological Issues in Environmental Economics, Institutions and

Environmental Governance, Relation between development and environmental stress; Environmental Kuznet's Curve; Impact of Human Activity on Environment.

Unit-II

Environmental Kuznet's Curve, Ecology, Environment and Eco-system, Ecology and Economics, Economy-Ecology-Environment Interaction; Conflicting Paradigms, The Material Balance Principle: Ecological Concern in the evolution of Economic thought. Entropy Law

Unit-III

Economics of Exhaustible Resources; Hotelling's rule; Solow, Harwick's Rule; Market structure and optimal extraction policy; Uncertainty and the rate of resources extraction; Resource scarcity; Economics of Renewable Resources; Economic Models of forestry and fisheries; Extinction of species; Economics of Biodiversity.

Unit IV

Concept of Sustainable Development, Sustainable Economic Growth and Development: An Economists perspective. Rules of Sustainable Development, Indicators of Sustainable Development, Measuring Sustainable Development, Sustainable Accounting, Political Economy and Sustainable Development, Participatory Institutions and Environmental Governance. Environmental Accounting

Unit V

Energy & Environment, Infrastructure and Environment, Trade and Environment, Agriculture and Environment, Industry and Environment, Services Sector and Environment, Economics of Pollution (air, Water, Solid Waste, Noise, Land degradation), Stationary and Mobile Sources of Pollution, Pollution Management, Waste Management Causes and effects of Environmental Degradation; Urban and Rural Environmental problems.

Suggested Readings:

- C.D. Kolstad: Environmental Economics
- R.N. Bhattacharya: Environmental Economics
- U. Sankar: Environmental Economics
- N. Hanley, Shogren, B. White: Introduction to Environmental Economics
- Haab and White head: Environmental and Natural resource economics
- Haab and Huang: Preference data for Environmental valuation
- Tom Tietenberg and Lynne Lewis: Environmental and Natural Resource Economics
- David.A.Anderson: Environmental Economics and Natural Resource
- Down to Earth, Science and Environment Fortnightly
- Economic and Political Weekly

MA ECONOMICS
SEMESTER-I
MATHEMATICS FOR ECONOMIC ANALYSIS

Course Code: ECOCC-105

Course Credit: 4

Objective: To learn the mathematical tools and concepts that aid in analysing economic optimisation. This course is designed for students who plan to do further graduate level work in economic theory, especially those with a keen interest in creating, as opposed to consuming, pure theory.

Course Learning Outcomes: By the end of the course, successful students are expected to understand how mathematical concepts aid in understanding optimisation in economics. The course aims for students to learn the following: (1) a rigorous exposure to a selection of basic mathematical tools that are used by economic theorists, and (2) applications of these methods to some areas of economic theory.

Course Content

Unit-I: Matrix and Determinants

Determinants, Properties of determinant, Minors and Cofactors, Jacobian and Hessian determinants and their use. Matrices: Definitions, Addition, Subtraction and Multiplication of matrices; Inverse matrices; Rank of matrix; Solving matrix equations with inverse; Eigen values and Eigen vectors.

Unit-II: Elementary Trigonometry and Coordinate Geometry

Elements of Trigonometry and Coordinate Geometry; Trigonometric functions and identities. Two – dimensional coordinates; Plotting of curves; Straight line; Parabola and Hyperbola.

Unit-III: Simple Variable Differentiation

Differential Calculus : First order derivative and its application in Economics; Slope and elasticity of demand, Determination of Marginal revenue, marginal cost and marginal product; Second order derivative and its application in Economics; Point of inflexion, concavity and convexity of curve, problem of maximization and minimization of certain economic variables.

Unit-IV: Partial and Total Differentiation
Determination of Partial Derivates of first and higher order, Young's Theorem, Application of Partial Differentiation in Economics, Constrained Optimization, Determination of Total Derivatives and its Application in Economics

Unit-V: Integration and its Economic Application

Integral Calculus; Indefinite and definite integration; Rules of integration; Integration by Substitution; Integration by parts. Economic Applications: Investment, Cost Function, Area under curve, Consumer surplus, producer surplus and present value.

Suggested Readings:

- Allen, R.G.D (2006): [*Mathematical Analysis For Economists*](#), Macmillan And Company Limited
- C. Chiang and K. Wainwright (2005): *Fundamental Methods of Mathematical Economics*, McGraw Hill International Edition.
- T. Yamane (2012): *Mathematics for Economists*, Prentice-Hall of India
- K. Sydsaeter and P. J. Hammond (2002): *Mathematics for Economic Analysis*, Pearson Educational Asia
- Mehta and Madhani: *Mathematics for Economists*, New Delhi: Sultan Chand Company

MA ECONOMICS SEMESTER-I

AGRICULTURAL ECONOMICS

Course Code: ECOVC-101

Credit: 04

Course Objective: To provide detailed understanding regarding the issues in agricultural economics to those intending to specialize in this area. To familiarize students with policy issues that is relevant to agricultural economics and enables them to analyse these issues.

Unit 1: Agriculture and Economic Development : Inter-relationship between Agriculture and Industry, Approaches to Agriculture Development- Schultz, Mellor, Boserup, Lewis and Ranis Fei, Inter-Regional Disparities in growth of output and productivity in Indian agriculture.

Unit 2: Marketing Structure : Agricultural Marketing, E-NAM, Price Spread, Behaviour of agricultural Prices, Marketed and marketable Surplus, Terms of Trade between agriculture and Industry - their impact on agriculture and change since Independence, Price trends, Role of Subsidies, Agricultural Price Policy in India, Cobweb theorem.

Unit 3: Strategy of Agricultural growth and Technological Progress: Capital formation in Indian Agriculture, Public and Private investment, Type and Measurement of technical changes, Nature and Pattern of technical change, Agricultural production function, farm size, Measures of Farm Efficiency.

Unit 4: Conventional farming to Sustainable farming, Approaches to Sustainable Agriculture, Growth and composition of output in agricultural and allied activities in India: Trends in overall agricultural growth as well as of Pulses, Food and Non-food item. Demand and supply of agricultural commodities including plantation and Horticultural Produce. Demand availability and Future prospects of live stock-, Poultry and Fishery in India.

Unit 5: Current issues in Indian Agriculture, Pattern of change in Exports and imports of agricultural commodities, Composition of Exports and imports of agricultural commodities and recent trends, WTO, Agreement on Agriculture- Tariffication, AMS, Export subsidies, Market Access Clause, Safeguard Provisions, Sanitary and Phytosanitary Measures.

Suggested Readings:

- Alag Y.K. Globalisation and Agriculture Crisis in India, Deep and Deep Publications
- Bilgrami S. A.R. An Introduction to Agricultural Economics, Himalaya Publishing House
- Kumar. Sanjeev. Crop Diversification and Food Security in India, Mittal Publications
- Lekhi R.K., & Joginder Singh, Agricultural Economics, Kalyani Publishers
- Meier Gerald M. Leading Issues in Economic Development, Oxford University Press
- Mellor, John, Agricultural Development and Economic Transformation, Palgrave Macmillan
- Misra Roli. Agricultural Growth and Terms of Trade in India Since 1951 by Kunal Books
- S.R.Mehta: Sociology of Rural Development; Sage. Publications
- Sadhu A.N and Singh Amarjit, Fundamentals of Agricultural Economics, Himalaya Publication House
- Sreenivas M. N.: Social Change in Modern India; Orient Black Swan.
- Todaro and Smith, Economic Development, Pearson

**MA ECONOMICS
SEMESTER-II
MACROECONOMICS**

Course Code: ECOCC-201

Course Credit: 4

Course Objective: The objective of this course is to familiarise the students of Master degree with the basic concepts, theories and approaches to understand the behaviour of macroeconomic aggregates and policies.

UNIT I: Macro Economics

Meaning and significance, Macroeconomic Development: An Overview, Inflation, Unemployment, output and growth, measures of national income and related concepts, methods of measuring national income. Macroeconomic fluctuations detrending of GDP, characteristics of macroeconomic fluctuations: Persistence and Coherence. Macroeconomic framework: interdependence among different sectors and circular flow of income.

UNIT -II : Theories of Employment

Classical theory of employment as a Barter and Monetary Framework, Neo Classical theory of employment, relevance of classical theory and Keynes criticism. Keynes theory of employment, policies to curtail unemployment in Keynes theory.

UNIT III: Demand for Money

Classical approach to demand for money- Quantity theory approach, Fisher's equation, Cambridge quantity theory, Keynes liquidity preference approach, Transaction, Precautionary & Speculative demand for money- Aggregate demand for money. Post Keynesian approaches to demand for money- Patinkin and the Real Balance Effect, Approaches of Baumol and Tobin; Friedman and the modern quantity theory; crisis in Keynesian economics and revival of monetarism.

UNIT IV: Supply of Money

A behavioural model of money supply determination, A demand determined money supply process, High Powered money and money multiplier. RBI approach to money supply, Control of money supply with special reference to India. Impact of foreign capital inflows on money supply and cross sterilization.

UNIT V: Neo-classical and Keynesian Approaches to Macro-Economics

One sector Neo-Classical Model, Simple Keynesian model, Economic implication of these models & essential differences between the two. Two sector IS-LM model: Both Neo-classical & Keynesian versions, Role and relative effectiveness of fiscal and monetary policy, IS-LM model in an open economy, case of small and large economies. Effects of change in monetary and fiscal policy on income and exchange rate. A Comparison of IS-LM model in closed and open economies.

References

1. Abel and Bernanke: Macroeconomics, Pearson Education.
2. Blanchard and Johnson, Macroeconomics, Pearson.
3. David King, An Introduction to National Income Accounting, Edward Arnold.
4. Dornbusch, Fischer, Startz, Macroeconomics, McGraw-Hill.
5. G. Ackley, Macroeconomics: Theory and Policy, MacMillan.
6. N. Gregory Mankiw- Macroeconomics, Macmillan Worth Publishers.
7. Richard T. Froyen, Macroeconomics, Pearson.
8. Ruggles and Ruggles, National Accounting and Economic Policy, Edward Elgar.
9. Soumen Sikdar, Principles of Macroeconomics, OUP.

MA ECONOMICS
SEMESTER-II
INTERNATIONAL TRADE AND POLICY

Credits: 04

Course Code: ECOCC-202

Aim: This course aims to acquaint the students with the trade policies so as to enable them to analyse the impact of the relevant policies on the economy.

Unit 1: International Trade Policies Trade Restrictions: Free trade and protection, Trade policy in developed and developing countries, Export promotion and Import substitution, Trade as an engine of growth, Tariffs - Partial Equilibrium Analysis of a Tariff - The Theory of Tariff Structure - General Equilibrium Analysis of Tariff - The Optimum Tariff. Non-Tariff Trade Barriers and the New Protectionism: Import Quotas - Voluntary Export Restraints - Technical, Administrative and other Regulations - International Cartels - Dumping

Unit 2: Economic Integration Customs Unions and Free Trade: Forms of Economic integration, Customs Union and Free trade, Customs union and Free Trade Area, Trade deflexion in FTA, Trade Diverting Customs Union , Dynamic Benefits from Customs Union , History of Economic Integration - The European Economic Community - The European Free Trade Association - NAFTA - Attempts of Developing Countries towards Economic Integration SAARC, UNCTAD, South-South Cooperation, North-South Co-operation and NIEO.

Unit 3: International Organisations: IMF, World Trade Organization General Agreements on Tariffs and Trade (GATT), World Trade Organization (WTO), Trade Related Intellectual Properties (TRIPs), Trade Related Investment Measures (TRIMs), General Agreements on Trade in Services (GATS), NAMA, BRICS, World Bank, IDB, ASEAN.

Unit 4: International Capital: International Capital Flows, FDI, Capital Controls, Working and Regulation of MNCs, Problem of international debt, Recent Import and Export Policies

Unit 5: Contemporary Issues in International Trade and Policy: Recent Policy issues at national and international level

Selected Readings:

- Bhagwati, J., International Trade, Selected Readings, Cambridge University Press
- Dominick Salvatore, International Economics: Trade and Finance, John Wiley International Student Edition
- Kindleberger, C.P. ,International Economics, R.D. Irwin, Homewood. King
- Paul Krugman, Maurice Obstfeld and Marc Melitz, International Economics: Theory and Policy, Addison-Wesley(Pearson Education India Edition)
- Soderston, Bo.,International Economics, Macmillan Press Ltd

MA ECONOMICS
SEMESTER-II
Econometric Theory and Application

Course Code: ECOCC-203

Course Credit: 4

Objective: This course provides the theoretical underpinnings for conducting applied econometric studies. It provides the conceptual framework on which such analyses are based, supplemented by illustrative empirical applications.

Course Learning Outcomes: The ability to conduct empirical analyses and data analytics are increasingly valued in the job market. This course will enable students to understand why and how questions are to be framed and answered. It will also equip them to learn more advanced topics on their own.

Course Content

Unit-I: Multiple Regression Model

Multiple Regressions with two explanatory variables, Partial and Multiple Correlation coefficients, Estimation of the Regression Coefficients, Testing of Significance of Regression, Coefficients and Regression Model, R- square, Adjusted R- square, Akaike Information Criteria and Schwarz Criterion.

Unit-II: General Linear Regression Model (GLM)

General Linear Regression Model- Estimation of Parameters, Mean and Variance of the Estimate, Illustration of OLS Estimates as Best, Linear and Unbiased

Unit-III: Problems of Regression Analysis

Nature, Tests, Consequences and remedies of Problem of Multicollinearity, Problems of specification error, Errors of Measurement.

Unit-IV: Problems in Regression Analysis having Time Series and Cross Section Data

Auto correlation, Nature of the problem, Consequences of using OLS in the presence of Auto correlation, Detecting Auto-correlation-Graphical Method, Durbin-Watson 'd-statistic', Remedial measures. Heteroscedasticity- meaning, graphical presentation of the presence of Heteroscedasticity. Consequences of Heteroscedasticity, Detection and remedial measures of the problem.

Unit-V: Application of Econometric Methods

Estimation of Consumption & Investment functions, Theories of Consumption; Permanent Income Hypothesis, Absolute Income Hypothesis, Life Cycle Hypothesis Relative Income Hypothesis, Classical and Keynesian Income Functions

Text & References

- Gujarati, D.N. (1995), Basic Econometrics (2nd Edition), McGraw Hill, New Delhi.
- Koutsoyiannis, A. (1997), Theory of Econometrics (2nd Edition), the Macmillan Press Ltd., London.
- Johnston, J. (1991), Econometric Methods, McGraw Hill Book Company, London.
- Maddala, G.S. (1993), Econometrics Methods and Applications, (2 Vol.), Alder shot, U.K.
- Krishna K.L. (1997), Econometrics Application in India, Oxford University Press, New Delhi.
- Kmenta, J. (1997), Elements of Econometrics, University of Michigan Press, New York.
- Madhni, G.M.K. (1999), Introduction of Econometrics.

MA ECONOMICS SEMESTER-II

PUBLIC FINANCE-I

Course Code: ECOCC-204

Course Credit: 4

Course Objective: The objective of the course is to provide the students with a thorough knowledge and understanding of the economic functions of government in an economy.

UNIT -I: Introduction to Public Finance

Meaning, Nature & Scope, Importance, Role of Government in Changing Perspective; Government as an agent of economic growth and development; Fiscal Functions of the Government; Classification of Goods: Private, Public, Social, Merit and Mixed Goods.

UNIT - II: Public Expenditure

Meaning and Classification, Theories of Public Expenditure – Maximum Social Advantage, Normative and Positive Theories, Growth in Public Expenditure, Canons of Public Expenditure, Effects of Public Expenditure on Production, Distribution and economic growth, Criteria for public investment – social cost-benefit analysis – project evaluation.

UNIT - III: Public Revenue

Sources of Revenue, Taxation – characteristics of a good taxation system, Canons of taxation, direct vs. indirect taxes, principles of taxation, effects of taxation, taxable capacity, impact and incidence of taxation; Tax structure in India and Recent Reforms.

UNIT -IV: Public Debt

Sources of Public Debt, Burden of public debt – theories, effects of public debt, methods of debt redemption, Public Debt Management in India. Public Budget - Concept of public budget, types of public budget, theories of public budgeting.

UNIT -V: Federal Finance

Principles and problems of Federal finance centre-state financial relations, Different Finance Commissions; Fiscal Policy: meaning and objective, fiscal multipliers, compensatory fiscal policy, functional finance approach, fiscal policy for inflation, full employment and economic growth.

Suggested Readings-

- Backhaus, J. G. & Wagner, R. E. (2004): Handbook of Public Finance, Springer, US.
- Bhatia, A. K. (2013): Public Economics, Wisdom Press, India.
- Choudhary, R. K. (2014): Public Finance and Fiscal Policy, Kalyani Publishers, New Delhi
- Dalton, H. (1922): Principles of Public Finance, Allied Publishers, Reprinted by Routledge (2009).
- Garg, R. & Garg, S. (2017): Handbook of GST in India, Bloomsbury India Professional.
- Gupta, J. R. (2011): Public Economics in India: Theory and Practice, Atlantic Publishers.
- Jha, Raghendra (2010): Modern Theory of Public Finance, New Age International Pvt. Ltd. India
- Musgrave, R. A. (1959): The Theory of Public Finance, MG-Hill Publication, New York (Available in National Digital Library for Free Download)

MA ECONOMICS
SEMESTER-II
DEVELOPMENT ECONOMICS

Course Credit: 4

Course Code: ECOCC-205

Objectives of the Paper: This course aims to introduce the students to know and understand the theoretical concepts of economic development, different indices of the measurement of development, issues related to poverty & inequality and, introduced the measures of fiscal and monetary policies.

Course Learning Outcomes: Students will have the tools to understand current policy debates and contribute to policy making in an informed way. They will also learn how to conduct independent research in these areas. Knowledge about development issues, both from a theoretical as well as empirical perspective.

COURSE CONTENT

UNIT-I: Economic Development: Concept & Measurement

Meaning of undeveloped, underdevelopment and development, Measuring Development: Income Measures, Basic Needs Approach, PQLI, HDI, HPI, GDI and Capabilities Approach of Amartya Sen, Common characteristics of developing nations, obstacles to economic development, structural changes underdevelopment development gap, international comparisons of developments.

UNIT-II: Poverty, Inequality, and Development

Development gap—concept and measurement. Absolute and relative poverty; Measurement of inequality and poverty—Lorenz curve, poverty gap, Foster-Greer Thorbecke index, Human poverty index, Chennery-Ahluwalia development index.

UNIT-III: Theories and Approaches of Development

Classical Theory of Development – Adam Smith, J.S. Mill, Neo Classical – Leibenstein's critical Minimum Effort Thesis, low income equilibrium trap –Ranis and Fei model Dualism Social Financial and Technical Dualism and Kremer's O-ring theory of economic development.

UNIT-IV: Development Policies and Perspectives

Role of economic and non-economic factors , Sectoral Priorities and Development policies, role of the informal sector, environmental issues in development, food security, education, health and nutrition, Choice of techniques and appropriate technology, Role of macroeconomic policies in developing countries

UNIT-V: Trade and Economic Development

International Trade, Aid, Finance in Development, Technology, Transfer and Multinational Corporations. Dual Gap Model, WTO and developing countries, Regional Cooperation; External resources – FDI,FII, Aid vs. trade, technology inflow; International trade as engine of growth; Static and dynamic gains from trade.

Suggested Readings-

- Barro, R. J. and Sala-i-Martin, X. 2007. Economic Growth (2nd Edition). Prentice-Hall of India, New Delhi.
- Grabowski, R. and Shields, M. P. 1996. Development. Blackwell Publishers, Cambridge.
- Herrick, B. and Kindleberger, C. P. 1984. Economic Development.(4th Edition). McGraw Hill Book Company
- Hayami, Y. 2001. Development Economics.(2nd Edition). Oxford University Press
- Hamberg, D. Models of Economic Growth. Harper and Row Publishers. New York
- Meir, G. M. and Rauch, J. E. 2000. Leading Issues in Economic Development. (7th Edition).Oxford University Press. New York.
- Todaro, M. P. 1996. Economic Development (6th Edition). Longman, London.
- Thirwal, A. P. 1999. Growth and Development.(6th Edition). Macmillan. U.K.
- Ray Debraj, 2007. Development Economics (12th Edition), Oxford University Press, London

M.A. Economics
Semester – II
Resource Economics

Course Code: ECOCC-206

Credit: 4

Course Objective: Students will come to know about market failure, students will learn to design regulation which corrects market failure and they will learn how to regulate pollutants that travel across country boundaries and how environmental regulations affect trade flows.

Course Content

Unit -I

The theory of Externality and Public Goods: Concepts, Market failure, Pigouvian Solution, Buchanan's Theory, Coase's theorem and its critique, Pigouvian vs. Coasian solution; Detrimental externality and non-convexities in the production set.

Unit-II

Property rights; Collective action. Measurement of Environmental Values: Use values; Option value and non-use values. Techniques of Valuation: Market and Non- Market Valuation: Physical linkage methods; Abatement Cost Methods; Behavior Linkage Method-Revealed and stated preference; Social Cost benefit Analysis.

Unit -III

Environmental impact assessment, Hedonic property values and household production models (Travel cost method and household health production function). Methods based response to hypothetical Markets, Contingent Valuation Methods.

Unit -IV

Environmental and Natural resource policy and strategies, Evolution of Environmental Policy, Economics of Environmental Policy. Protection, Conservation. Policy Instruments; Pigouvian Tax and Subsidies, Tradable permits and fees, Price vs. Quantity instruments, Mixed instruments, Monitoring and Enforcement Issues, India's Environmental Policy and Performance, International Environmental Policy, Environmental Planning and Management, Macroeconomic Policies and Environment, People's Participation.

Unit -V

Population and Environment, Poverty and Environment, Trade and environment in the WTO regime, Eco-labeling, Economics of climate change, Causes and Consequences of Ozone depletion and climate change. Rio and other then Rio Conference, Protocols and Treaties relating to climate change and Environmental degradation, Ozone depletion and Bio diversity.

Suggested Readings-

1. C.D. Kolstad: Environmental Economics
2. R.N. Bhattacharya: Environmental Economics
3. U. Sankar: Environmental Economics
4. N. Hanley, Shogren, B. White: Introduction to Environmental Economics
5. Haab and White head: Environmental and Natural resource economics
6. Haab and Huang: Preference data for Environmental valuation
7. Tom Tietenberg and Lynne Lewis: Environmental and Natural Resource Economics
8. David.A.Anderson: Environmental Economics and Natural Resource
9. Down to Earth, Science and Environment Fortnightly
10. Economic and Political Weekly

MA ECONOMICS
SEMESTER-III
ADVANCED MACROECONOMICS

Course Code: ECOCC-301

Course Credit: 4

Course Objective: The objective of this course is to familiarise the students of Master degree with the advance concepts, theories and approaches to understand the behaviour of macroeconomic aggregates and policies.

UNIT I: Consumption and investment Function

Consumption Function: Short run and long run, consumption functions, alternative theories of consumption function: Absolute, Relative, Permanent and Life cycle Hypotheses.

Investment Function: Investment- interest rate relationship, classical theory of investment and criterion of NPV investment demand function and criterion of MEC and MEI. Investment-Income Relationship, accelerator and investment behaviour, multiplier-accelerator model.

UNIT-II: Three sector models

Three sector macro model and determination of price level, concept of aggregate demand, deriving AD curve, introduction of labor curve, derivation of aggregate supply curve in the Neo-Classical and Keynesian cases, determination of equilibrium price in Neo classical and Keynesian cases, factors affecting aggregate demand and macroeconomic equilibrium adjustment process in the Neo classical and Keynesian cases. Introduction to Walrus general equilibrium model, concept of excess demand equation, introduction of QTM in Walrus model and Classical dichotomy, Patinkin's system or Neo classical synthesis.

UNIT- III: Unemployment and Inflation

Relationship between unemployment and inflation rate: early Phillips curve, concept of stagflation, short-run and long-run Phillips curve, concept of natural rate of unemployment, role of expectations and Phillips curve, Friedman- Phelps hypothesis, monetary policy and importance of Phillips curve in inflation management, Okun's Law

UNIT- IV: Macroeconomics in a Dynamic Setting

Dynamic Aggregate Supply Curve and its Derivation, Dynamic Aggregate Demand Curve, Macroeconomic Equilibrium, Adjustment in the long-run under ADEX Approach, a New Classical Macroeconomics and RATX Approach, Role of anticipated and unanticipated changes in monetary policy.

UNIT-V: New Keynesian and Recent Development in Economics

GDP and Random Walk Model, Nelson- Plosser Viewpoint, New Keynesian Macroeconomics, Efficiency Wage Hypothesis, Menu-Cost model and Policy Implications of New- Keynesian Macroeconomic , Real business Cycle theory, Intertemporal substitution of Labor and Propagation mechanism, Dynamics Stochastic General Equilibrium models.

Suggested Readings-

1. Abel and Bernanke: Macroeconomics, Pearson Education.
2. Blanchard and Johnson, Macroeconomics, Pearson.
3. David King, An Introduction to National Income Accounting, Edward Arnold.
4. Dornbusch, Fischer, Startz, Macroeconomics , McGraw -Hill.
5. G. Ackley, Macroeconomics: Theory and Policy, MacMillan.
6. N. Gregory Mankiw- Macroeconomics, Macmillan Worth Publishers.
7. Richard T.Froyen, Macroeconomics, Pearson.
8. Ruggles and Ruggles, National Accounting and Economic Policy, Edward Elgar.
9. Soumen Sikdar, Principles of Macroeconomics, OUP.
10. Thomas F. Dernburg, Macro-economics: Concepts, Theories& Policies. McGraw-Hill.
11. Uma Dutta Roy Choudhary, National Income Accounting , Macmillan Education Ltd.

MA ECONOMICS
SEMESTER-III
THEORIES OF ECONOMIC GROWTH

Course Code: ECOCC-302

Course Credit: 4

Objective: To introduce students to the theories and empirics of economic growth.

Course Learning Outcomes: Upon completion of this course students should be able to discuss the important models, theories and implications of the alternative approaches to growth.

COURSE CONTENT

UNIT-I: Economic Growth Theories

Economic growth- Meaning, Characteristics, Measurement and Factors of Economic Growth, Balanced and Unbalanced Economic Growth, Marx's Stages of Growth, Rostow's Stages of Economic growth Factors affecting Economic Growth: capital, labour and technology; Historical Perspective of Economic Growth and its relevance; Structural Diversity and common characteristics of developing nations.

UNIT-II: Modern Theories of Economic Growth

Conceptual framework and methodology of modern growth theories; Harrod-Domar Growth model contemporary growth theories of neo-classical, Solow, Meade, and Swan-Uzawa.

UNIT-III: Cambridge theories of growth

Cambridge theories of growth; Joan Robinson, Kaldor, Pasinetti, the capital controversy, money and economic growth-Tobin and Johnson's models.

UNIT-IV: Technological Progress and Economic Growth

Technological Progress embodied and disembodied; Neutral and Non-Neutral (Hicks and Harrod); Arrow's learning by doing approach to economic growth, total factor productivity and growth accounting.

UNIT-IV: Optimal and Endogenous Growth Theory

Optimal growth theory: Ramsay, Von Neumann, Golden Rule of Accumulation; Endogenous growth models—AK model and Romer model; Explanations of cross country differentials in economic growth.

Suggested Readings:

- Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.
- Gillis, M., D.H. Perkins, M. Romer and D.R. Snodgrass (1992), Economics of Development, (3rd Edition), W.W. Norton, New York.
- Kindleberger, C.P. (1977), Economic Development, (3rd Edition), McGraw Hill, New York.
- Meier, G.M. and J.E. Rauch (2005), Leading Issues in Economic Development, (8th Edition), Oxford University Press, New Delhi.
- Sen, A.K. (Ed.) (1990), Growth Economics, Penguin, Harmondsworth.
- Todaro, M.P. and S.C. Smith (2003), (8th Edition), Economic Development, Pearson Education, Delhi.
- Thirlwall, A.P. (1999), (6th Edition), Growth and Development, Macmillan, U.K.

**MA ECONOMICS
SEMESTER-III**

ADVANCED INDIAN ECONOMY

Course Code: ECOEL-301A

Credits: 04

Aim: To provide the students with a critical understanding of the Indian economy so that they may be able to engage meaningfully with the issues regarding the country's economy. Moreover, student should be able to comprehend the issues at the macrolevel while using their theoretical understanding of the macroeconomics and development in the context of the Indian economy.

Unit 1: Growth and Structure of the Economy: Brief History of Indian Economy; Changing Structure of Indian Economy; Sectoral Behavior and Relationship; Growth Pattern at Sub-National Level; Pattern of Consumption, Saving, Investment, Capital Structure.

Unit 2: Agriculture: Pattern and Growth of Farm Sector Development, Agricultural Price Policy, Food Security, Modernisation and Diversification of the Farm Sector, Other Activities of the Primary Sector, Challenges of Farm sector

Unit 3: Industry: Pattern and Growth of Industrial Growth and Policy Shifts; Industrial Policy, Capital goods industries, MSMEs

Unit 4 Services: Growth and Structure of Services Sector: Banking, Finance, Tourism, Science and Technology

Unit 5: U.P. Economy: Recent Trends and Emerging Issues in the Economy of U.P. Five year Plans of U.P., Agriculture, Industry and Social Sector Development

Suggested Readings:

- Agarwal A. N and M.K. Indian Economy, New Age Publications
- Agarwal M.K. *Uttar Pradesh Mein Arthik Vikas*, New Royal
- Banerjee Abhijit, *What the Economy Needs Now*, Juggernaut Publication
- Dreze Jean, *Social Policy (EPW)*, Orient Blackswan
- Economic Survey, Ministry of Finance, Government of India
- Human Development Reports, UNDP
- Kapila Uma, *Indian Economy: Performance and Policies*, Academic Foundation
- Kumar Sanjeev, *Crop Diversification and Food Security in India*, Mittal Publications
- Piketty Thomas, *Economics of Inequality*, Harvard University Press
- Stiglitz Joseph, *Globalization and its Discontents*, Penguin
- Relevant Government Publications

MA ECONOMICS
SEMESTER-III
INDUSTRIAL ECONOMICS

Course Credit: 4

Course Code: ECOEL-301B

Course Objectives: This course provides a foundation for the study of theoretical models of industrial organisation.

Unit I: Framework of Industrial Economics

Industrialization – Patterns and stage, advantages and problems of Industrialization, concept and organization of a firm- ownership control and objectives of a firm passive and active behavior of firm, size, growth, profitability, productivity and capacity utilization- concept and measurement.

Unit II: Industrial location and Regional Development

Determinants of Industrial location – Technical, economic, infrastructural and other factors, theories of Industrial location – Weber, August, Losch, surgant Florence, Development of Backward Regions, Govt. Policy and approach for the development of backward regions.

Unit III: Industrial Structure and Labour

Alternative patterns of Industrilization – Hoffman's hypothesis of capitalistic Economics, Siman Kuznet's interpretation, Industrilization and planned Economics- Cheney's patterns of industrial changes, structure of Industrial relations Labour, industrial, Exit Policy, Mergers, Amalgamation and tapeovers.

Unit IV: Project Appraisal and Industrial Finance

Project Appraisal Techniques –EBA, NPV and IRR, Sources of Industrial Finance- owned, external and components of funds, Nature, volume and types, - IDBI, IFCI, SFG, SIDBI, Commercial Banks etc.

Unit V: Industrialization and contemporary issues in India

Industrial Policy, changing Trends in public and private sector, Industrial growth and pattern in India, Recent Trends Industrial Growth, Role of MSMES in Indian context, industrial proliferation and Environmental Protection, other Emerging Issues in India Industries.

Suggested Readings:

- Ahluwalia, I.J: Industrial Growth in India (Oxford University Press, New Delhi, 1985)
- Barthwal, R.R: Industrial Economics (Wiley Eastern Ltd, New Delhi, 1985)
- Cherunilam F: Industrial Economics: Indian Perspective (3rd Edition) (Himalaya Publishing House, Mumbai, 1994)
- Desai B: Industrial Economy in India (3rd Edition) (Himalaya Publishing House, Mumbai, 1999)
- Divine P.J & R.M Jones et. Al: An Introduction to Industrial Economics (George Allen and Unwin Ltd, London, 1976)
- Hay D and D J Morris: Industrial Economics: Theory and Evidence (Oxford University Press, New Delhi, 1979)
- Kuchhal S.C.: Industrial Economy of India (5th Edition) (Chaitanya Publishing House, Allahabad, 1980)
- Singh. A and A.N Sadhu: Industrial Economics (Himalaya Publishing House, Bombay, 1988).

**MA ECONOMICS
SEMESTER-III**

ADVANCED ECONOMETRIC THEORY & APPLICATION – I

Course Code: ECOEL-301C

Course Credit: 4

Course Objective: The objective of the course is to familiarize the students with advanced econometric analysis using time series and panel data.

UNIT-I Methodology of Econometrics:

Sources of Hypotheses, Econometric and economic models, General Linear Model (GLM): Assumptions; OLS and Maximum Likelihood (ML); Inference, Likelihood Ratio, Wald and LM Tests, GLS Model and estimation.

UNIT-II Introduction to Dummy Variable:

Meaning, Use of Dummy in Regression Model, Dummy Variable Trap, Estimation of Regression Model with Dummy Variable, Inferences and Significance.

UNIT III Qualitative Response Regression Models:

Nature of qualitative response models, Linear Probability Models, Estimation and Inference, Logit Model, its estimation and inference, Tobit Model.

UNIT IV Simultaneous Equation Models:

The nature and structure of simultaneous equation models; Inconsistency of OLS Estimators; Simultaneous equation bias, solution to simultaneous equation models: reduced forms or Indirect Least Squares (ILS) Method, Recursive Models and its estimation.

UNIT-V Identification:

The identification problem, formal rules of identification, the order condition, the rank conditions, reduced form and identification; Method of instrumental variables and two-stage least square methods of simultaneous equation solutions.

Suggested Readings:

- Econometric Methods- J. Johnston & J. DiNardo (1997) McGraw Hill Higher Education IV Edition.
- Basic Econometrics – D.N Gujrati, D.C Porter, S Gunasekar (2012) McGraw Hill Higher Education V Edition.
- Theory of Econometrics – A. Koutsoyiannis(1973) Palgrave Macmillan Second Edition

MA ECONOMICS
SEMESTER-III
POPULATION THEORY AND DEMOGRAPHIC ANALYSIS

Course Code: ECOEL-302A

Credits: 04

Aim: The main objective of this paper is to make the students aware of the importance of population in economic development and the various theories that explain the growth of population in a country. The paper also enlightens the students on the quantitative and the qualitative aspects and characteristics of the population through various demographic techniques.

Unit 1: Concept of Population and Demography: Biological Theories; Theories of Population: Malthusian, Post-Malthusian, Neo-Malthusian; Optimum theory; Modern theories and Recent Developments; Theory of Demographic Transition, Demographic Dividend, Migration

Unit 2: Measures of Demographic Analysis: Fertility, Mortality, Nuptiality; Morbidity, population Pyramid, Population Ageing.

Unit 3: Population and Economic Development: Models of Population and Economic Development; Demand for Children in Poor Countries; Population Projection.

Unit 4: Indian Population and Demographic Changes: Inter-State Variations; Population Policy; Sources of Data-Census, SRS, NFHS, RCH etc.

Unit 5: Contemporary Issues: World Population: structure and Growth, Emerging challenges in population and Demography

Suggested Readings:

- Agarwala, S.N. India's Population Problem, Tata-McGraw-Hill Co., Bombay.
- Bhende, Asha A. and Tara Kamitkar, Principles of Population Studies, Himalaya Publishing House, Mumbai
- Bose, A., India's Basic Demographic Statistics, B.R. Publishing Corporation, New Delhi
- Bogue, D.J., Principles of Demography, John Wiley, New York
- Chaubey, P.K., Population Policy in India, Kanishka Publications, New Delhi.
- Different publications based on Census of India, published by Census Commissioner and Registrar General of India, New Delhi
- Family Welfare Programme in India, Year Book 2012, Government of India, New Delhi
- National Family Health Survey-(reports for India and different States of India) Government of India and International Institute for Population Sciences, Mumbai
- National Population Policy 2000, Government of India, New Delhi

MA ECONOMICS SEMESTER-III

QUANTITATIVE METHODS FOR ECONOMICS

Course Code: ECOEL-302B

Course Credit: 4

Objective: The aim of the course is to equip the student with the fundamental understanding of quantitative methods and their usage in economics.

Course Learning Outcomes: Students would acquire theoretical and practical knowledge of mathematical techniques used in the empirical analysis of economic relationships.

COURSE CONTENT

Unit- I: Capital Budgeting

Capital and Investment Decisions: Valuation of capital assets, Discounting and Present Value, Discount Rate and Opportunity Cost, Payout Period, Marginal Efficiency of Investment, Concept of Yield and Yield to Maturity on Financial Assets

Unit- II: Differential Equations

Differential Equations ; Definitions and Concepts; First-order Linear Differential Equations; Exact Differential Equations; Integrating Factors; Separations of variables; Second-order Differential Equations. Economic Application.

Unit- III: Difference Equation

Difference Equations: Definitions and Concepts; First-order and Second-order, Linear Difference Equations; Stability conditions. Economic Applications.

Unit- IV: Input- Output Analysis and Game Theory

Input-Output Analysis : Input-output model, Game theory- the zero-sum two-person game, pay-off matrices, Maximum and Minimum Strategies, Saddle point, Strategies.

Unit- V: Linear Programming

Linear Programming: Graphic Approach; Simplex method; The Dual. Other approaches to optimization.

Suggested Readings-

- Allen, R.G.D (2006): *Mathematical Analysis For Economists*, Macmillan And Company Limited
- C. Chiang and K. Wainwright (2005): *Fundamental Methods of Mathematical Economics*, McGraw Hill International Edition.
- T. Yamane (2012): *Mathematics for Economists*, Prentice-Hall of India
- K. Sydsaeter and P. J. Hammond (2002): *Mathematics for Economic Analysis*, Pearson Educational Asia
- Mehta and Madhani: *Mathematics for Economists*, New Delhi: Sultan Chand Company

M.A. Economics
Semester – III
LABOUR ECONOMICS

Course Code: ECOEL302-C

Course Credit: 4

Objective: To develop a better understanding of students' abilities in acquiring the functioning of labour markets.

Course Learning Outcomes: The course will be taught using lectures, discussions, seminars and assignments.

Unit I

Labour: key issues in Developing Economy, Characteristics of Indian Labour, Structure of Labour Market, Employment exchange in India, Rural labour in India Employment Programmes in India, Labour Productivity and wage Determination theories, Minimum wages Act, share of wages in National Income of India, wages Differentials Standardization, National wages Policy.

Unit II

Trade Union: Theories & Function, Trade Union Movement in India and Abroad, National Trade Unions, Impact of.

Unit III

Industrial Relations: Recruitment of workers, Disputes & Establishment of peace, Settlement of Disputes, Collective Bargaining, Conciliation Arbitration and adjudication, Participation in management.

Unit IV

Labour Welfare: Labour Welfare Measures in India, legislations in India, Child and women, Labour, Social security -Social Security in India and Abroad, International labour organization.

Unit V

Cotemporary Issues: Labour markets failure, working poverty surplus labour, lack of labour reforms, and other contemporary issues.

Suggested Readings-

1. Labour Economics : theory, institutional & pub policy, by Ray Marshall
2. Labour Economics : by Dr. Sinha, Sinha
3. Labour Economics and social welfare, by- Dr. B.P Tyagi & Dr. H.P Singh
4. Labour Economics & Labour Problems by M.V. Joshi

M.A. Economics Semester – III

SUMMER INTERNSHIP

Course Code: ECOIN-301

Course Credit: 4

Course Overview: The objective of this course is to develop the human and soft skills of the students of Master's Degree. The internship track is designed for students who want to engage in real economic analysis outside of the classroom. The 04 credit internship is designed to expose students to a variety of contexts in which economists work within the development sector, in higher education, in public policy and with government agencies.

General Outlines:

1. The course should make the students learn how to prepare project report on the basis of Internship and the student must provide the certificate of successful completion of internship from the respective company/ institute.
2. The preparation of project report on a given topic should be made referring to Internship experiences.
3. The project report based on internship and its presentation should be evaluated by a duly constituted Department level committee.
4. The Internship/ project work will evaluate for 50 Marks and there will be viva for 50 Marks.

M.A. Economics
Semester – III
CONTEMPORARY ISSUES IN INDIAN ECONOMY

Course Code: ECOIER-301 (Interdepartmental Course)

Credits: 04

Aim: The objective of this paper is to sharpen the knowledge of the student about the policy issues related to Indian Economy and contemporary issues of the economy.

Unit 1: Economic Infrastructure: Pattern and Growth of Infrastructure: Energy, Transport, Communication etc

Unit 2: Social Infrastructure: Social Sector Development, Human Development, Poverty, Unemployment, Measures of Economic Inequality, Demographic Transformations

Unit 3: Foreign Sector: Globalisation, Foreign Direct Investment, Foreign capital and MNCs in India, WTO and India, International Experiences of growth

Unit 4: Reforms in Indian Economy: Reforms in Fiscal Policy, Monetary Policy, Trade Policy, Important recent developments in Indian Economy.

Unit 5: Contemporary Issues: Emerging challenges in Indian Economy, New Bottlenecks and new opportunities in the Indian Economy; Social capital, Artificial intelligence, Environment

Suggested Readings:

- Agarwal A.N and M.K. Indian Economy, New Age Publication
- Banerjee Abhijit, What the Economy Needs Now, Juggernaut Publication
- Census of India, Census Commissioner and Registrar General of India, New Delhi
- Dreze Jean, Social Policy (EPW), Orient Blackswan
- Human Development Reports, UNDP
- Kapila Uma, Indian Economy: Performance and Policies, Academic Foundation, Latest edition.
- India Infrastructure Report, IDFC
- NSS Reports, Ministry of Statistics and program Implementation, Government of India
- Piketty Thomas, Economics of Inequality, Harvard University Press
- Stiglitz Joseph, Globalization and its Discontents, Penguin
- Relevant Government Publications

M.A. Economics
Semester – III

CONTEMPORARY ISSUES IN INDIAN ECONOMY

Course Code: ECOIER-301 (Interdepartmental Course)

Credits: 04

Aim: The objective of this paper is to sharpen the knowledge of the student about the policy issues related to Indian Economy and contemporary issues of the economy.

Unit 1: Economic Infrastructure: Pattern and Growth of Infrastructure: Energy, Transport, Communication etc

Unit 2: Social Infrastructure: Social Sector Development, Human Development, Poverty, Unemployment, Measures of Economic Inequality, Demographic Transformations

Unit 3: Foreign Sector: Globalisation, Foreign Direct Investment, Foreign capital and MNCs in India, WTO and India, International Experiences of growth

Unit 4: Reforms in Indian Economy: Reforms in Fiscal Policy, Monetary Policy, Trade Policy, Important recent developments in Indian Economy.

Unit 5: Contemporary Issues: Emerging challenges in Indian Economy, New Bottlenecks and new opportunities in the Indian Economy; Social capital, Artificial intelligence, Environment

Suggested Readings:

- Agarwal A.N and M.K. Indian Economy, New Age Publication
- Banerjee Abhijit, What the Economy Needs Now, Juggernaut Publication
- Census of India, Census Commissioner and Registrar General of India, New Delhi
- Dreze Jean, Social Policy (EPW), Orient Blackswan
- Human Development Reports, UNDP
- Kapila Uma, Indian Economy: Performance and Policies, Academic Foundation, Latest edition.
- India Infrastructure Report, IDFC
- NSS Reports, Ministry of Statistics and program Implementation, Government of India
- Piketty Thomas, Economics of Inequality, Harvard University Press
- Stiglitz Joseph, Globalization and its Discontents, Penguin
- Relevant Government Publications

M.A. Economics
Semester – IV
Advance Microeconomics

Course Code: ECOCC-401

Credit: 4

Course Objective: It provides theoretical tools to analyse real/ practical market situations.

Course Content

UNIT-I

Market Failure and Asymmetric Information: Quality Uncertainty, Market Signaling, Moral Hazard and Principal-Agent Problem. Measurement of Utility: Neuman- Morgenstern Utility Index.

UNIT-II

Market and Price Determination: Oligopoly; Non-Collusive and Collusive Oligopoly, Kinked Demand Analysis, Role of Cartel and Price Leadership Models. Merger and Acquisition, Types of Mergers and Economic Theories Regarding Mergers.

UNIT --III

Full Cost Pricing Principle, Mark Up Approach and other Product Pricing Principles in practice. Limit-Price Theorem: Role of Natural and Strategic Barriers in the Determination of Limit Price.

UNIT -IV

Game Theory: Zero-Sum Game, Pure and Mixed Strategies under Zero-Sum Games; Variable Sum Game; Concept of Dominant and Dominated Strategies, Mixed Strategies under Variable Sum Game. Alternative Methods of Determination of Optimal Pay-Offs and Nash Equilibrium. Prisoners' Dilemma and Folk Theorem, Refinements in Nash Equilibrium.

UNIT - V

Theories of Distribution: Theories of Rent, Interest, Profit and Wages. General Equilibrium and Economic Efficiency, Efficiency and Attainment of General Equilibrium.

Suggested Readings:

- Gould and Ferguson: Micro Economic Theory
- A. Koutsoyiannis: Modern Micro economics
- David Krepps: A course in Micro Economics Theory
- Andrew. Mas-Colel, Michael Dennis Whinston, Jerry R. Green: Micro Economics
- Handerson and Quandt: Micro Economic Theory: A mathematical approach
- Pynddick and Rubinfeld: Micro Economics

MA ECONOMICS

SEMESTER-IV

PUBLIC FINANCE-II

Course Code: ECOCC-402

Course Credit: 4

Course Objective: The objective of the course is to provide the students with a thorough knowledge and understanding of the economic functions of government in an economy.

UNIT-I

Modern Public Choice Theory and the Fiscal Decision process. Simple and Complex model of Majority Voting. Redistribution via the Fiscal Process, Stable growth as a Fiscal Objective, redefine Role of Government, fiscal Decision Making Process.

UNIT II

The Budget Cycle and the Budgetary Process. Classification of Budgets and Budgeting Practices, Integration with National Accounts, Implementation, Authorization, Accountability and Audit, expenditure Structure and Policy Principle, Methods and Techniques of Expenditure Evaluation.

UNIT III

Fiscal Policy, Meaning, Objectives, Short and Long Perspectives, Different Budget Adjustment with Investment, Fixed and Variable and in Closed and Open. Economic Growth and Fiscal Policy, recent and Contemporary Theoretical Foundations and Analytics.

UNIT IV

Fiscal Decentralization, Finances of Local Governments, Financial Administration of Local Governments : Budget, Accounts and Audit.

UNIT V

Planning Programming Budgeting System, Zero-Base Budgeting System, Applicability to Less Developed Countries, Deficits and Deficit Financing, Recent Issues.

Suggested Readings:

- Backhaus, J. G. & Wagner, R. E. (2004): Handbook of Public Finance, Springer, US.
- Bhatia, A. K. (2013): Public Economics, Wisdom Press, India.
- Choudhary, R. K. (2014): Public Finance and Fiscal Policy, Kalyani Publishers, New Delhi
- Dalton, H. (1922): Principles of Public Finance, Allied Publishers, Reprinted by Routledge (2009).
- Garg, R. & Garg, S. (2017): Handbook of GST in India, Bloomsbury India Professional.
- Gupta, J. R. (2011): Public Economics in India: Theory and Practice, Atlantic Publishers.
- Jha, Raghendra (2010): Modern Theory of Public Finance, New Age International Pvt. Ltd. India
- Musgrave, R. A. (1959): The Theory of Public Finance, MG-Hill Publication, New York (Available in National Digital Library for Free Download)

MA ECONOMICS

SEMESTER-IV

FINANCIAL INSTITUTIONS AND MARKET

Course Code: ECCEL-401A

Course Credit: 4

Course Objective: The objective of the course is to familiarize the students with Financial Institutions and Market.

Unit-I

Introduction Financial and non financial Assets Financial intermediation and role of financial intermediaries. The structure and function of financial system. Indicators of financial development Financial development and economic development Globalization of financial system.

Unit-II

Central Bank and Commercial Banks: Functions of Central Bank Aims and effectiveness of monetary policy. Transmission and effectiveness of monetary policy. Monetary policy reforms. Commercial Banks. Profitability Vs liquidity credit creation. Term structure of interest rates resolution of NPAS : One time settlement policies, hiving off etc BASEL norms, Banking sector reforms. Cooperative Banks

Unit-III

NBFIS, SEBI, IRDA, NBFIs definition and types. Role and challenges. Their growth and impact on economic development in India. Systemically important NBFIS. Need and effectiveness of regulation of NBFIs, SEBI, Small savings, provident and pension Funds, Insurance companies IRDA.

Unit-IV

International Financial Institutions, International liquidity. International Financial Flows form and volume. IMF, IBRD and IDA. European investment Bank (EIB), ADB , IFC, BIS (Bank for international settlement) BRICs bank.

Unit-V

Money and Security Market; Foreign exchange market: Nature organization and participants, Exchange rate determination. REER and NEER, Devaluation and depreciation, Fixed and floating exchange rate system, Working of Floating exchange rate system since 1973 currency convertibility the Indian experience. Risk hedging and futures in exchange rates.

Suggested Readings:

- ❖ Avadhani, V.A. (2012): Financial Services and Markets, Himalaya Publishing House, India
- ❖ Bhole, L. M. (2015): Indian Financial System, Chugh Publications, Allahabad, India
- ❖ Bhole, L. M. (2016): Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi, India
- ❖ Gordon and Natarajan (2012): Financial markets and services, Himalaya Publishing House, India
- ❖ Gupta, Shashi K. & Agrawal, Nisha (2013): Financial services, Kalyani Publishers, India
- ❖ Houthakker, H. S. & Williamson, P. J. (1996): Economics of Financial Markets, Oxford University Press.
- ❖ Khan, M. Y. (2016): Indian Financial System, Tata McGraw Hill, New York
- ❖ Avadhani, V.A. (2012): Financial Services and Markets, Himalaya Publishing House, India
- ❖ Houthakker, H. S. & Williamson, P. J. (1996): *Economics of Financial Markets*, Oxford University Press.

MA ECONOMICS
SEMESTER-IV
ADVANCED ECONOMETRIC THEORY & APPLICATION – II

Course Code: ECOEL-401B

Course Credit: 4

Course Objective: The objective of the course is to familiarize the students with advanced econometric analysis using time series and panel data.

UNIT I – INTRODUCTION TO ASYMPTOTICS

Concept of auto-regression, problems in estimation, introduction to asymptotics, Mann -Wald conditions, concept of stationarity & correlogram. Unit root and non- stationarity.

UNIT II- UNIVARIATE TIME SERIES MODELLING

Concepts of Autoregressive and Moving averages processes, Lag operator, ARMA Modelling, properties of AR, MA & ARMA processes, testing for stationarity: Unit Root Test (Dickey- Fuller test) , Augmented Dickey -Fuller test , Mackinnon critical values, Trend Stationary vs Difference Stationary Time Series, Identification, estimation, testing of ARIMA models & forecasting.

UNIT III- DYNAMIC ECONOMETRIC MODELS

Introduction to Autoregressive Distributed Lag Relationship, Rationale for lags, estimation of distributed lag models, Koyck's Approach, Instrumental Variable Method, Almon approach to Distributed Lag Models.

UNIT IV- BIVARIATE & MULTIVARIATE TIME SERIES ANALYSIS

Cointegration and VAR Model: Basic concepts, Meaning of Cointegration, Cointegrating regression, estimation of parameters, Error Correction Model, Long run estimates of Cointegrating Regression & Inference. Meaning of Vector Autoregression, estimation of VAR model, Impulse Response Function & Forecasting through VAR Models.

UNIT V – FINANCIAL TIME SERIES AND PANEL DATA

Measuring volatility in financial time series, ARCH Models, GARCH Model and its types, ARCH processes and estimation. Panel data: Meaning, sources & types of Panel data, Pooled OLS Regression or constant coefficient Model, Fixed Effect Model & its estimation, Random Effect Model.

Suggested Readings:

- Econometric Methods- J. Johnston & J. DiNardo (1997) McGraw Hill Higher Education IV Edition.
- Basic Econometrics D.N Gujrati, D.C Porter, S Gunasekar (2012) McGraw Hill Higher Education V Edition.
- Theory of Econometrics A. Koutsoyiannis(1973) Palgrave Macmillan Second Edition

MA ECONOMICS SEMESTER-IV

GENDER ECONOMICS

Course Code: ECOEL- 401C

Credit: 04

Aim: To introduce students to the discipline of Gender Studies and its specific purposes and perspectives and to understand the basic concepts of Gender Studies

Unit 1: Defining Gender: Difference between Gender and Sex, Types of Gender, Patriarchy, Gender Stereotypes, From Women's Studies to Gender Studies: A Paradigm Shift, Waves of Feminism, GDI, GEM, GNI, Gendered Social Movements, International Initiatives for Women Development

Unit 2: Approaches to Gender: Pre and Post- Colonial Feminism, Capability approach, Approaches to Women and development (WIN, WAD, GAD), Intersectionality

Unit 3: Women and Health: Reproductive Health, Family planning, New Reproductive Technology, Maternal Health, Violence against women and Mental health

Unit 4: Women and Work: Women in primary, secondary and tertiary sectors, Gender Gap in access to Resources and Control over Economic Resources, Gender Discrimination, Impact of gender equality on economic development, Marginalisation and Glass Ceiling, Gender issues at the work place.

Unit 5: Contemporary Issues: Women and Planning, Gender Budgeting, Gender Mainstreaming, Migration and Displacement of women, Women in Discourse

Selected Readings:

- Agarwal Bina, Gender Challenges, Oxford University Press
- Ahlawat Neerja, Gender Discrimination and Development Paradox, Rawat Publications, Jaipur
- Boserup Ester, Women's Role in Economic Development, George Allen and Unwin, Routledge
- Chattopadhyay S.K., Gender Socialization and the Making of Gender in the Indian Context, Sage
- Chowdhry Prem, Understanding Women's Land Rights: Gender Discrimination in Ownership, Sage
- Dreze J & Sen A, India: Development and Participation, Oxford University Press.
- John Mary E., Women Studies in India: A Reader, Penguin, India
- Judith Butler, Gender Trouble, Routledge
- Menon Nivedita, Seeing like a Feminist, Penguin
- Misra. Roli, Migration and Gender Construction: Women in Transition (ed) by Sage Stree
- Misra. Roli, Rethinking Gender (ed) by Rawat Publications, Jaipur
- Moser Caroline, Gender Planning and Development, Routledge

**MA ECONOMICS
SEMESTER-IV
DISSERTATION**

Course Code: ECOMT-401

Course Credit: 8

Course Objective: The objective of the course is to make the students learn the skills of formulation of research problem, objectives, hypotheses and also the skills of data collection, analysis and interpretation. This course is directly related to Ability Enhancement of students.

General Outlines:

1. Each student should be assigned a project supervisor from the faculty members of the concerned centre.
2. The topic of project report should be decided by the supervisor taking into account the area of interest of the student. As far as possible the topic should address the current issues / developments in the field of Economics.
3. Standard norms for the preparation of a research project report may be followed – introduction, brief background, relevance of the topic, literature review, problem statement, objectives, hypotheses, sample design, data nature and sources, tools and techniques of data collection, data presentation, analysis, and interpretation, findings and conclusion.
4. The Dissertation outcomes may be reported in the following for : Chapter-1: Introduction & Review of Literature; Chapter-2: Research Methodology; Chapter-3: Conceptual & Theoretical Description; Chapter-4: Analysis and Interpretations; Chapter-5: Conclusion, Suggestions & Scope for further research; References, Annexure, etc.
5. The Dissertation outcomes should be evaluated both in the form of reports and viva-voce examination by a duly constituted committee by the appropriate authority.
6. This is to be evaluated as ‘Satisfactory (S)’ or ‘Unsatisfactory (US)’.

MA ECONOMICS
SEMESTER-IV
PRINCIPLES OF ECONOMICS

Course Code: ECOIRA-401 (Intradepartmental Course)

Course Credit: 4

Course Objectives: The purpose of this course is to give students a introduction to modern micro and macro economic theory.

Unit I

Basic Concepts Definition and scope of Economics Determinants of demand and supply. Equilibrium, elasticity of demand and its measurement. Utility, Gossen's laws, Consumer's equilibrium.

Unit II

production function: short and long term. Cost curves: short run and long run. Revenue curves. Equilibrium, of firm. Types of Markets: perfect competition, Monopoly, Monopolistic competition and oligopoly.

Unit III

Macroeconomic perspective, G.D.P. and its measurement. Economic growth and welfare. Capitalist, socialist and mixed Economy Public goods, Public expenditure, Taxation and Public Debt. Fiscal Policy.

Unit IV

Unemployment : Classical Vs. Keynesian Views. Aggregate supply – aggregate demand model. Money, Banking and monetary policy Business Cycles, inflation and stagflation International Trade and capital flows. Free trade Vs. Protectionism. Exchange rate.

Unit V

Slowdown in Indian Economy, Predatory Pricing in telecom sector and risk of rise monopoly, Deteriorating trade relations in world economy and other contemporary issues.

Suggested Readings:

1. Paul A Samuelson, William D. Nordhaus : Economics McGraw- Hill India
2. Michael Parkin- Economics, Global edition, pearson.
3. Hal R. Varian Microeconomics Analysis : W.W. Norton, New York.
4. Devid Begg, Stanley Fischer and R Dornbusch : Economics : Tata- McGraw- Hill.
5. A. Koutsoyianis : Modern Microeconomics, Mac Millan Press Ltd. London.
6. Uma Dutta Roy Choudhary, National Income Accounting, Mcmillan Education Ltd.