MIZORAM UNIVERSITY UNDERGRADUATE SYLLABUS

ECONOMICS

Semester Wise Paper Distribution (NEP 2020)

Year	Course	Code	Name of Paper	Credits
	Category			
I Sem	Major	ECO-100	Rural Development	4
1 Sem	Major	ECO-101	Microeconomics – I	4
	Multidisciplinary	ECO-102	Fundamentals of Economics-I	3
	Major	ECO-103	Financial Institutions & Markets	4
II Sem	Major	ECO-104	Microeconomics-II	4
	Multidisciplinary	ECO-105	Fundamentals of Economics-II	3
	Major	ECO-200	Environmental Economics	4
III Sem	Major	ECO-201	Macroeconomics-I	4
	Multidisciplinary	ECO-202	Fundamentals of Economics-III	3
IV Sem	Major	ECO-203	Public Finance	4
	Major	ECO-204	Macroeconomics-II	4
	Major	ECO-300	Quantitative Techniques -I	4
V Sem	Major	ECO 301	Agriculture Economics	4
V Sem	Major	ECO-302	Industrial Economics	4
	Major	ECO-303	Indian Economy	4
	Major	ECO-304	Quantitative Techniques -II	4
	Major	ECO-305	International Trade	4
VI Sem	Major	ECO-306	Demography	4
, i Sem	Major	ECO-307	History of Economics Thought	4
	Major	ECO-308	Economics of Growth and	4
			Development	

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ECONOMICS

I SEMESTER

Paper	Code	Credit
Disciplinary Major		
1. Rural Development	ECO/100	4
Disciplinary Minor		
1. Microeconomics-I	ECO/101	4
<u>Multi-disciplinary</u>		
1. Fundamentals of Economics-I	ECO/102/MD	3

Objective: To help students understand the basic concepts and significance of rural development.

<u>Outcome:</u> The students will be able to understand the importance of rural development and the various determinants, policies, issues, and challenges associated with the development of the rural area.

Unit I: Introduction

Concepts and connotation of rural development; Basic elements of rural development; needs and importance.

Rural economy of India- size and structure; the role and major problems of agricultural sector; the role of the non-agricultural sub-sector.

Unit II: Development of Rural Economy

Determinants of rural development: natural resources, human resources, capital, technology. Rural infrastructure: needs and importance, Problems & challenges;

Concept, characteristics and functions - SHGs, Co-operatives Societies.

Unit III: Sources and instruments of rural credit

Meaning and types of Rural credit;

Sources of Rural credit: Institutional sources – NABARD, Commercial banks, Regional Rural Banks, Cooperative Credit Societies; Non-institutional sources- role of agencies. Problems of Rural credit; concept of KCC.

Unit IV: Models and Policies of Rural Development

Lewi's Model of Economic development, the Gandhian Model of Rural Development. Rural development policies – need and goals of rural development policies, Rural development policies in India – MGNREGA, PMAY, NRLM.

Suggested Readings:

- 1) Pain, Adam, and Hansen, Kjell "Rural Development, Routledge, New York"
- 2) Das, Saurav "An introduction to Rural development Concepts and applications", Gnp Publisher
- 3) Desai, Vasant "Rural Development in India", Himalaya Publishing House Pvt Ltd.
- 4) Hussain, Tahir, Tahir, Mary., Tahir, Riya "Fundamentals of Rural Development", Dreamtech Press
- 5) Kapila, Uma "Indian Economy: Economic Development and Policy", Academic Foundation, New Delhi
- 6) Singh, Katar and Shishodia, Anil"Rural Development, Principles, Policies, and Management", Sage Publications, New Delhi
- 7) Singh, Ramesh "Indian Economy", Mc Graw Hill
- 8) Sundaram, Satya, I "Rural Development", Himalaya Publishing House Pvt Ltd.

Objective: The course introduces key concepts in Microeconomics.

<u>Outcome:</u> At the end of the course, the learners will be able to understand the basic principles underlying market mechanism-how the forces of demand and supply brings equilibrium in the market for goods and services.

Unit I: Introduction

Definition, nature and scope of economics; Adam Smith, Alfred Marshall, Lionel Robbins.Micro vs Macro –economics; Methodology in economics; Basic economic problems; Concept of price mechanism.

Unit II: Theory of Demand and Supply

Demand and supply-concept and determinants; Laws of demand and supply; shifts of demandversus movements along a demand curve, market demand, shifts of supply versus movementsalong a supply curve; Concept and measurement of Elasticity of Demand-Price, Income and Cross.

Unit III: Consumer Behavior

Utility – Cardinal and Ordinal approaches and their assumptions; Concept of diminishing marginal utility; Concept of Law of Equi-Marginal Utility; Theory of Diamond-water paradox; Indifference Curves- concept, properties and equilibrium; Budget line; Decomposition of Price Effect (Hicks and Slutzky's methods); Engel's curve. Consumer's surplus.

Unit IV: Theory of Production and Costs

Production function; Isoquants-concept and properties; Iso-cost Line - Producer's Equilibrium; Law of variable proportion and Law of returns to scale - Economies and diseconomies of scale. Concept of Expansion path; Different concepts of cost and their inter-relation; Producer surplus; concept of opportunity cost

Suggested Readings:

- 1) Samuelson, Paul. A& Nordhaus, William. D: Economics I, Tata McGraw Hill.
- 2) Koutsoviannis, A Modern Microeconomics, Macmillan
- 3) Stonier A.W. and D.C. Haque A Textbook of Economic Theory, ELBS & Longman Group, London
- 4) Varian, H.R Intermediate Microeconomics: A Modern Approach (5th ed.) EastWest Press New Delhi
- 5) Dewett K.K, Modern Economic Theory, S. Chand Publication, New Delhi
- 6) Dwivedi, D.N: Microeconomics-Theory & Applications, Pearson.
- 7) Ray, N.C An introduction to Micro economics, Macmillan India Ltd. Delhi
- 8) Ahuja ,H.L: Advanced Economic Theory, S.Chand & Company
- 9) Gauld, J.P and Edward P.L Microeconomic theory, Richard Irwin, Homewood
- 10) Healthfield and Wibe. An Introduction to Cost and Production Functions, Macmillan, London
- 11) Lipsey R.G and K.A Chrystal Principles of Economics (9th edition) Oxford University Press, Oxford.
- 12) Salvatore, Dominic: Principles of Microeconomics, Oxford University PressPublications, New Delhi.
- 13) Pindyck, R., Rubinfeld, S., Daniel, L., & Prem L. Mehta., Microeconomics, Pearson Education India.

Objective: To impart basic understanding of economics.

<u>Outcome:</u> The course will enable students to understand basic problems and concepts of economics.

Unit I: Microeconomics

- a) Definition Adam Smith & Lionel Robbins.
- b) Basic economics problems
- c) Concept & Law demand & supply

Unit II: Macroeconomics

- a) Concept and Measurement of NI in India
- b) Budget Meaning & kinds; Preparation & procedure of passing of Budget in India
 - c) Public Revenue and Public Expenditure

Unit III: Indian Economy

- a) Characteristics of Indian Economy
- b) Population- size, growth rate, sex ratio.
- c) Concept of Economic Growth and Development
- d) Economic Reforms

Suggested Readings:

- 1) Ahuja ,H.L: Advanced Economic Theory, S.Chand & Company
- 2) Dwivedi, D.N: Microeconomics-Theory & Applications, Pearson.
- 3) Dewett K.K, Modern Economic Theory, S. Chand Publication, New Delhi
- 4) Ackley, G, Macroeconomics, Theory and Policy, Macmillan Publishing Company NY.
- 5) Shapiro E. Macro Economic Analysis, Galgotia Publications, New Delhi
- 6) Dwivedi D N (Latest edition) Macroeconomics, Tata McGraw Hill Publications.
- 7) Datt R and K.P.M Sundharm (Latest edition), Indian Economy, S.Chand and Company Ltd. New Delhi
- 8) Dinghra I.C The Indian Economy; Environment and Policy; Sultan Chand &Sons, New Delhi
- 9) Dutt R.C The Economic History of India under early British Rule, Low Price Publication Delhi

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ECONOMICS

II SEMESTER

Paper	Code	Credit
<u>Disciplinary Major</u>		
1. Financial Institutions and Markets	ECO/103	4
Disciplinary Minor		
1. Microeconomics-II	ECO/104	4
Multi-disciplinary		
1. Fundamentals of Economics-II	ECO/105/MD	3

ECO/103 FINANCIAL INSTITUTIONS AND MARKETS 4 Credits

Objective: To introduce basic concepts in financial institutions and markets

Outcome: At the end of the course, the learner will be able to understand working and performance of various segments of financial sector

Unit I: Indian Banking System

Origin and evolution of banking in India; Central Bank-Functions and objectives, Instruments of Credit Control- quantitative and qualitative methods. Development and regulatory role of RBI; Monetary policy- meaning, objectives and its importance for economic development Current Monetary policy of India.

Unit II: Money and Commercial Banking

Meaning, functions and kinds of money. Commercial banks-meaning, functions, process of Credit Creation; Types of deposits-Savings, Current, Fixed and Recurring Deposits; Banking Documents and Modern Banking Services-Concepts of Cheque, Pass book, Demand draft, Credit and Debit card, Internet Banking, Mobile banking. Concept Digital Currency

Unit III: Co-operative and Development Banks in India

Meaning, objectives, role and structure of Co-operative banks in India; Development Banks in India-meaning, objectives, role and structure of - SIDBI, IDBI, EXIM BANK, NABARD, National Housing Bank

UnitIV: Financial Markets

Meaning and structure of financial markets; Money market and Capital Market-Primary and Secondary market; Money Market instruments- Call Money, Treasury Bill, Commercial Papers, Commercial Bills, Trade Bills; Capital Market Instruments -Debentures, Shares, Bonds, Equity; Stock Market -Functions and Workings of major stock exchanges in India; Functions of SEBI. Concept of Euro dollar market.

Suggested Readings

- 1) Bhole, LM & Mahakud, J. Financial Institutions and Market. Tata McGraw Hill
- 2) Gupta, S.B Monetary Economics, Institutions, Theory and Policy. S.Chand & Co. New Delhi
- 3) Grabble J.O. International Financial Markets Elsevire, New York
- 4) Mithani, DM Money, Banking, International Trade and Public Finance. Himalaya Publishing House.
- 5) Pathak, Bharati V. The Indian Financial System: Markets, Institutions and Services. Pearson Education.
- 6) Rangarajan, C Indian Economics; Essays on Money and Finance; UBS Publishers, New Delhi
- 7) RBI, Report of the Committee on Financial Companies.

Objective: The course will familiarize students with basic concepts of microeconomics and its application.

Outcome: The learners will understand how factor market works and the basic tools in welfare economics and trade theories.

Unit I: Market structure-I

Meaning of market; Market equilibrium; Perfect market and imperfect market; Meaning, Features and equilibrium (short run and long run) under Perfect competition and monopoly; shut-down points; concept of zero profit; Price Discrimination- Concepts, types, degrees and profitability; Concept of controlled and administered prices.

Unit II: Market structure-II

Meaning, features and equilibrium (short run and long run) under Monopolistic Competition; Oligopoly-meaning, features and equilibrium using kinked demand curve; Duopoly-Meaning features and equilibrium; Monopsony and Bi-lateral monopoly.

Unit III: Factor Pricing and markets

Marginal Productivity theory of distribution; Theories of wage determination; Concept of rent – Scarcity, Differential and Quasi; Interest – Classical and Keynesian Theories; Profit – Innovation, risk and uncertainty theories; Factor Market – Meaning, Factor-market equilibrium.

Unit IV: Welfare Economics

Concept of Welfare Economics; Classical welfare economics; Pareto's criteria; Value judgment; Compensation principle–Kaldor- Hicks. Concept of Social welfare function.

Suggested Readings

- 1) Samuelson, Paul. A& Nordhaus, William. D: Economics I, Tata McGraw Hill. Koutsoyiannis, A: Modern Microeconomics, Macmillan
- 2) Stonier A.W. and D.C. Haque A Textbook of Economic Theory, ELBS & Longman Group, London
- 3) Varian, H.R Intermediate Microeconomics: A Modern Approach (5th ed.) EastWest Press New Delhi
- 4) Dewett K.K, Modern Economic Theory, S. Chand Publication, New Delhi
- 5) Dwivedi, D.N: Microeconomics-Theory & Applications, Pearson.
- 6) Ray, N.C An introduction to Micro economics, Macmillan India Ltd. Delhi
- 7) Ahuja ,H.L: Advanced Economic Theory, S.Chand & Company
- 8) Gauld, J.P and Edward P.L Microeconomic theory, Richard Irwin, Homewood
- 9) Healthfield and Wibe. An Introduction to Cost and Production Functions, Macmillan, London
- 10) Lipsey R.G and K.A Chrystal Principles of Economics OxfordUniversity Press, Oxford.
- 11) Salvatore, Dominic: Principles of Microeconomics, Oxford University Press Publications, New Delhi.
- 12) Pindyck, R., Rubinfeld, S., Daniel, L., & Prem L. Mehta., Microeconomics, Pearson Education India

Credit 3

Objective: To impart basic understanding of economics.

<u>Outcome:</u> The course will enable students to understand basic problems and concepts of economics.

Unit I: Microeconomics

- a) Definition Adam Smith & Lionel Robbins.
- b) Basic economics problems
- c) Concept & Law demand & supply

Unit II: Macroeconomics

- a) Concept and Measurement of NI in India
- b) Budget Meaning & kinds; Preparation & procedure of passing of Budget in India
 - c) Public Revenue and Public Expenditure

Unit III: Indian Economy

- a) Characteristics of Indian Economy
- b) Population- size, growth rate, sex ratio.
- c) Concept of Economic Growth and Development
- d) Economic Reforms

Suggested Readings

- 1) Ahuja ,H.L : Advanced Economic Theory, S.Chand & Company
- 2) Dwivedi, D.N: Microeconomics-Theory & Applications, Pearson.
- 3) Dewett K.K, Modern Economic Theory, S. Chand Publication, New Delhi
- 4) Ackley, G, Macroeconomics, Theory and Policy, Macmillan Publishing Company NY.
- 5) Shapiro E. Macro Economic Analysis, Galgotia Publications, New Delhi
- 6) Dwivedi D N Macroeconomics, Tata McGraw Hill Publications.
- 7) Datt R and K.P.M Sundharm, Indian Economy, S.Chand and CompanyLtd. New Delhi
- 8) Dinghra I.C The Indian Economy; Environment and Policy; Sultan Chand &Sons, New Delhi
- 9) Dutt R.C The Economic History of India under early British Rule, Low Price Publication Delhi

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ECONOMICS

III SEMESTER

Paper	Code	Credit
Disciplinary Major		
1. Environmental Economics	ECO/200	4
Disciplinary Minor		
1. Macroeconomics-I	ECO/201	4
Multi-disciplinary		
1. Fundamentals of Economics-III	ECO/202/MD	3

<u>**Objective**</u>: The course aims to provide fundamental concepts in environmental economics

<u>Outcome</u>: At the end of the course, the learners will be able to understand economy-environmental linkages

Unit I: Introduction to Environmental Economics

Economy and environment inter-linkages; Pareto Optimality and Market Failures; Problem of externalities; Public Goods and public bads; Tragedy of Commons; Common property resources; Coase Theorem; Meaning and Objectives of Sustainable Development.

Unit II: Development and Environment

Environment and Development; Environmental Kuznets's Curve; Population, Poverty and Environment; Degradation of Environment; Environmental Impact Assessment; Sustainable Development Goals

Unit III: Pollution Control

Types of pollution: Air, water and noise; Prevention and Control of Pollution in India; Soil degradation - causes, effects and controlling measures; Main features of Water (Prevention and Control of Pollution) Act 1974 and Forest Conservation Act, 1980; Central Pollution Control Board and State Pollution Control Board.

Unit IV: Global Environmental Issues

Green House effect, ozone layer depletion, Green Audit; International attempts to protect the environment - Movements, Laws, Agreements; Rio Declaration and Kyoto Protocol; World Bank and the environment - Polluter pays principle; Energy Security-concept.

Suggested Readings

- 1) Singh, Katar and Shishodia, Anil Environmental Economics -Theory and Practice, Sage Publications, New Delhi.
- 2) Jhingan, M. L. & Sharma, C. K. Environmental Economics: Theory, Management and Policy
- 3) Bhattacharya, R.N. (Ed), Environmental Economics: An Indian Perspective, Oxford University Press, New Delhi.
- 4) Hanley, Shogren & White, Environmental Economics in Theory and Practice, Macmillan India limited, Delhi.

<u>Objective:</u> Explain the process of calculating national income and its components, its fluctuations and the various theories behind consumption, investment and other business cycles

Outcome: At the end of the course, the learner will be able to assess the workings of the economy and the role of investment and money.

Unit I: National Income and Social Accounts

Concepts and measurement of National Income; Circular flow of income with closed and open economy; National income identities with government; Concept of Green Accountings.

Unit II: Output and Employment

Say's law of markets and the Classical theory of employment; Aggregate demand and aggregate supply functions; The principle of effective demand and income determination.

Unit III: Consumption Function

Meaning of Consumption function; Average and Marginal propensity to consume; Factors influencing consumption spending; the income multiplier; Keynesian theory of absolute income; Duesenberry's relative income hypothesis; Life Cycle Hypothesis

Unit IV: Investment and Saving

Equilibrium between investment and saving; Investment Multiplier and its effectiveness in LDCs; Autonomous and induced investment; Marginal Efficiency of Capital (MEC), Marginal Efficiency of Investment (MEI); Concept of present discounted value; Savings and Investment

– ex-post and ex-ante equality and equilibrium.

Suggested Readings

- 1) Ackley, G, Macroeconomics, Theory and Policy, Macmillan Publishing Company NY.
- 2) Day A.C.L, Outline of Monetary Economics; Oxford University Press, Oxford
- 3) Gupta, S.B Monetary Economics, S.Chand and Co. Delhi
- 4) Heijdra, B.J and F.V Ploeg, Foundation of Modern Macroeconomics, Oxford University Press, Oxford
- 5) Lucas R. Studies in Business Cycle Theory, MIT Press, Cambridge
- 6) Shapiro E. Macro Economic Analysis, Galgotia Publications, New Delhi
- 7) Dwivedi D N Macroeconomics, Tata McGraw Hill Publications.
- 8) Mithani D M Money, Banking, International Trade and Public Finance, Himalaya Publishing House.

Credit 3

Objective: To impart basic understanding of economics.

<u>Outcome:</u> The course will enable students to understand basic problems and concepts of economics.

Unit I: Microeconomics

- a) Definition Adam Smith & Lionel Robbins.
- b) Basic economics problems
- c) Concept & Law demand & supply

Unit II: Macroeconomics

- a) Concept and Measurement of NI in India
- b) Budget Meaning & kinds; Preparation & procedure of passing of Budget in India
 - c) Public Revenue and Public Expenditure

Unit III: Indian Economy

- a) Characteristics of Indian Economy
- b) Population- size, growth rate, sex ratio.
- c) Concept of Economic Growth and Development
- d) Economic Reforms

Suggested Readings

- 1) Ahuja ,H.L: Advanced Economic Theory, S.Chand & Company
- 2) Dwivedi, D.N Microeconomics-Theory & Applications, Pearson.
- 3) Dewett K.K, Modern Economic Theory, S. Chand Publication, New Delhi
- 4) Ackley, G, Macroeconomics, Theory and Policy, Macmillan Publishing Company NY.
- 5) Shapiro E. Macro Economic Analysis, Galgotia Publications, New Delhi
- 6) Dwivedi D N Macroeconomics, Tata McGraw Hill Publications.
- 7) Datt R and K.P.M Sundharm, Indian Economy, S.Chand and CompanyLtd. New Delhi
- 8) Dinghra I.C The Indian Economy; Environment and Policy; Sultan Chand &Sons, New Delhi
- 9) Dutt R.C The Economic History of India under early British Rule, Low Price Publication Delhi

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ECONOMICS

IV SEMESTER

Paper	Code	Credit
Disciplinary Major		
1. Public Finance	ECO/203	4
Disciplinary Minor		
1. Macroeconomics-II	ECO/204	4

Objective: To introduce the role of fiscal policy in economic stabilisation, distribution and development

Outcome: The learner, at the end of the course, will be able to follow the role and significance of public expenditure, taxation and public debt in the economy

Unit I: Nature and Scope of Public Finance

Meaning and scope of public finance; Distinction between private and public finance; Public goods vs. private goods; The principle of maximum social advantage; Market failure and Role of the government.

Unit II: Public Revenue

Sources of Public Revenue - Tax and Non-tax revenue; Meaning, Canons and classification of taxes; Division of tax burden – The benefit and ability-to-pay approaches; Impact and incidence of taxes; Taxable capacity; Effects of taxation; Dead weight loss characteristics of a good tax system.

Unit III: Public Expenditure and Public Debt

Meaning, classification and principle of public expenditure; Canons and effects of public expenditure; Causes of growth of public expenditure in recent year; Sources of public borrowing; effects of public debt; methods of debt redemption.

Unit IV: Fiscal Policy and Financial Administration

Role of Fiscal policy in Developed and Developing countries; Budget Structure – Union and State Budget; Kinds of budget – Balanced, Surplus and Deficit budgets; Zero-based Budgeting; Economic and Functional Classification of Budget; Role of Finance Commission in India.

Suggested Readings

- 1) Musgrave, R.A and P.B Musgrave, Public finance in Theory and Practice, Mc Graw Hill, Kogakusha, Tokyo.
- 2) Musgrave R.A The Theory of Public Finance, Mc Graw Hill, Kogakusha, Tokyo
- 3) Browning E.K; J.M Bowning: Public Finance and the Price System: Pearson Publication (Singapore) Pvt. Ltd; Indian Branch, Potperganj Delhi
- 4) Houghton, E.W (Ed), Public finance, Penguin, Baltimore
- 5) Bhargava, R.N The theory and working of Union Finance in India, Chaitanya Publishing House, Allahabad
- 6) Jha. R., Modern Public Economics, Routledge, London.
- 7) Mithani D.M Modern Public Finance, Himalaya Publishing House, Mumbai
- 8) Prakash OM Public Economics (Theory and Practice), Vishal Publishing Co. Jalendhar
- 9) RBI, Report on Currency and Finance (Annual) Mumbai.
- 10) HL Bhatia, Public Finance: Vikash Publishing House, New Delhi

Objective: To explain the role of money and banking in the economy

Outcome: At the end of the course, the learner will be able to understand fluctuations in the economy and models of economic growth.

Unit I: Money

Meaning and functions of money; High-powered money; Gresham's law; Monetary standards, metallic and paper systems; Quantity Theory of Money, Classical and Cambridge versions, Keynesian approach; The IS-LM Model: meaning, characteristics and limitations.

Unit II: Banking

Central Bank- Role & Function, Monetary Policy. Commercial Bank- Meaning, types and functions; Process of credit creation by banks; Instruments of credit control by Central Bank.

Unit III: Trade Cycles

Meaning, nature and characteristics of trade cycle; Hawtrey's monetary theory; Hayek's over-investment theory; Keynes' view on trade cycle- concept of accelerator; Control of trade cycles.

Unit IV: Inflation

Meaning of Inflation, Deflation, Reflation and Stagflation; Demand-pull inflation and Costpush inflation; Causes and effects of inflation; Measures to control inflation; Philip's curve.

Basic Readings

- 1) Ackley, G, Macroeconomics, Theory and Policy, Macmillan Publishing CompanyNY.
- 2) Day, A.C.L Outline of Monetary Economics; Oxford University Press, Oxford
- 3) Shapiro E. Macroeconomic Analysis, Galgotia Publications, New Delhi
- 4) Gupta, S.B Monetary Economics, S.Chand and Co. Delhi
- 5) Mankiw, N.G Principles of Macroeconomics; Cengage Learning IndiaPvt.Ltd
- 6) Lucas R. Studies in Business Cycle Theory, MIT Press, Cambridge
- 7) Dwivedi, D.N Macroeconomics, Tata McGraw Hill Publications.
- 8) Mithani, D.M Money, Banking, International Trade and Public Finance, Himalaya Publishing House.

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ECONOMICS

V SEMESTER

Paper	Code	Credit
Disciplinary Major		
1. Quantitative Techniques-I	ECO/300	4
2. Optional (Any one)A. Agriculture economicsB. Industrial Economics	ECO/301 ECO/302	4 4
Disciplinary Minor		
1. Indian Economy	ECO/303	4

Objective: To provides basic mathematical tools for economics analysis

Outcome: Interpret and analyse economics data using mathematical tools

Unit I: Basic concepts and Linear Programming

Sets and set operations; Types of functions- constant, polynomial, rational, exponential, logarithmic. Concept of Linear Programming Problems; solution of LPP by graphical method.

Unit II: Differential Calculus

Rules of differentiation; Maxima and Minima; Partial derivatives; Economics applications of simple differentiation- Profit maximisation, cost minimisation, Interrelationships among total, marginal and average costs and revenues.

Unit III: Integral Calculus

Simple rules of integration; Definite integral; Application of integrations- Consumer's surplus and Producer's surplus, total revenue and total cost.

Unit -4: Matrices and its Operations.

Concept, types, matrix algebra, transposes of a matrix, inverse of a matrix, rank of a matrix. Determinants and its properties. Solution of system of linear equations by Cramer's rule and Matrix Inversion Method

Suggested Readings

- 1) Allen R.G.D: Mathematical analysis for economist, Mc Millan Press, London
- 2) Chiang AC: Fundamental methods of economics, Mc Graw Hill, New Delhi
- 3) Mehta, B.C and Madnani GM: Mathematics for economist, Sultan Chand & Sons, New Delhi
- 4) Renshaw, Geoff: Maths for economics: Oxford University Press.
- 5) Monga GS: Mathematics and Statistics for Economics, Vikas Publishing House, New Delhi.

Objective: To explain the role and performance of agriculture in the development process

Outcome: At the end of the course, leaner will be able to understand the role of agrarian relations, land reforms, and technological change in agriculture development.

Unit I: Development of Agriculture and Rural Economy of India

Role and importance of Agriculture in economic development: Linkages between Agricultural and non-agricultural sectors; Composition of Indian rural economy- Farm sector, Non-Farm sector.

Agriculture and Allied activities- Fisheries, Horticulture, Floriculture, Forestry -its Growth and Problems; Rural Industrialization- Food Processing and Agro-based industries, Problems and Challenges of rural infrastructure.

Unit II: Agrarian relations and Land reforms in India.

Agrarian relations- Evolution of Land Reforms in India- during 1950's,1960's and 1970'S onwards; Land utilization, cropping pattern and irrigation; Trends in agricultural development and its productivity; Regional variation in agriculture development.

Unit III: Technological Change in Agriculture

Technological change in agriculture, Traditional techniques and practices; Green Revolution-HYV Seeds, Fertilizers, Mechanization of agriculture; Agriculture and Sustainable development-Emerging trends in agricultural technology, Dry Land Farming, Use of Biotechnology in agriculture; Organic Farming- meaning, importance and challenges.

Unit IV: Globalization and Agriculture Development.

Overview of Indian Agriculture Development – Major causes of low productivity; Agricultural marketing-Prospects and Challenges, Remedial measures; Globalization of Indian Economy and its effects on Indian agriculture.

Suggested Readings

- 1) Bilgrami, S A R An Introduction to Agricultural Economics, Himalaya Publishing House, Mumbai.
- 2) Sadhu, A.N and J. Singh Agricultural Problems in India Himalaya Publishing House, Mumbai
- 3) Sundaram I.S Rural Development Himalaya Publishing House, Mumbai
- 4) Sani R.N Leading Issues in Agricultural Economics, Arihant Press, Jalandar

ECO/302 INDUSTRIAL ECONOMICS Credit 4

Objective: To explain basic concepts and issues in industrial economics

Outcome: The learners will be able to understand the role in industrial sectors in

the economy

Unit I: Introduction

Industry and economic development; Industry and sectoral linkages; Industrial classification and data information.

Unit II: Industrial Organization and Ownership Structure

Public, private, joint and cooperative sectors; Private corporate sector; MNC and their role; Industrial concentration and monopoly.

Unit III: Location and Dispersion

Locations of industries – Theories of location; Diversification; Integration and merger of industrial units; Dispersion and problem of regional imbalance.

Unit IV: Industrial Financing and Productivity

Mode of financing – equity and debt; Institutional Finance; Bank finance; Concept and measurement of productivity; industrial sickness; Under-utilization of capacity – factors accounting for it and consequences.

Suggested Readings

- 1) Devine, P.J et al An introduction to Industrial Economics, (3rd edition) GeorgeAllen and Unwin London.
- 2) Clarkson K.W. and R. Miller Industrial organization: Theory, Evidence and Public Policy, Mc Gowe Hill, Kogakusha, Tokyo
- 3) Aluwalia, I.J Industrial Growth in India, Oxford University Press, New Delhi
- 4) Government of India, Economic Survey (Annual) New Delhi
- 5) Mamoria and Mamoria, Dynamics of Industrial Relation in India Himalaya Publishing House, Mumbai.
- 6) Barthwal R.R Industial Economics An Introductory Textbook New Age International Publishers Pvt. Ltd.
- 7) Reserve Bank of India, Report on Currency and Finance (Annual) Mumbai

Objective: To introduce the basic features of Indian economy

Outcome: At the end of the course, the learner will understand the performance of Indian economy

Unit I: Structure of Indian Economy and Population.

Basic features of Indian economy; Broad demographic features, problems of over-population; Population Policy; Problems of poverty, Unemployment, Inflation and Income Inequlaity.

Unit II: Planning and Economic Reforms

Formation of Planning and Five-Year Plans in India; New Economic Policy (1991)-Liberalization, Privatization and Globalisation, Impact of LPG; Objectives and achievements of economic Planning in India; Composition and Role of NITI Aayog. New Industrial Policy of 1991 and recent changes; Roles and contribution of Micro, Small & Medium Enterprises.

Unit III: Agriculture

Causes of low productivity in Indian agriculture; Land reforms in India –Needs, objectives, measures and achievement; Green Revolution. Sources of agricultural finance – institutional and non-institutional; Problems of agricultural marketing in India; Concept of MSP and subsidy; Food security and PDS

Unit IV: Regional Economy

Basic features of Mizoram Economy – Agriculture, industry and service sectors; Finances – Source of revenue, growth of public expenditure and debt; Rural development.

Suggested Readings

- 1) Datt R and K.P.M Sundharm, Indian Economy, S.Chand and CompanyLtd. New Delhi
- 2) Dinghra I.C The Indian Economy; Environment and Policy; Sultan Chand & Sons New Delhi
- 3) Dutt R.C The Economic History of India under early British Rule, Low Price Publication Delhi
- 4) Misra, S.K and V.K Puri Indian Economy Its Development Experience, Himalaya Publishing House, Mumbai
- 5) Ahuwalia, I.J and IMD Little (Eds) India's Economic Reforms and Development, Oxford University Press, New Delhi.
- 6) Mizoram Economic Survey

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VI SEMESTER

Paper	Code	Credit
Disciplinary Major		
1. Quantitative Techniques-II	ECO/304	4
2. International Trade	ECO/305	4
3. Optional (Any one)		
A. Demography	ECO/306	4
B. History of Economics Thought	ECO/307	4
Disciplinary Minor		
1. Economics of Growth and Development	ECO/308	4

Objective: Introduce quantitative methods in economics analysis

Outcome: Define and understand applications of quantitative methods

Unit I: Introduction, Central Tendency and Dispersion

Methods of data collection- sampling vs census, primary and secondary data. Measures of central tendency: mean, median, mode, geometric mean and harmonic mean. Measures of dispersion: range, mean deviation, standard deviation, coefficient of variation, skewness and kurtosis.

Unit II: Probability and Distribution

Concept of probability- Classical, Empirical and Modern; Basic theorems of probability-addition and multiplication. Theoretical distribution - binomial, poisson and normal distribution.

Unit III: Correlation and Regression

Correlations: Karl Pearson and Rank Correlation. Concept of partial and multiple correlation. Regression analysis: estimation of simple regression line by OLS, interpretation of regression coefficients, concept of coefficient of determination.

Unit IV: Time series and Index Number

Time series analysis-Concept and components, determination of trend, seasonal and cyclical indices; Index numbers - Concept, price-relative, quantitative relative, Laspeyre's, Paasche's and Fisher's Indices. Problems in the construction and limitations of index numbers. Tests for ideal index number.

Suggested Readings

- 1. Gupta SC & Kapoor VK Fundamentals of Mathematical Statistics, SChand & Sons, New Delhi.
- 2. Gupta, SP Statistical Methods, S Chand & Sons, New Delhi.
- 3. Goon, Gupta, Dasgupta Fundamentals of Statistics-I, The World Press Private Ltd, Kolkata.
- 4. Nagar, A.L. and Das R.K., Basic Statistics, Oxford University Press

Objective: To explain theories of trade and gains from trade and role of protection and the pattern of India's trade.

Outcome: Be able to understand impacts of protection in trade and liberalization of trade measures.

Unit I: Importance of Trade and Trade Theories

Importance of the study of international trade; The Classical Theories of International Trade - Adam Smith, David Ricardo; Mill's Reciprocal Demand Analysis; Terms of Trade-meaning, types and determinants. Concept of Inter-regional and international trade;

Unit II: Modern theory and the Gains from Trade

Heckscher-Ohlin theory of International Trade – its main features, assumptions and limitations. The Leontief Paradox; Gains from Trade-Meaning, Types and measurement–J.S.Mills and Modern Approach. Concept of Actual gains and potential gains from trade.

Unit III: Balance of Payments, Tariffs and Quotas

Balance of Payments -Concepts and components, causes of BOP disequilibrium in India; Measures to correct deficit in the balance of payment; Tariffs –meaning and types; Theory of Optimum Tariff; Quota-Meaning & types; Concept of –devaluation, Purchasing Power Parity Theory, fix and flexible exchange rate.

Unit IV: Foreign Trade in India and International Financial Institutions Composition and Direction of India's foreign trade: India's Foreign Trade Policy (2023-28 onwards) WTO- agreements under WTO, TRIMS,TRIPS, AoA; Concept- IMF, World Bank, ADB&GATT.

Suggested Readings

- 1) Mithani, D.M, Money, banking, International Trade and Public Finance, Himalaya Publishing House.
- 2) Soderstein, Bo International economics, Macmillan Press Ltd, London
- 3) Kindleberger, C.P. International Economics, R.D. Irwin, Home Wood.
- 4) Krugman, P.R. and M. Obstfeld International Economics -Theory and policy, Glenview, Foresman.
- 5) Patel S.J. Indian Economy Towards the 21st Century, University Press Ltd, India.
- 6) Salvatore, D.L. International Economics, Prentice-Hall, Upper Saddle River, N. J.
- 7) Kennan, P.B, The International Economy, Cambridge University Press London.
- 8) Agarwal, Babita Antarrastriya Arthshastra, Omega Publications.
- 9) Bhatia, H.L International Economics, Vikash Publishing House.
- 10) Field, Alfred. J & Appleyard, Dennis. R International Economics, McGraw Hill
- 11) Education.
- 12) Krugman, Paul. R & Obstfeld, Maurice International Economics, Pearson.
- 13) Salvatore, Dominick International Economics: Trade & Finance, Wiley Publishers.
- 14) Vaishya,M.C. & Singh,Sudama International Economics, Oxford &IBH Publishing House, Delhi

Objective: Introduce key concepts/theories and provide basic techniques of analysis in demography.

Outcome: Understand vital demographic statistics.

Unit I: Introduction

Population study and demography: Its relation with other disciplines; Theories of Population Malthus, Optimum theory of population, and theory of demographic transition.

Unit II: Sources of Demographic Data in India

Sources of Demographic data in India: Census-Civil registration system and demographic surveys; Salient features of population census since independence, features of National Family Health Survey 5.

Unit III: Techniques of Analysis

Crude birth and death rates, age specific birth and death rates, standardized birth and death rates. Study of Fertility: Total fertility rate, gross reproduction rate and net reproduction rate.

Unit IV: Population Projection& Policy

Population projection in India; concept of stationary, stable and quasi-stationary population. Aging of population in India.

Population Policy in India; Women empowerment and its relation to Population control.

Suggested Readings

- 1) Bogul, D.J. Principles of Demography; John Wiley, New York.
- 2) Agarwal U.D Population Projection and Their Accuracy, B.R. PublishingCorporation N.D.
- 3) Blende, A.A ;and T.R. Kanitkar Principles of Population Studies, Himalaya Publishing House, Mumbai.
- 4) Agarwala S.N, India's Population Problem, Tata McGraw Hill, Bombay
- 5) Bose, A. India's Basic Demoraphic Statistics, B.R. Publishing Corporation, NewDelhi.
- 6) Choubey, R.K. Population Policy in India, Kanishka Publications, New Delhi.
- 7) Srinivasan, K., Basic Demographic Techniques and Applications, Sage Publications, New Delhi.

Objective: Provide the learners an overview of the history of economic thought

<u>Outcome:</u> The learner will appreciate the historical background of various economic thoughts

Unit I: Early Period

Economic thought of Plato and Aristotle – Doctrines of just cost and just price –Mercantilism: main characteristics; Adam Smith – Division of labour, theory of value, capital accumulation, distribution; David Ricardo – value, theory of rent, distribution; Thomas R.Malthus – theory of population,

Unit II: Marginalists

The precursors of marginalism — Cournot, Thunen, Gossen — The marginalist revolution; Jevons, Walras and Menger — Bohm-Bawark, Wicksell and Fisher: the rate of interest —Wicksteed and Weiser; Distribution — Marshall as a great synthesizer; role of time in price determination, economic methods, ideas on consumer's surplus, elasticities, prime and supplementary costs, representative firm, external and internal economies, quasi-rent, organization as factor of production, nature of profits.

Unit III: Keynesian Ideas

The aggregate economy, Liquidity Preference Theory and Liquidity trap, Marginal Efficiency of Capital and Marginal Efficiency of Investment, wage rigidities, underemployment equilibrium, role of fiscal policy: deficit spending and public works, multiplier principle, cyclical behavior of the economy, uncertainty and role of expectations, impetus to economic modelling

Unit IV: Indian Economic Thought

Early economic ideas: Kautilya, Valluvar; Modern economic ideas: Naoroji, Ranade, R.C Dutt and MN.Roy; Economic ideas of Gandhi: Village, Swadeshi, place of machine and labour, cottage industries, trusteeship; Early approaches to planning (The national planning committee); Gadgil co-operation as a way of life and strategy of development; J.K Mehta:Wantlessness.

Suggested Readings

- 1. Blackhouse, R. A History of Modern Economic analysis, Basil Blackwell,Oxford.
- 2. Blang M. Economic Theory in Retrospect Cambridge
- 3. University Press, Cambridge.
- 4. Ganguly B.N Indian Economic Thought: A 19th Century Perspective,
- 5. Tata Mc GrAw Hill, New Delhi.
- 6. Guide, C and G. Rist A History of Economic Doctrines
- 7. George Harrop & Co., London.
- 8. Gray A and AE Thomson The Development of Economic Doctrine, Longman Group, London.
- 9. Roll, E A History of Economic Thought, Faber, London.
- 10. Schumpeter, J.A. History of Economic Analysis, Oxford Press, New York.

Objective: To explain theories and approaches of economic development and role of planning;

<u>**Outcome:**</u> The learners will be able to understand the dynamic interplay of various forces in understanding the development process

Unit I: Basic Concepts of Development

Meaning of Economic growth and economic development; Measurement of Development and Development Gap; Common characteristics of developing countries; Factors affecting economic growth (Capital, Labour and Technology); Regional and global disparities; Development ethics - concept and principles.

Unit II: Approaches to Economic Development

Concept of Poverty and Inequality - poverty line, absolute and relative poverty; Vicious Circle of Poverty; Concepts of Social and Human Developments – HDI, PQLI, Happiness Index; Concept of Sustainable Development and SDGs.

Unit III: Theories of Economic Development

Adam Smith; Karl Marx; Schumpeter; Rostow's stages of growth; Kuznets's inverted U hypothesis; Lewis dual sector model, Big Push theory; Concept of Balanced vs Unbalanced growth.

Unit IV: Growth Models

Concept of Endogenous versus exogenous growth models; Harrod-Domar model; Solow model; Kaldor Model; Joan Robinson Model; Dualism - Social, Technological and Financial; Modernization theory and Dependency theory; concept of CBA.

Suggested Readings

- 1) Todaro, Michael P. and Stephen C Smith Economic Development, PearsonEducation,
- 2) Thirlwall, A. P. Growth and Development, Seventh edition, Palgrave Macmillan, New York.
- 3) Meier, Gerald M. and James E. Rauch, Leading Issues in Economic Dvelopment,Oxford University Press, New York
- 4) Jhingan, ML The Economics of Development and Planning, Vrinda Publication
- 5) Goel, R.L. Economics of Development and Planning
- 6) Subrata Introduction to Development Economics,
- 7) Routledge, London & New York
- 8) Ghosh, Arun Paradigms of Economic Development, IIAS, Shimla.
- 9) Higgins, B., Economic Development, W.W. Norton, New York.