

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY
(Formerly West Bengal University of Technology)
Syllabus of M.Sc. in Applied Economics
(Effective from 2021-2022 Admission Session)

Objective

The Master of Science in Applied Economics Programme aims to:

1. Build mastery in scientific analysis through advanced quantitative methods including statistics and econometrics
2. Make students competent to engage with real world economic challenges in business, industry, public sector
3. Train students with critical thinking for higher academic pursuits in research
4. Recognize and examine the social structures underlying our society and how they shape our existence;

Course

1. Two – Year full-time M.Sc in Applied Economics
2. Total class room contact teaching for this programme is 88
3. Credits (one credit equals 10 hours) and Internship / Project is 08 credits i.e., Total 88 + 08= 96 credits.

Eligibility for Admission

A pass in any undergraduate Degree.

DURATION

Two academic years- full Time

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Semester	Course No.	Course	Code	Course Title		Credit	Hours
I	1.	MECO	101	1	Advanced Microeconomics	5	50
I	2.	MECO	102	2	Macroeconomic Analysis	5	50
I	3.	MECO	103	3	Research Methodology and Statistical Applications	5	50
I	4.	MECO	104	4	Economics of Agriculture	5	50
I	5.	MECO	181	5	Project	4	
				Total		24	
II	6.	MECO	201	1	Welfare Economics	5	50
II	7.	MECO	202	2	Monetary Theory and Policy	5	50
II	8.	MECO	203	3	Mathematical Economics	5	50
II	9.	MECO	204	4	Industrial Economics	5	50
II	10.	MECO	281	5	Project	4	
				Total		24	
III	11.	MECO	301	1	Public Economics	5	50
III	12.	MECO	302	2	International Trade and Finance	5	50
III	13.	MECO	303	3	Development Economics	5	50
III	14.	MECO	304	4	Human Resource Development and Policy	5	50
III	15.	MECO	381	5	Project	4	
				Total		24	
IV	17.	MECO	401	1	Environmental Economics	5	50
IV	18.	MECO	402	2	Indian Economic Development & Policy	5	50
IV	19.	MECO	403	3	Computer Applications in Economics	5	50
IV	20.	MECO	404	4	Environmental Audit	5	50
IV	21.	MECO	481	5	Project	4	
				Total		24	
				GRAND TOTAL		96	

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FIRST SEMESTER

MECO-101 ADVANCED MICROECONOMICS

Module I

(30L)

1. Utility and Demand

Consumer preferences; Axioms of preference ordering; Utility function: existence and characteristics; concavity and quasi concavity; Budget sets; Demand functions: Zero homogeneity; Income and substitution effects; Slutsky theorem: Indirect utility functions; Hicksian compensated demand functions; Expenditure functions; Substitutes and complements: gross and pure; Revealed preference; Uncertainty, expected utility functions: von Neumann-Morgenstern utility function; Asymmetric Information: Sheepskin Effect

2. Production and Supply

Production functions; Concavity and quasi concavity; Returns to a factor and to scale; Total, marginal and average cost function; Long run cost curves: envelopes; Factor demand functions, Conditional factor demands; Profit maximization; Supply functions, cost minimization – first and second order conditions; Linear homogeneous production functions and their properties; Cobb-Douglas, CES, VES and Translog production functions and their properties; Leontief's production functions, Elasticity of substitution, its derivation for C-D and CES functions; the impact of tax/subsidy.

3. Markets

Characterizing perfect competition; Pricing and output under perfect competitive markets; Monopoly markets: Pricing, discrimination; welfare costs; Monopolistic competition: Characteristics; Long run and short run behavior; Oligopoly — Non-collusive (Cournot, Bertrand, Edgeworth, Chamberlin, kinked demand curve and Stackelberg's solution) and collusive (Cartels and mergers, price leadership and basing point price system) models; Price and output determination under monopsony and bilateral monopoly

Module II

(20L)

4. Distribution

Neo-classical approach — Marginal productivity theory; Product Exhaustion Theorem; Elasticity of technical substitution, technical progress and factor shares; Theory of distribution in imperfect product and factor markets.

5. Welfare Economics

Pigovian welfare economics; Pareto optimal conditions; Value judgment; Social welfare function; Compensation principle; Inability to obtain optimum welfare—Imperfections, market failure, decreasing costs; Uncertainty and non-existent and incomplete markets; Theory of

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second best –Arrow’s impossibility theorem, Rawl’s theory of Justice; Equity efficiency trade off.

6. General Equilibrium

Partial and general equilibrium; Walrasian excess demand and input-output approaches to general equilibrium; Existence, stability and uniqueness of partial equilibrium and general equilibrium; Relationship between relative commodity and factor prices (Stopler-Samuelson theorem); Relationship between output-mix and real factor prices-effect of changes in factors supply in closed economy (Rybczynski theorem).

Text Books And Reference Books:

1. Henderson, J. M., & Quandt R. E., (2003). **Microeconomic Theory: A Mathematical Approach**, New Delhi: McGraw Hill.
2. Koutsoyiannis, A., (1979). **Modern Microeconomics**. London: Macmillan Press.
3. Kreps, David M., (1990). **A Course in Microeconomic Theory**. Princeton: Princeton University Press.
4. Mas-Colell, A., Whinston, M. D., & Green, J. R. (1995). **Microeconomic theory (Vol. 1)**. New York: Oxford university press.
5. Sen, Anindya., (2007). **Microeconomics: Theory and Applications**. New Delhi: Oxford University Press.
6. Varian, Hal R., (2000). **Microeconomic Analysis**. New York: W.W. Norton & Company.
7. Varian, Hal R., (2010). **Intermediate microeconomics: a modern approach**. Vol. 6. New York: W.W. Norton & Company

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MECO-102 - MACROECONOMIC ANALYSIS

Module-I
(30L)

1. Income and Output determination

The development of macroeconomics- Actual and potential output-GNP identity on the product, income and disposition side-The government sector and foreign sector-Classical theory of income and employment- The saving investment balance- The labour market equilibrium- Aggregate demand and supply, money and prices in classical model- Keynes' theory of employment- Consumption function, investment demand- Effective demand-Determination of equilibrium income- Theory of multiplier-Derivation of the expenditure multiplier

2. Demand side and Supply side Equilibrium

Equilibrium income and the interest rate determination in the product market- Equilibrium income and the interest rate determination in the money market- Derivation of IS and LM curves-Shift in IS and LM curves-Simultaneous equilibrium- Fiscal and monetary policy effects on demand-Interaction of monetary and fiscal policies- -Aggregate supply in the short run and long run-Supply side disturbances and reactions-Demand side disturbances and reactions-Determination of equilibrium income, employment, rate of interest and price level.

3. Consumption, Saving and Investment

Theories of aggregate consumption- Absolute income hypothesis- Relative income hypothesis- Life cycle hypothesis-Permanent income hypothesis- Robert Hall and Random Walk Hypothesis- Non-income factors affecting consumption-The MPS model-The wealth effect in the static model-The present value criterion for investment-The marginal efficiency of investment-Investment demand and output growth-The accelerator principle and stabilization policy-The rental cost of capital and investment-Tobin's q theory of investment.

Module II

(20L)

4. Monetary and Fiscal policy

The instruments of monetary policy-The mechanism of monetary expansion- money growth targeting and inflation targeting -The effects of fiscal policy changes-Three ranges of LM curve-The effectiveness of monetary and fiscal policy: Monetarists and Fiscalists-Tax rate changes and the budget deficit-Fiscal stimulus and deficit financing- crowding out and crowding in controversy- Quantitative easing policies- macroeconomic policies in advanced and emerging economies.

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5. The External Sector equilibrium

The current account and product market equilibrium-The capital account and balance of payments equilibrium-Balance of payment adjustment and the LM curve- The Classical approach: The automatic adjustment method- Balance of payment adjustment by policy measures: Mundell-Fleming model- The expenditure changing policies- The expenditure switching policy: Devaluation- Monetary approach to Balance of payment adjustments.

Text Books And Reference Books:

1. William.H.Branson (2005). Macroeconomic Theory and Policy, Third Edition, All India Traveller Book Seller Publishers, New Delhi.
2. D.N. Dwivedi. (2005). Macroeconomics:Theory and Policy. 2nd Edition, Tata Mc Graw Hill Education.
3. Levacic and Rebman. (1982). Macro Economics: An Introduction to Keynesian and Neo-Classical Controversies. 2nd Edition, Macmillan Publishers.
4. N. Gregory Mankiw New Keynesian Economics – Imperfect Competition & Sticky Prices: Imperfect Competition and Sticky Prices MIT Press
5. David Romer Advanced Macroeconomics (Mcgraw-hill Economics)

MECO-103 RESEARCH METHODOLOGY & STATISTICAL APPLICATIONS

Module I

(30L)

Research Methods in Economics

1. Nature of Social Science Research – Research Methods in Social Science – Formulating the problem.
2. Types and Sources of Hypothesis – Characteristics of a Good hypothesis.
3. Components and types of research design – Collection of data – sources and methods.
4. Presentation of results – Format of a Report.

Sampling and Data collection

1. Sampling; Need, types, Probability sampling, random, systematic, stratified, multistage or cluster sampling, Non Probability sampling; Purposive Judgment, quota and snowball sampling
2. Data collection; Primary and Secondary data; NSS and censuses data Methods of data collection:
3. Tools of data collection; schedule and questionnaire:

Data Processing and Presentation

1. Processing and analysis of data: Editing, coding and tabulation; use of computers in social science research
2. Diagrammatic and graphic representation of data
3. Interpretation of results and Report writing – Preparation of Project Proposals.

Module II

(20L)

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Statistical Inferences

1. Census Versus sampling -Random and Non-Random sampling Techniques.
2. Estimation – Point and interval estimation – Statistics and Parameter – Standard Error – Confidence interval.
3. Null and Alternative hypothesis – Type I Error and Type II Error, Level of Significance – Critical region – Steps in Testing of Hypothesis.

Large and small Sample Tests

1. Properties and uses of Normal Distribution – Standard normal ‘Z’ Statistic.
2. Z-Test of Significance of proportions, means and Correlation.
3. ‘t’ Test for sample mean and Equality of mean – Paired ‘t’ Test.
4. Chi-Square Test for Association of Attributes.

Suggested Readings

1. C.R. Kothari (2002), *Research Methodology* Vikas publishing House, New Delhi.

Reference Books

1. Goode W. J and Hatt: (1952), *Methods in Social Research*, Mcgraw Hill Book Co, Tokyo.
2. Kenneth. D, and Bailey: (1962), *Methods of Social Research*, Longman’s Green Co, New York.
3. Enhance. D.N, *Fundamentals of Statistics*: (1973), Kitab Mahal, Allahabad.
4. Gupta. C.B: (1998), *An Introduction to Statistical Methods*, Vikas publishing House, New Delhi.

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MECO – 104 ECONOMICS OF AGRICULTURE

Module I

(30L)

Introduction

1. Scope and Significance of Agriculture
2. Agriculture and Industry - A Comparison
3. Role of Agriculture in India's Development
4. Inter-Sectoral Linkage - An Overview

Agricultural Production and Productivity

1. Production Function Analysis - Relevance to Farm Production Economics.
2. Productivity Trends; Low production and Productivity: Causes, Consequences and Measures.
3. Farm Size - Efficiency relations in Indian agriculture - A.K. Sen's Hypothesis.
4. Role of Technology in Agriculture - Structural Changes in Agriculture.

Agricultural Labour

1. Agricultural Labour: Types – Supply of Labour – Problems
2. Rural Unemployment: Types, consequences and remedial measures.
3. Minimum wages for agricultural workers - An evaluation.
4. Poverty Eradication programmes – Recent Wage and Self-Employment Programmes

Module II

(20L)

Agricultural Finance and Capital

1. Agricultural Finance: Meaning, Nature, Types, Sources and Problems of Agricultural Finance.
2. Co-operatives in Rural Finance.
3. Role of Commercial Banks and NABARD in Rural Finance.
4. Farm Capital - Meaning, Types, and Marginal Efficiency of Farm Capital and Capital formation in agriculture.

Agricultural Policy

1. Agricultural Price policy - Objectives, instruments and impact.
2. Economic Reforms and Agricultural policy – WTO and Agriculture
3. Agricultural Taxation and its relevance.

Suggested Readings

1. Ashok Rudra (1982). *Indian Agricultural Economics: Myths and Realities* (Allied publishers, New Delhi)
2. Dantwala M.L (ed) (1991). *Indian Agricultural Development since Independence*(Oxford and IBH Publishing company private limited, New Delhi).
3. Vasant Desai B.P (1996). *Agricultural Economics, Rural development* (Jai Prakash North, Meerut)
4. Hanumantha Rao C.H. (1975). *Technological changes and distribution of grains in India agriculture* (Macmillan, New Delhi).
- 5.. Ruddar Datt and K.P.M. Sundharam (2001). *Indian Economy*[S.ChandandLtd.,RamNagar.NewDelhi]

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SECOND SEMESTER

MECO-201 WELFARE ECONOMICS

Module I

(30L)

Basic Concepts

1. Positive and normative economics, welfare economics as a normative study
2. Preference orderings
3. utility function: properties of a utility function
4. Interpersonal comparisons of utility: degrees of interpersonal comparability

Measurement of Welfare

1. Ordinal measure, merits and demerits of ordinal measure
2. Cardinal measure: interval scale and ratio scale Merits and demerits of cardinal measure
3. Hicks's four measures of consumers' surplus

Definitions of Welfare

1. The preference definition of well-being
2. Utilitarian definition
3. Rawlsian welfare theory
4. Sen's capability approach.

Module II

(20L)

Pareto Criterion and Compensation Tests

1. The Pareto principle and assumptions underlying pareto optimality
2. Conditions for Pareto optimality: efficiency in exchange, efficiency in production and efficiency in product-mix, Edgeworth Box Diagrams.
3. The two fundamental theorems of welfare economics and Theory of second best
4. Compensation tests : a) the compensation criteria of Kaldor and Hicks ;b) Scitovsky paradox and Scitovsky double criterion; c) Little's criterion

Social Choice

1. Bergson-Samuelson social welfare function
2. Types of social welfare functions: utilitarian, egalitarian and Rawlsian SWFs
3. Arrow's impossibility , Resolving Arrow's paradox: single peaked preferences
4. Sen's "paretian liberal" theorem

Textbooks

1. Ng, Yew-Kwang (1983) *Welfare Economics: Introduction and Development of Basic Concepts* London: Macmillan
2. Sen Amartya (2004) *Inequality Reexamined* Delhi:OUP, chapters 3,4,and 8
3. *The Welfare Economics of Public Policy: A Practical Approach to Project and Policy Evaluation* Book by Andrew Schmitz, Darrell L. Hueth, and Richard E.
4. *Welfare Economics: Book by Robin Boadway*

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MECO - 202 MONETARY THEORY AND POLICY

Module I **(30L)**

Demand for Money

1. Quantity theories of money – Fisher and Cambridge
2. Keynesian monetary theory
3. James Tobin's portfolio analysis of money demand
4. Don Patinkin's Integration– Real Balance Effect
5. Milton Friedman's reformulated quantity theory

Supply of Money

1. Types and determinants of money supply – money multiplier
2. Theories of interest rate – classical – Keynes – Hicks – Hansen.

Money and Capital Market

1. Significance and functions of Money market and capital market
2. Role of financial intermediaries – Effects of financial intermediation
3. Non-banking financial institutions – Gurley and Shaw theory

Module II **(20L)**

Unit – IV: Banking

1. Functions of Commercial banks - Credit creation – process and limitations
2. Role of Commercial banks after nationalization – after reforms
3. Role of RBI – Regulation of money supply and credit
4. Narashimham Committee Reports– 1991 and 1998
5. Raguram Rajan Committee Report -2007

Unit – V: Monetary Policy

1. Objectives and Instruments of Monetary policy– Limitations of monetary policy
2. Monetarism and Keynesianism – Comparison - Supply side policies

Suggested Readings

1. Jhingan, M.L. (2005). *Monetary Economics*[Konark Publication, New Delhi]
2. Sundaram, K.P.M. (2003). *Money, Banking and International Trade*[Vikas, New Delhi]
3. Vaish, M.C. (2004). *Money, Banking and International Trade* [New Age International, New Delhi]
4. Gupta, R.D. (1995). *Keynes and Post Keynesian Economics* [Kalyani Publishers, New Delhi]
5. Basil J. Moore (1965). *An Introduction to the Theory of Finance* [Oxford University Press]

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MECO-203 MATHEMATICAL ECONOMICS

Module I

(30L)

Static Equilibrium Analysis

1. Ingredients of an Economic Model-Mathematical Economics Vs Literary Economics- Relations and Functions of Two or more variables in Economics.
2. Partial market Equilibrium- Method of Elimination-Simultaneous Linear Equations-Cramer's rule using determinants-Properties of Determinants.
3. Matrix operations-Addition, Subtraction, Scalar Multiplication, Transpose and Inverse- Solving a system of linear equations using matrix inverse method – Input-Output Analysis – Assumptions, uses and limitations.

Comparative Static Analysis

1. Differential Calculus- Derivatives of a function in two or more variables –Total and partial derivatives – Rules of first and second order derivatives.
2. Applications of derivatives- Marginal values, Elasticity and Growth rate of a function and shape of graph of the function.
3. Optimum values of a function in two or more variables- First and Second order conditions- Lagrangian Multiplier method of constrained optimization.

Theory of Demand

1. Utility Function-Marginal Utility- Consumer's equilibrium- Proportionality rule-Marginal Rate of Substitution-Normal properties of Indifference Curves.
2. Slutsky equation-Separation of price effect into income and substitution effect.

Module II

(20L)

Theory of Production

1. Production Function-Marginal product-Isoquant- Marginal Rate of Technical substitution-Expansion Path–Elasticity of Substitution.
2. Properties of Homogeneous production Function, Application of Euler's theorem to the marginal Productivity theory of Distribution - Cobb-Douglas Production Function – Properties, uses and limitations.
3. Linear programming – Graphic method and Applications.

Theory of Firm

1. Cost Function – Marginal, Average and Total – Normal Cost conditions.
2. Revenue Functions –Marginal, Average and Total-Normal Revenue conditions
3. Profit maximization under Perfect competition and Monopoly.

Suggested Readings

1. Chiang, C (1994) *Fundamental Methods of Mathematical Economics* (New Delhi: McGraw Hill).
2. Dowling Edward T (1989) *Mathematical Methods* (Schaum Series, New York).
3. Geoff Renshaw (2009) *Maths for Economics* (OxfordUniversity Press, London)
4. Metha, B.C. & Madnani, G.M.K. (2004), *Mathematics for Economists* (Sultan Chand & Sons- New Delhi).

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MECO-204 INDUSTRIAL ECONOMICS

Module I **(20L)**

Basic Concepts, Theory of Firm and Pricing

1. Concepts: Firm, Industrial Combination-Causes-conglomerate, cartel, pattern of industrialization– Economies of scale – Market structure.
2. Objectives of the firm – Growth of firms – Marginal cost pricing vs. full cost pricing – Depreciation –Administered prices.

Industrial Organization

1. Industrial Organization -Structure and change- Relevance of industry studies for public policy.
2. Monopoly and concentration: Concepts –Measures of monopoly – Control of monopoly- Industrial monopoly legislation- The Indian MRTP Act, 1969.

Module II **(30L)**

Theories of Industrial Location and Regional Development

1. Industrial location: Factors affecting industrial location - Measures of localization – Weber and Sargent Florence - Regional growth of industry in India
2. Need for balance regional development of Industries- Industrial policy on backward areas.

Industrial Productivity and Finance

1. Industrial Productivity-Measures –factors affecting productivity- and efficiency.
2. Financial statements: Ratio analysis and interpretation.
3. Industrial finance-sources of finance- Industrial Development Bank of India – IFC- Objectives and functioning – Impact of these institutions.

Issues in Indian Industry

1. Public sector: Rationale-organization – Pricing policies – The question of efficiency – Performance of public sector in India – The concept of joint sector.
2. Industrial problems: Industrial sickness, Evaluation of Industrial reform measures
3. Industrial policy since 1991-Foreign capital and role of MMNC in India.

Suggested Readings

1. Divine, P.J. *et al.*, (1978). *An Introduction to Industrial Economics* 3e [George Allen and Unwin, London]
2. Hay, D.A. and D.J.Morris (1979). *Industrial Economics: Theory and Evidence* [Oxford University Press, Oxford]
3. Industrial Economics: Issues and Perspectives: **Book by Paul R Ferguson**
4. Industrial Economics **Book by Ranjana Seth**

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THIRD SEMESTER

MECO-301 PUBLIC ECONOMICS

Module
(30L)

Introduction

1. Role of public finance - Major Fiscal functions.
2. Private and Public goods – Mixed goods –Merit goods- Social goods-Market failure Public goods and externalities.

Public Expenditure

1. Theories of Public Expenditure – Musgrave – Wagner - Peacock Wiseman– Growth of Public Expenditure – Canons and Evaluation of Public Expenditure.

Taxation and Public Debt

1. Direct and Indirect taxation – Cannons and Principles of Taxation – Theory of optimal taxation – modern theory of incidence.
2. Classification and Sources of public debt–Burden of public debt–Principles of public debt–Methods of repayment of public debt–Compensatory aspects of public debt policy

Module II

(20L)

Fiscal Policy and Fiscal Federalism

1. Objectives and Instruments of Fiscal policy –Compensatory Fiscal policy – Fiscal policy for Economic stability and growth– Effectiveness of fiscal policy.
2. Fiscal federalism – Role of finance commission – Principles –Recommendations of 12th Finance Commission and Terms of Reference of the 13th Finance Commission – Transfer of resources from Union and States and States to Local Bodies.

Indian Public Finance

1. Financial Autonomy in India – Tax Reform proposals of Kelkar Committee.
2. Tax structure and Working of Fiscal federalism in India – Resource transfer from union to state of Tamilnadu – VAT – Merits and Demerits.
3. Fiscal consolidation in India since 2001-2002 – Fiscal responsibilities of central and state.
4. Central and State government Budgets – issues of fiscal deficit
5. Fiscal policy and Economic downturn : Fiscal correction versus additional Stimulus

Suggested Readings

1. Richard A Musgrave and Peggy B. Musgave (2000). *Public Finance in Theory and Practice* [New Delhi]
2. Singh S.K.(2004) , *Public Finance in theory and Practice* (S.Chand & Co)
3. Tyagi B.P. (1982). *Public Finance* [Jai Prakash Nath]
4. Sundaram, K.P.M & Andley K.K. (1998) *Public Finance in theory and Practice* S.Chand & Co)

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MECO-302 INTERNATIONAL TRADE AND FINANCE

Module I

(30L)

PURE THEORY OF INTERNATIONAL TRADE

1. Comparative Cost Theory - Refinements of Comparative Cost Theory.
2. Modern Theory of Factor Endowments – Leontief Paradox.
3. Factor price equalization theorem – Factors Intensity Reversal: The Stolper-Samuelson Theorem and the Rybezynski Theorem.

RECENT THEORIES OF INTERNATIONAL TRADE

1. Karvi's Theory of Availability – Lindar's Theory of Volume of Trade and demand pattern.
2. Posner's Technological Gap Theory – Vernon's Product Cycle Theory - Kenen's Human capital theory
3. Intra- Industry Trade – Theory of Imperfect Competition - Strategic Theory – External Economies and International Trade.

BALANCE OF PAYMENTS POLICIES

1. BOP Disequilibrium – Adjustment Mechanism: Elasticity Approach, Absorption approach and Monetary Approach
2. Expenditure changing monetary and fiscal policy – Monetary and Fiscal policies for internal and external balance: The Swan Model and Mundallian Model
3. Expenditure Switching Policies and Expenditure Reducing Policies – Foreign Trade Multiplier

Module II

(20L)

FOREIGN AID AND MNCs.

1. Foreign Aid - Types of Foreign aid – Advantages and Disadvantages – Factors determining foreign aid -
2. Foreign Investment – Foreign Direct investment – Types of FDI – FDI Policy of India.
3. Multinational Corporations – Features of Multinational Corporations - Advantages and Limitations of MNCs – MNCs and International Trade

MANAGING FOREIGN EXCHANGE RISK

1. Foreign exchange risk - Sources of foreign exchange risk – types of exchange rate risk - Transaction risk, Translation risk, Economic risk.
2. Measurement of Exchange Rate Risk - value-at-risk (VaR) model. Methods of managing foreign exchange risk - internal and external techniques.
3. Forward contracts, Money market hedges, Currency futures, Currency Options, Currency swaps.

Textbooks:

1. Francis Cherunillam(2004),International Economics(Tata McGraw Hill,NewDelhi)
2. Paul Krugman and Maurice *International Economics: Theory and Policy* Obstfeld (New Delhi: Pearson, 2013)
3. International Money and Finance: 9th Edition by Michael Melvin and Stefan Norrbin
4. Understanding International Trade Finance by Badmus Akorede Mark

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MECO -303 DEVELOPMENT ECONOMICS

Module I

(30L)

Introduction

1. Conceptualizing development: (a) GNP) as development indicator (b) Sen's capabilities approach to development: The Human Development Index.
2. The structural characteristics of developing economies
3. Factors of development : (a) Capital accumulation (b) Labour (c) Natural resources (d) Technological Progress (e) Social institutions cultural values and entrepreneurial ability.

Theories of Development

1. Development as growth: (a) Harrod-Doman model (b) Rostow's stages of growth theory (c) Lewis theory (d) balanced and unbalanced growth (e) Neo classical growth theory –Solow Model
2. Contemporary theory of development: (a) New growth theory: Romer model (b) Underdevelopment as Co-ordination failure (c) Kremer's O-Ring theory of development
3. Dependency theory-path dependence in development: QWERTY
4. Geography and development: Krugman's theory

Poverty, Inequality and Human Capital

1. Measurement of inequality and poverty-Inverted –U hypothesis -Cause of inequality
2. Investing in education and health-the human capital approach.
3. Education and Development(a) social and private benefits of education (b) education, inequality and poverty (c) Women's education and development
4. Health system in development (a) health and productivity (b) financing health system in developing economics (c) Gender perspective in health care.

Module II

(20L)

Agriculture and Rural Development

1. The role of agriculture in development
2. Agricultural policy : (a) agricultural taxation (b) pricing policy
3. Risk aversion and uncertainty in subsistence farming-sharecropping and interlocking factor markets
4. Rural urban migration –Todaro model –Rural credit markets (a) providers and characteristics (b) theories of informed credit markets: lender's monopoly and default collateral

Policies for development

1. Market and the state in development:(a) The Washington consensus components and critical evaluation (b) The role of state in development (c) market failure state failure and development
2. Trade Policy in development : (a) import substitution (b) export promotion
3. Fiscal policy for development: (a) direct Vs indirect taxes (b) pattern and level of taxation.
4. Financial system in development: (a) the role of financial system in development (b) role of central banks (c) financial liberalization.

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Suggested Readings

1. Michael p. Todaro and Stephen C. Smith (2004) *Economic Development*, Pearson Education, Singapore cha- 2, 6,7, 8,
2. Yujiro Hayami (2003), *Development Economics: New DelhiOxfordUniversity Pres*
3. Debraj Ray (2009) *Development Economics*, New Delhi, OxfordUniversity Press
4. Jomo K.S. and Ben Fiveth (Eds); (2005), "The New Development Economics: London ZesBooks and New Delhi, Tulika Books
5. World Development Reports, (The World Bank1998,2005,2007,and 2009)

MECO -304 HUMAN RESOURCE DEVELOPMENT AND POLICY

Module I

(30L)

Introduction

1. Human resource development – Concept and background – Need and importance
2. Role of human resource development and productivity
3. Human capital formation and skill formation – Factors influencing human resource development.

Education

1. Role of education in human resource development
2. Investment in education – Effects of education – Economic impact of education
3. Women’s education and human resource development in developing countries.

Nutrition and Health

1. Economics of public health – Factors affecting health – Preventive and curative services – Investment in public health
2. Health policies of India – Health policies with special reference to women’s health.

Module II

(20L)

Entrepreneurship

1. Role of entrepreneurship in development – Factors stimulating entrepreneurship – Principles of entrepreneurship
2. Entrepreneurial skills for the poor and unemployed – Need for entrepreneurship in developing countries.

Manpower Planning

1. Meaning, need and importance of manpower planning – Objectives and methods of manpower planning
2. Manpower planning in LDCs, Manpower shortages – Manpower surpluses – Strategy for manpower planning
3. Human resource policy in India

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Suggested Readings

1. Gerald M.Meier (2006). *Leading Issues in Economic Development* [OxfordUniversity Press, London]
2. T.V.Rao (1996). *Human Resource Development – Experiences, Interventions, Strategies* [Sage Publications, New Delhi]
3. Suresh Chandra Shukla and Rekha Kaul (1998). *Education, Development and Underdevelopment* [Sage Publications, New Delhi]
4. B.R.Virman [1996]. *Economic Restructuring Technology Transfer and Human Resource Development* [Sage Publications, New Delhi]

FOURTH SEMESTER

MECO-401 ENVIRONMENTAL ECONOMICS

Module I

(20L)

Economy and the Environment

1. The interaction between the economic system and the environmental system – The services provided by the environmental system to the economic system – The Material Balance model.
2. Types of Pollutants: Cumulative and non- cumulative; Local, régional and global; Point source and non- point source.
3. Welfare effects of pollution: Local and global air pollution (acid rain, ozone depletion, global warming), water pollution, municipal solid waste.

Market and the Environment

1. Conditions for efficient functioning of markets.
2. Market failure and environmental damage – Environmental damage as an externality – Environmental goods as public goods – Asymmetric information and environmental damage; adverse selection, moral hazard.
3. Property rights and environmental damage: the Coase Theorem.
4. “Government failure” and environmental damage.
5. Pollution control Policies – Command-and-control policy – Market based instruments: Pollution taxes, tradable permits, subsidies.

Module II

(30L)

Environmental Valuation

1. Cost-Benefit analysis
2. The need for environmental valuation - The categories of environmental value.
3. Methods of environmental valuation – Revealed preference methods: Hedonic pricing method, travel cost method: - Stated preference approach; Contingent Valuation Method.

Natural Resource Economics

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1. Types of natural resources, the McKelvey classification.
2. Measuring resource scarcity: Resource lifetime, unit cost measures, real prices, economic rent - Allocating non-renewable resources: The Hotelling Theorem.
3. Renewable resources – Forests: Frontier model and immiserisation models of deforestation; Consequences of deforestation; - Fisheries: “Efficient sustainable yield”; - Water: Efficient allocation of surface and ground water.
4. Common Property Resources (CPRs) – Characteristics of CPRs -Dissipation of Hotelling rents (“tragedy of the commons”) - Ostrom’s “design principles” for sustainable local CPR governance.

Economic Growth and Sustainable Development

1. Growth and the environment: The environmental Kuznets curve.
2. The “limits to growth” Club of Rome model.
3. Economics of sustainable development – Brundtland Commission definition – Theories of sustainable development: weak sustainable development and strong sustainable development – sustainability rules: The “Hartwick rule”; Safe minimum standards; -

Measuring sustainable development: “green national accounts”; genuine savings - Link between poverty and environmental degradation

4. Economics of Climate Change – Summary of Stern Review.

Suggested Readings

1. Hanley, Nick, J.F. Shogren, and Ben White (2001): *Introduction to Environmental Economics* (London: OxfordUniversity Press).
2. Karpagam M. (1998) *Environmental Economics* (Streling Publishers, New Delhi).
3. Field, Barry C (2001): *Natural Resource Economics: An Introduction* (London: McGrawHill).
4. Sankar U (2000) *Environmental Economics* (OxfordUniversity Press: New Delhi).

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MECO-402 INDIAN ECONOMIC DEVELOPMENT AND POLICY

Module I

(30L)

Growth and Structural Change

1. Indian economy at Independence
2. The policy framework: statist policy, transition to market-oriented policy, role of erstwhile Planning Commission And NITI Ayog
3. Two phases of growth (1950-1980 and 1980 onwards), factors underlying turnaround
4. Structural change in Indian economy

Agricultural and Industrial Sectors Agricultural Sector

1. Performance of agricultural sector, factors determining agricultural growth
2. Factors underlying food inflation
3. Agricultural price policy and food security
4. Industrial Growth - Industrial growth before and after reforms - Dualism in Indian manufacturing
5. Issues in performance of public sector enterprises and privatisation

Fiscal Developments, Finance and External Sector

1. Expenditure trends
2. GST: rationale and impact
3. Evolution of the financial sector in post-liberalisation period
4. External sector performance: emergence of India as major exporter in services, performance of manufacturing sector

Module II

(20L)

Poverty and Inequality

1. Measuring poverty in India: Selection of poverty lines
2. Poverty in pre and post liberalization periods
3. Impact of growth on poverty
4. PDS vs cash transfers, feasibility of universal basic income in India
5. Inequality in India in pre and post liberalization periods

Social Issues

1. Gender gap in India and trends in female labour force participation rates, factors determining female labour force participation
2. Employment : changing nature of employment in India, "jobless growth"
3. Labour in informal sector
4. India's demographic transition

Textbook

1. *Indian Economy Since Independence* Edited by Uma Kapila (New Delhi: Academic Foundation), the latest edition
2. *Economic Survey 2018* and subsequent editions (Government of India: Ministry of Finance)
3. *Indian Economy* by Ramesh Singh
4. *The Indian Economy* by Sanjiv Verma

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MECO-403 COMPUTER APPLICATIONS IN ECONOMICS

Module I

(20L)

Text Management with MS-WORD

Creating new Documents –Document template – Typing Text – Editing Text – Insert Text – Go to, Find, and Replace text or word - Formatting of Text – Format painter – Cut and Paste utility - Copying Document/text in the same or Different file or Document – Drag and drop of typed text-creating tables – using auto correct, dictionary thesaurus.

Managing Data Base

EXCEL: The typical worksheet or spread sheet – cell and their properties – formatting cell – text, numbers, currency, accounting, date, time, percentage, scientific – formats.

Formula: using arithmetic and relational operators in a worksheet -Advanced Formulas: sum, count, Average, Max, Min, Product -Using auto format

Graphs and Charts

5. Bar diagrams, pie charts, Area,
6. Building Line Diagrams, Histograms, Scatter plots
7. Frequency Graphs, Ogive, Lorenz curve
8. Time Series

Module II

(30L)

Fundamental of R programming (14L)

- 1. Basic fundamentals, installation and use of software, data editing, use of R as a calculator, functions and assignments.**
- 2. Use of R as a calculator, functions and matrix operations, missing data and logical operators. Conditional executions and loops, data management with sequences.**
- 3. Data management with repeats, sorting, ordering, and lists.**
- 4. Vector indexing, factors, Data management with strings, display and formatting.**
- 5. Data management with display paste, split, find and replacement, manipulations with alphabets, evaluation of strings, data frames.**

Data Analysis (16L)

1. Naming variables - Coding and Recoding of data - Arithmetic calculations with in variables
2. Descriptive Statistics: Frequencies, Descriptive, Explore, Cross Tabulation
3. Compare Means: One sample T- test, Independent Sample T – test, paired sample T test, One way ANOVA
4. Correlation: Bivariate, Partial,
5. Regression: Linear, Curve Estimation, Multiple Regression

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6. Classification: K-means cluster, Hierarchical cluster, Discriminant function
7. Non-parametric Test: Chi-square, Bi-nomial
8. Time Series – Exponential Smoothing, Auto regression, Seasonal Decomposition

Suggested Readings

1. Lipschutz M.M. and S. Lipschutz (1982) *Theory and problems of Data processing : Schaum's Outline Series*, (McGraw Hill, New York)
2. Corey Sandler, Tom Badgett, Jan Weingarten (1997) *Office 97 for Windows*(BPB Publications, New Delhi)
3. Andy Field (2000). *Discovering Statistics Using SPSS for Windows – Advanced Techniques for the Beginner* [Sage Publications, New Delhi]
4. .Asthana and Braj Bhushan : *Statistics for Social Sciences (with SPSS applications)*, PHI

MECO-404 ENVIRONMENTAL AUDIT

Module I

(20L)

Approaches to Environmental Valuation

1. “Total Economic Value” of the Environment - Cost – Benefit Analysis
2. State Preference Approaches: Contingent Valuation Method
3. Revealed Preference Approaches: Travel Cost & Hedonic Pricing Method.
4. Production Function Approach: Dose-Response Model

Environmental Risk and Environmental Impact Assessment

1. Assessing Environmental Risks - Choice Under Risk - Valuing Risks to life -Regulating Risk
2. Environmental Impact Assessment - Information Gathering - Impact Assessment and Mitigation Measures - EIA Report and Review

Module II

(30L)

Environmental Cost Accounting

1. Full Cost Accounting
2. Internal Environmental Cost Accounting
3. External Environmental Cost Accounting: Internalizing Externalities

Environmental Information Management

1. Life Cycle Assessment
2. Environmental Share Holder Value
3. Environmental Reporting - Environmental Audit

Green National Accounts

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1. Limitations of Conventional National Accounts
2. Genuine Savings - Environmentally Defensive Expenditures
3. Integrated Economic and Environmental Accounting (IEEA)

Text and Reference Books

1. Hanley, Shogren and White (2001) *Introduction to Environmental Economics* (Oxford University Press).
2. Richard Welford (1996) *Corporate Environmental Management*, Chapter 7, 8, and 9.
3. Schaltegger, Buritt and Peterson (2003) *Corporate Environmental Accounting* (Greenleaf Publishing).
4. A HandBook of Environmental Audit by Dr.Hemant Pathak