SYLLABUS

FOR MASTER OF ARTS IN ECONOMICS

(DISTANCE EDUCATION)

RAJIV GANDHI UNIVERSITY
RONO HILLS, DOIMUKH
ARUNACHAL PRADESH

MASTER OF ARTS IN ECONOMICS

COURSE TITLE   :   M.A. ECONOMICS

PREVIOUS YEAR

Paper Code	Course Title	Marks		
		End Term	**Assignment**	**Total**
MAECO-401	Micro Economic Theory	80	20	100
MAECO-402	Macro Economic Theory and Monetary Economics	80	20	100
MAECO-403	Public Finance	80	20	100
MAECO-404	Mathematics and Statistics	80	20	100

FINAL YEAR

Paper Code	Course Title	End Term	Assignment	Total
MAECO-501	Development Economics	80	20	100
MAECO-501	International Economics	80	20	100
MAECO-501	Indian and North East Economy	80	20	100
MAECO-501	Environment, Population and Agriculture	80	20	100

DURATION   :   2 YEARS (ANNUAL SYSTEM)

MA-ECO-401:

MICRO ECONOMIC THEORY

UNIT I: Consumer's Choice under Certainty

Preference ordering and utility function - Utility maximization and Marshallian demand function - Indirect utility function and cost/expenditure function duality between constrained utility maximization and constrained cost minimisation -Hicksian demand function - Properties of budget line and demand function: Engel aggregation, Cournot aggregation, homogeneity - Linear expenditure system - An overview of estimation of demand functions.

UNIT II: Theory of Production

Production function - Returns to scale and returns to a factor - Elasticity of factor substitution - Types of production function: Homogeneous production function, Cobb-Douglas, CES production functions and its properties - Derivation of Cobb-Douglas and Leontief production functions from CES production function.

UNIT III: Theory of Cost and Factor Pricing

Derivation of cost funtion from production function - Technical progress (Hicksian and Harrodian version) and factor shares - Theories of distribution: Marginal productivity theory and Euler's theorem, Ricardo, Kalecki and Kaldor.

UNIT IV: Theory of Market

Critique of perfect competition as a market form - Actual market forms: Duopoly, oligopoly and monopolistic competition - Cournot and Staekelberg's model of duopoly - Collusive oligopoly: Cartel.

UNIT V: Game Theoretic Approach to Economics

Two-person zero-sum and non-zero sum game - Pure strategy, maximin and minimax-saddle point, and minimax theorem - mixed strategy, its solution', Two person co-operative game, non-co-operative game - dominated strategy -

Prisoner's dilemma and its repetition- Nash equilibrium - application of game theory to oligopoly.

UNIT VI: Alternative Theories of the Firm

The traditional theory of firm and its critical evaluation - Baumol's revenue maximization model - Williamson's model of managerial discretion - Managerial firm vs. entrepreneurial firm - Marris's model of managerial enterprise - Limit pricing theory.

UNIT VII: Theory of General Equilibrium

Principles of general equilibrium, existence, uniqueness and stability (Walrasian and Marshallian conditions of stability) - Walrasian general equilibrium system - Computable general equilibrium

UNIT VIII: Welfare Economics

Pareto Optimality, Pareto Optimality conditions: Consumption, production and exchange, critical evaluation of Pareto Optimality - Compensation tests: Kaldor, Hicks and Scitovsky and Little's criterion - Social welfare function - Arrow's Impossibility Theorem.

UNIT IX: Choice under Uncertainty and Risk

Difference between Uncertainty and risk; classes of measures: associative measure, ordinal and cardinal measures, Axioms of Neumann-Morgenstern (N-M) utility, Characteristics of N-M utility index; relationship between the shape of the utility function and behavior towards risk, elasticity of marginal utility and risk aversion; absolute and relative risk aversion.

UNIT X: Economics of Imperfect Information

Information and decision making under certainty and uncertainty - Asymmetric information, adverse selection, moral hazard and signaling - Applications to insurance and lemons markets

Recommended Readings:

1.   Koutsoyiannis, A., *Modern Microeconomics*, Macmillan Press, London, 1979.

2.   Walter Nicholson and Christopher Snyder (2008) *Microeconomic Theory*: *Basic Principles and Extensions*, Thomson South-Western.

3.   Varian, H., *Microeconomic Analysis,* W. W. Norton, New York, 2000.

4.   Baumol, W. J., *Economic Theory and Operations Analysis,* Prentice Halls of India, New Delhi, 1982.

5.   Henderson, J.M. and R.E. Quant, *Microeconomic Theory*: A Mathematical Approach, McGraw Hill, New Delhi, 1980.

6.   Kreps, M.D., *A Course in Microeconomic Theory*, Prentice Hall of India, New Delhi, 1992.

7.   Arrow, K., *Social Choice and Individual Values*.

8.   Sen, A.K., *Collective Choice and Social Welfare*.

9.   Ray, N.C., *An Introduction to Microeconomic Theory*.

10.   Mishan E.J., *Welfare Economics: An Assessment*, North Holland, Amsterdam, 1969.

11.   Sen, Anindya, Microeconomics, Theory and Applications, Oxford University Press, 1999.

12.   Maddala, G.S. and Ellen Miller, *Microeconomics-Theory and Applications;* Tata McGraw-Hill Publishing Company Limited, New Delhi, 2004.

13. Borch, K.H., *The Economics of Uncertainty*, Princeton University Press, Princeton, 1968.

14. Diamond and Rothschild (Eds.), *Uncertainty in Economics*, Academic Press, New York, 1978.

15. Ryan and Pearce, Price Theory, Macmillan.

16. Hirslief, Applications of Microeconomics .

17. Pindyck, R. S. Rubuinfeld, D.L. & Mehta, P.L. Microeconomics, Pearson Education

MAECO-402:

MACRO ECONOMIC THEORY AND MONETARY ECONOMICS

UNIT I: Review of Classical and Keynesian Economics

Classical theory of income, employment, wage rate and price level -macro equilibrium in classical model - Classical dichotomy - Causes of unemployment - Evaluation of classical model.

Keynesian determination of income, output and employment - Consumption function, investment multiplier and balanced budget multiplier - Multiplier in an open economy; difference between Keynesian and classical macro-equilibrium, Pigou's critique of Keynes's under employment equilibrium - the Pigou effect.

UNIT II: Neo-Classical and Keynesian Synthesis

Classical and Keynesian theories of interest - IS-LM model - Relative effectiveness of monetary and fiscal policies - Extension of IS-LM model to labour market, flexible price; Mundell-Fleming model of an open economy.

UNIT III: Theories of Consumption

Extension of Keynesian consumption function to long run - Relative Income Hypothesis- Life Cycle Hypothesis - Permanent Income Hypothesis.

UNIT IV: Theories of Investment

Investment demand: Present value criterion for investment, payback period and internal rate of return;' Marginal Efficiency of Investment (MEI). Acceleration principle, its derivation from the profit maximizing behaviour, flexible accelerator

UNIT V: Theories of Trade Cycle

Schumpeterian theory - Multiplier-accelerator interaction - Kaldor's theory - Monetary & fiscal policy for economic stabilization.

UNIT VI: Demand for and Supply of Money

The demand for money - Tobin's portfolio selection and Baumol's transaction demand for money - Friedman's restatement of quantity theory of money - Supply of money - Inside and outside money, Gurley-Shaw's approach - Concept of exogenous money supply, Friedman's theory - Endogenous money supply, Kaldor's theory.

UNIT VII: Inflation, Monetarism and New-Classical Macroeconomics

Keynesian theory of inflation - Phillips Curve - Monetarism: Basic elements of monetarism - Monetarist theory of income determination and inflation - Friedman-Phelp critique of Phillips Curve and money supply rule.

Price behaviour and expectation: Adaptive and rational expectations - New-classical economics, real business cycle and economic policy.

UNIT VIII: Problems in Asset Pricing

Returns from assets and risk - Measure of risk, diversification - Risk' in a Portfolio, Cost of capital, traditional theory and Modigliani - Miller theorem - Capital asset pricing model and arbitrage pricing model.

UNIT IX: Financial Market

Role, structure and characteristics of money market and capital market, Primary and secondary market for securities, treasury bill and commercial bill market - Discount market, government securities, markets for derivatives, futures and options - types, uses and pricing of derivatives - depth, breadth and resilience of markets, construction of Sensex and Nifty.

UNIT X: Indian Financial Institutions

Working of capital market and SEBI - Commercial banks, co-operatives, regional rural banks (RRBs), problems of micro finance, self-help groups (SHGs) - Non-bank financial intermediaries (NBFIs): Insurance institutions: Life and general insurance, mutual benefit funds.

Recommended Readings:

1.Mankin, N. Gregory (2010) *Macroeconomics*, Worth Publishers, New York.

2.Shapiro, Edward, *Macroeconomic Analysis*, Galgatia Publication, New Delhi, 1996.

3.Branson, W. H., *Macroeconomic Theory and Policy*, Universal Book Stall, New Delhi, 1979.

4.Kaldor, N., *Essays on Economic Stability and Growth*, Duckworth, London.

5.Jha, R., Contemporary *Macroeconomic Theory and Policy*, New Age International (P) Ltd., New Delhi, 1999.

6.Mueller, M.G. (ed,), *Readings in Macroeconomics*, Surjeet Publications, Delhi, 1978.

7.Gampinski, J. H., *Macroeconomic Theory*, McGraw Hill, New York, 1982.

8.Keynes, J. M., *General Theory of Employment, Interest and Money*, Macmillan, London, 1936.

9.Chandler, L. V. and S. M. Goldfeld, *The Economics of Money and Banking,* Harper & Row, New York, 1977.

10.Bhole, L. M., *Financial Institutions and Markets*, Tata McGraw Hill Company Ltd., New Delhi, 1999.

11.Gupta, S B, *Monetary Economics Institutions and policy*, S.Chand & Co., New Delhi, 1995.

12.Patinkin, *Money, Interest and Prices*, Harper and Row, New York

13.Khan M. Y., *Indian Financial System*, Tata McGraw Hill, New Delhi, 1996.

14.Coghlan, R., *The Theory of Money and Finance, Macmillan*, London, 1980

15.Frisher, H, *Theories of Inflation,* Cambridge University Press, 1983.

16.Sheffrin, S.M., *Rational Expectation*, Cambridge University Press, 1996.

17.   *Higgins*, Monetary Economics.

MAECO-403

PUBLIC FINANCE

UNIT - I: Rationale for Government Intervention

Role of Government in economic activity: Allocation, distribution and stabilization functions - Provision of public goods and merit goods - Externalities, market imperfection and government intervention.

UNIT - II: Size of Government Expenditure

The classical and neoclassical views on the size of the government and its expenditure; Wagner's law of increasing state activities, Keynesian view; effects of public expenditure.

UNIT - III: Major theories of Public expenditure

- Voluntary exchange principle and Lindhal's model - Samuelson's model - Musgrave's optimum budget model- Paradox of voting.

UNIT - IV: Principles of taxation

Canons of taxation, benefit & ability to pay approaches, neutrality in taxation; taxable capacity, absolute and relative; factors determining taxable capacity; regressive, proportional and progressive tax; overview of Indian Tax System.

UNIT - V: Effects of taxation

Tax on income and its effect on work effort, commodity tax: unit and advalorem; impact and incidence; effects of tax on production and price in different market conditions; elasticity and buoyancy of tax.

UNIT - VI: Public Budget

Classification of public budget: Incremental budget & zero-base budget - different measures of deficits in budget - Revenue deficit, primary deficit and fiscal deficit; different types of deficit, measures to reduce different deficits, problems of budget deficit in India.

UNIT - VII: Public Debt

Differences between private debt and public debt; Sources of government borrowing; effects of public debt; Ricardian equivalence; burden of public debt, Domar's model, management of public debt.

UNIT - VIII: Fiscal Policy in a Closed 'Economy

Instruments of fiscal policy: tax, borrowing and expenditure, anti cyclical fiscal policy in a closed economy. Crowding-out effects of government expenditure, its criticisms.

UNIT - IX: Fiscal Policy in an Open Economy

Relation between fiscal, monetary & exchange rate policies. Deficit spending and its effect on money stock, exchange rate, export, import and capital movement. Changes in tax rate and its effect on the movement of foreign capital.

UNIT - X: Fiscal Federalism

Principles of division of financial resources in a federation - horizontal and vertical imbalance - Finance Commission and Planning Commission in resources transfer from centre to the states in India.

Recommended Readings:

1.Musgrave, R. A., *The Theory of Public Finance*, McGraw Hill, Kogakhusa, Tokyo, 1959.

2.Musgrave, R. A. and P. B. Musgrave, *Public Finance in Theory and Practice,* McGraw Hills, Kogakhusa, Tokyo.

3.Buchanan, J. M., *The Public Finances*, Richard D Irwin, Homewood, 1970.

4.Jha, R., *Public Economics*, Routledge, London, 1998.

5.Atkinson, A.B., and J. E. Stiglitz, *Lectures on Public Economics*, Tata McGraw Hill, Newyork, 1980.

6.Peacock, A. and C. K. Shaw, *The Economic Theory of Fiscal Policy*, George Allen and Unwin, London, 1978.

7.Buchanan, J. M., *Public Principles of Public Debt - A Defence and Restatement,* Richard Irwin, Homewood, 1958.

8.Musgrave, R. A. and C. Shoup (Eds.), *Readings in the Economics of Taxation*, George Allen and Unwin, London, 1970.

9.Chelliah, Raja J. et al, *Trends and Issues in India's Federal Finances,* National Institute of Public Finance and Policy, New Delhi, 1981.

10.Rao, Govinda *Political Economy of Federalism in India -* Oxford University Press.

11.   Rao, Govinda, State Finances in India Issues and Challenges (Article) *Economic and Political Weekly -* 03-08- 2002.

MAECO-404:

MATHEMATICS AND STATISTICS

UNIT I: Co-ordinate Geometry (Two dimensional) and Algebra

Equation of the straight line: Slope, intercept - Derivation of a straight line given (a) intercept and slope and (b) intercepts - angle between two lines - condition of lines for being parallel. Circle: Derivation of the equation of a circle given a point & radius - derivation of the equation of a parabola - definition of hyperbola and ellipse - binomial expansion for a positive, negative or fractional exponent - exponential and logarithmic series.

UNIT II: Matrix Algebra

Scalar and vector - length of a vector - addition, subtraction and scalar products of vectors - angle between two vectors - Cauchy-Schwarz inequality - vector space and normed space -basis of a vector space, the standard basis - spanning of vector space: Linear combination and linear independence.

Types of Matrices: Null, unit and idempotent matrices - Matrix operations - Determinants - Matrix inversion and solution of simultaneous equations - Cramer's rule - Rank of a matrix- Characteristic roots and vectors.

UNIT III: Differentiation

Limit and continuity of functions - Basic rules of differentiation - Partial and total differentiation -Indeterminate form - L'Hopital Rules - Maxima and minima - Points of inflexion - constrained maximization and minimization - Lagrangean multiplier Applications to elasticity of demand and supply, equilibrium of consumer and firm.

UNIT IV: Integration

Integral as anti-derivative - Basic rules of integration - Indefinite and definite integral- Beta and Gamma functions - Improper integral of the form $\int\limits_{o}^{\alpha} e^{-x^2}\,dx;$

Applications to derivation of total revenue and total cost from marginal revenue and marginal cost, estimation of consumer surplus and producer surplus - First order differential equation.

UNIT V: Linear Programming

Concept, objectives and uses of linear programming in economics - Graphical method - Slack and surplus variables - Feasible region and basic solution, problem of degeneration - Simplex method - Solution of primal and dual models.

UNIT - VI: Probability

The concept of a sample space & elementary events - mutually exclusive events, dependent & independent events, compound events - a-priori & empirical definition –Addition & multiplication theorems - Compound and conditional probability -Bayes' theorem.

UNIT - VII: Probability Distribution

Random variable, probability function and probability density function - expectation, variance, covariance, variance of a linear combination of variables, moments & moment generating functions -Binomial, Poisson, Beta, Gamma & Normal distributions: Derivation of moments around origin and moments around mean - Standard normal distribution.

UNIT VIII: Statistical Inference

Concept of sampling distribution - X^2, t and F distributions and their properties - Type I and type II errors, - One tailed and two tailed tests - Testing of hypotheses based on Z, X^2 , t and F distributions.

UNIT - IX: Correlation & Regression

Simple correlation and its properties - Range of correlation coefficient - Spearman's rank correlation (tied and untied).

Regression: OLS, its assumptions, estimation of two regression lines - angle between two regression lines - Properties of regression coefficients - standard

error of regression coefficients-Partial and multiple correlation., General regression model, regression coefficients and their testing of significance.

UNIT - X: Index Number and Time Series

Index Number - Laspeyeres', Paasche's and Fisher's index numbers - Tests for ideal index number - Base shifting, base splicing and deflating - Concept of constant utility index number Time series - Components of time series - Methods of estimation of linear and non-linear trend.

Recommended Readings:

1.Allen, R.G.D., *Mathematical Analysis for Economists*, Macmillan, 1976.

2.Chiang, A.C., *Fundamental Methods of Mathematical Economics*, McGraw Hill, Kogakusha, New Delhi, 1974.

3.Yamane, T., *Mathematics for Economists*, Prentice Halls, New Delhi, Indian Reprint, 1986.

4.Baumol, W.J., *Economic Theory and Operations Analysis*, Prentice Hall, Indian Reprint 1986.

5.Hadley, G, *Linear Algebra*, Addison-Weley Publishers Company, Tokyo.

6.Vatssa, B.S., *Theory of Matrices*, Wily Eastern Limited, New Delhi, Reprint, 1995.

7.Mehta and Madnani, *Mathematics for Economists*, S. Chand and Sons, New Delhi, Reprint 1997.

8.Henderson, J.M. and RE. Quandt, *Microeconomic Theory*: *A Mathematical Approach*, McGraw Hill, New Delhi, 1980

9.Nagar, A.L. and R. K. Das, *Basic Statistics*, Oxford University Press, New Delhi, 1993.

10.Gupta, S. C., *Fundamentals of Applied Statistics*, S. Chand and Sons, New Delhi, 1993.

11.Goon, A M., M.K.Gupta and B.S. Dasgupta, *Fundamentals of Statistics, Vol. I and Vol.lI*, The World Press Limited, Calcutta, 1996.

12.Kapoor, J.N. and H.C. Saxena, *Mathematical Statistics*, S.Chand &'Company, New Delhi, 1992.

13.Millar, J., *Statistics for Advanced Level*, Cambridge University Press, Cambridge, 1996.

14.Hogg, RV. and A.T.Craig, *Introduction to Mathematical Statistics*, Macmillan Publishing Co., New York, 1970.

15.Gupta, S.C. and V.K. Kapoor, *Fundamentals of Applied Statistics*, S. Chand and Sons, New Delhi, 1993.

MAECO-5OI:

DEVELOPMENT ECONOMICS

UNIT I: Concept of Economic Development

Economic growth and economic development - Measurement of economic development: Problems in measures of development, human development index - Obstacles to economic development: weak Property rights, low ability to create and adopt new technology, low levels of human and physical capital-Kuznets' characteristics of modem economic growth.

UNIT II: Theories of Underdevelopment

Dualism and backward bending supply curve - Vicious circle of poverty - Nelson's low level equilibrium trap - Leibenstein's critical minimum effort - Paul Baran's theory of underdevelopment - Myrdal's theory of cumulative causation.

UNIT III: Classical, Schumpeterian and Marxian Theories of Growth

Theories of Adam Smith, Ricardo, Multhus and their critical evaluation - Schumpeter's theory -Marx and theory of reproduction.

UNIT IV: Neo-classical and Cambridge Models of Economic Growth

Harrod and Damar models and unstable growth - Neo-classical model of Solow - Cambridge model (Joan Robinson only).

UNIT - **V: Technical Change**

Hicksian and Harrodian versions of neutral technical progress - Labour and capital augmenting technical progress (Harrod and Solow versions only) - Disembodied and embodied technical progress. An overview of endogenous growth theory - growth under vintage capital model.

UNIT VI: Approaches to Economic Development

Traditional approach to development: Balanced vs. unbalanced growth - Rosenstein Rodan's theory of big push - Nurkse's model- Hirschman's theory - Ranis-Fei model.

Unit - VII: Human Capital and Social Capital

Process of human capital formation, human capital and unemployment. Community approach to development: State, market and community - Market and prisoner's dilemma- Community, social capital and development - Critical evaluation of the social capital approach to development.

Unit - VIII: Allocation of Resources,

Need for investment criteria in developing countries - Alternative investment criteria: Rate of turnover criterion, social marginal productivity criterion, marginal per capita reinvestment criterion and time series criterion - Cost-benefit analysis of projects: Little-Mirrlees.

UNIT IX: Development Planning

Rationale for planning in a developing economy - Input-output model, closed and open - Samuelson's substitution theorem, Hawkins-Simons condition; sectoral projections in planning - Plan models in India: Mahalanobis model - and the Fifth Plan Model - Plan in a market oriented economy.

UNIT X: Trade and Political Economy of Development

Import substitution and export-led growth - Krueger's model of rent seeking society - Institutions and development: Contribution of Stephen Knack and Philip Keefer - foreign direct and institutional investments and economic development - foreign aid and economic development.

Recommended Readings:

1.Sen, A. (Ed), *Growth Economics, Penguine*, Harmondsworth, 1990.

2.Adelfllfln$_1$ J., *Theories of Economic Growth and Development*, Stanford University Press, 1961.

3.Domar, E.D., *Essays in Theory of Economic Growth*, Oxford University Press, New York.

*4.*Arrow, K. J., *The Economic Implications of Learning by Doing, Review of*

Economic Studies, Vo1.29, pp.155-73.

5.Kaldor, N., *Essays on Economic Stability and Growth*, Duckworth, London, 1980.

6.Solow, R. M., *Growth Theory: An Exposition*, Oxford University Press, 2000.

7.Allen, R.G.D., *Macroeconomic Theory.*

8.Meier, G, *Leading Issues in Economic Development*, Oxford University Press, New Delhi, 1990.

9.Higgins, B., *Economic Development*, W.W. Norton, New York, 1959.

10.Baran, Paul, *Political Economy of Growth*, Monthly Review Press, New York, 1967.

11.Todaro, M.P., *Economic Development*, Longman, London, 1996.

12.Myrdal, G., *Economic Theory and Underdeveloped Regions*, Duckworth, London, 1957.

13.Roy, D., *Development Economics,* Oxford University Press;

14.UNDP, *Human Development Reports*, Oxford University Press.

15.Thirwal, A.P., *Growth and Development*, Macmillan, London, 1999.

16.Hayami, Yujiro, *Development Economics*, Oxford University Press, 2001

MAECO-502:

INTERNATIONAL ECONOMICS

UNIT I: Comparative Cost and Opportunity Cost Models

Review of theory of comparative advantage - Ricardo model, modified Ricardian model, Haberler's opportunity cost theory - Production possibility curves, Trade under increasing, decreasing and constant cost conditions.

UNIT-II: Trade, Factor Endowments and Factor Price

Heckscher-Ohlin theory - Its proof; - Leontief Paradox and its critical evaluation (Mead's view) Stolper - Samuelson theorem - factor price equalization theorem, Samuelson's proof, Hicksian proof, criticisms of the theorem. Trade under imperfect competition.

UNIT III: Terms of Trade

Net barter, gross barter, income terms of trade, single and double factoral terms of trade, real cost and utility terms of trade; offer curves, its elasticity and terms of trade.

UNIT IV: Tariff

Arguments of tariff, - Impact of tariff: Partial and general equilibrium analysis - Game theoretic approach to tariff - Tariff and income distribution.

UNIT - V: Trade and Economic Growth

Growth in factor endowments and international trade, Rybczynski theorem - Bhagwati's views on immiserising growth - Technical change and international trade: Neutral, capital saving and labour saving technical progress and their impact on terms of trade.

UNIT VI: Balance of Payments

Components of balance of payments - Relative importance of current account and capital account - Balance of payments adjustment: Absorption and Monetary approaches

UNIT - VII: Foreign Exchange Market

Fixed and floating exchange rates: their advantages and disadvantages; Foreign exchange market - Exchange rate determination: Purchasing power parity theory - Interest parity theorem, interest arbitrage, hedging, premium and discount.

UNIT VIII: Theory of Regional Blocks

Theory of regional blocks: Stages of Regional integration - preferential trading, free trade area, Trade diversion and Trade Creation, Customs Union and Common Market.

UNIT IX: International Trade and Monetary Order

Trade and Gold standard, Collapse of the Gold Standard in the inter-war period; Bretton - Woods System, IMF and World Bank, fixed exchange rate and its working, collapse of the Bretton- Woods System, and emergence of the floating exchange rate system; Multilateralism - GATT and WTO regime.

UNIT X: Problems of Policy in an open economy

Tinbergen on Targets and Instruments; internal and external balance, Swan diagram, flexible exchange rate and problems in maintenance of monetary and fiscal policies, and maintenance of current and capital accounts balance.

Recommended Readings:

1.Mannur, H.G, *International Economics*, Vikash Publishing House,.1983.

2.Kindleberger, C.P. *International Economics*, R.D. Irwin, Homewood, 1991.

3.Soderston, Bo, *International Economics*, The Macmillan Press Ltd., London, 1991

4.Salvator, D, *International Economics*, Prentice Hall, Upper Saddle River, N.J. New York, 1997.

5.Bhagwati, J. (Ed.), *International Trade: Selected Readings*, Cambridge University Press, Massachusetts, 1981

6.Viner, Jacob, *Studies in the Theory of International Trade*, Harper and Row, New York

7.Grable, J.O., *International Financial Markets*, Prentice Hall, New York, 1996.

8.Meade, LE, *Theory of International Economic Policy*, Oxford University Press, London, 1968.

9.Meier, G.M., *The International Economics of Development*, Harper and Row, New York, 1968.

10.Cherunilam, Francis*, International Economics*, Tata McGraw-Hill Publishing Company Limited, New Delhi, 1999.

11.   Pilbeam, Keith, *International Finance, Macmillan*, London, 1997.

MAECO-503:

INDIAN AND NORTH EAST ECONOMY

UNIT I: National Income, Employment and Price Behaviour

National income - Trends in growth and structure, performance of different sectors. Employment and unemployment: Recent trends and estimates - Changing structure and emerging issues - Labour market reforms - Inflation: recent trends in prices in India and its causes, price stability.

UNIT II: Agriculture

Agricultural performance: Growth and productivity - Economic reforms and their impact on agriculture - Agricultural policy - Institutional reforms.

UNIT III: Industry

Evolution of Indian industries: An overview - Evaluation of industrial policies of 1948 and 1956 - PSUs: Performance and shortcomings - PSUs and disinvestment debate - Economic reforms and industry.

UNIT IV: Infrastructure

Physical infrastructure: Power, transport and communication - Financial infrastructure: Bank - Social infrastructure: Education and healthcare - Institutional infrastructure: Market - Financing infrastructure: Problems and policies.

UNIT V: Public Finance and Economic Reforms

Trends in revenue and expenditure of central and state governments - Public debt - Characteristics of tax reforms in India - Deficit financing and price behaviour in India: Consequences and policy suggestions.

Rationale for economic reforms- Main components of structural reforms - Evaluation of structural reforms - Impact of WTO on Indian economy - Foreign capital and MNCs in India.

UNIT VI: Structure of North East Economy

North East economy: An overview - Basic Features of North East economy - Relative performance of the North East economy in the country.

Economic performance of the region - Level and growth of NSDP and Per Capita NSDP - Changing sectoral composition of state income and sectoral contribution to the growth of income with respect to Arunachal economy.

Natural Resource Base - Land, mineral; water and forests - Status of human development in N.E. India.

UNIT VII: Population in North East India

Population: Trends and features, causes for its rapid growth, population growth and economic development.

Urbanization: Trends and features, causes for rapid growth and consequences. Work force structure and its changes, participation of female labour force, unemployment situation in North East India.

UNIT VIII: Agriculture in North East India

Agricultural practices in the region - Permanent cultivation, shifting cultivation and its effects - Jhum cultivation and the problem of induction of new technology

Land tenure and problems of agricultural credit - Land use pattern and cropping pattern in North East India - Need for land reforms with special reference to Arunachal Pradesh- Agricultural productivity - Causes of low productivity

UNIT IX: Development of Secondary and Tertiary Sectors in North East

Status of industry: Cottage and small scale-agro-based industries, medium and large scale industries - Factors inhibiting the growth of industries - Infrastructure development: Power, transport, communication, market and banking: NEDFi, SIDBI, IDBI.

UNIT X: The Policy Framework

State of public finance and fiscal issues in North Eastern economy with special reference to Arunachal Pradesh. Five year plans of the states (with special emphasis on the state of Arunachal Pradesh). Problems and prospects of North East economy in the background of economic liberalization of India - Opening of NE economy and 'Look East' policy of the government of India.

Recommended Readings:

l.Bardhan, P., *The Political Economy of Development in India*, Oxford University Press, New Delhi, 1999.

2.Jalan, B., *The Indian Economy-Problems and Prospects*, Viking, New Delhi, 1992.

3.Ahluwalia, I.J. and I. M. D. Little (eds.), *India's Economic Reforms and Development* (Essays in Honour of Manmohan Singh), Oxford University Press, New Delhi, 1999.'

4.Kapila, Uma (Ed.), *India's Economic Reforms*, Academic Foundation, New Delhi.

5.Government of India, *Economic Survey* (Annual), Ministry of Finance, New Delhi.

6.Parikh, K.S., *India Development Report - 1999-2000 and 2001-02*, Oxford University Press, New Delhi.

7.Byres, T. J. (Ed.), *The Indian Economy: Major Debates Since Independence,* Oxford University Press, New Delhi, 1998.

8.Dreze, J and A. Sen, *India: Economic Development and Social Opportunities,* Oxford University Press.

9.Dutt and Sundaram, (Latest edition*) Indian Economy*, S. Chand and Company, New Delhi.

10.Mundle, S., *Public Finance: Policy Issues for India*, Oxford University Press, New Delhi, 1999.

11.NEDfi Data Bank, *Quarterly Journal of Northeastern States,* Different Years.

12.Alam, K (Ed), *Agricultural Development in Northeast India*, Deep and Deep Publications, New Delhi, 1993.

13.Banerjee, Amalesh and Biman Kar (Ed), *Economic Planning and Development of North-eastern States*, Kanishka Publishers and Distributors, New Delhi, 1999.

14.Behera, M.C. and N.C. Roy (Eds), *Trends in Agrarian Structure in the Hills of Northeast India*, Commonwealth Publishers, New Delhi, 1997.

15.Das, Gurudas, *Tribes of Arunachal Pradesh in Transition*, Vikash Publishing House, New Delhi, 1995.

16.Ganguly, J.B., (Ed), *Urbanization and Development in Northeast India*, Deep and Deep Publications, New Delhi, 1995.

17. Majumdar, D.N (Ed.) *Shifting Cultivation in Northeast India*, Omsons Publications, New Delhi, 1990.

18. Mitra, A., *Internal Migration and Economic Development in the Hills*, Omsons Publications, New Delhi, 1997.

19. Yogi, A.K., *Development of the Northeast Region- Problems and Prospects*, Spectrum Publications, New Delhi.

20. Behera, M.C. (Ed), *Agricultural Modernization in Eastern Himalayas*, Commonwealth Publishers, New Delhi, 1998.

21. Planning Commission, *Government of India, National Human Development Report, 2001.*

22. Government of Arunachal Pradesh (2006) *Arunachal Pradesh Human Development Report 2005,* Itanagar.

23. Planning Commission (2009) *Arunachal Pradesh Development Report 2008,* Planning Commission, Government of India, Academic Foundation, New Delhi.

24. Baruah, Alokesh (Ed), *India's' North-East Developmental Issues in a Historical Perspective,* Manohar Publishers, New Delhi, 2005.

MAECO-504:
ENVIRONMENT, POPULATION AND AGRICULTURE

UNIT I: The Economy and the Environment

Components of environment - Interlinkages between the economy and the environment - Environmental economics vs. natural resource economics; Common Property Resources - Open Access, tragedy of Commons - Environmental degradation as market failure - Externality - Coase theorem, market efficiency through negotiations, critical evaluation.

UNIT II: Environmental Valuation

Use values and non-use values - Direct methods of valuation: Contingent valuation method - Indirect methods of valuation: Hedonic pricing and travel cost method.

UNIT III: Environment and Development

Environment-development trade-off - Population, poverty and environment - Environmental Kuznets curve - Trade and environment - Concept and indicators of sustainable development - Rules to sustainability - Concept of Green Accounting.

UNIT IV: Population Growth and Fertility

Trends of population growth since the beginning of 20th century - Basic measures of demography - Rates and ratios - Data sources: Census, surveys and vital statistics. Measures of fertility - CBR, GFR, TFR, cumulative fertility rate, child women ratio, gross and net reproduction rate.

Easterlin's and Becker's theories of fertility and their critical evaluation.

UNIT V: Mortality

Basic measures - CDR, age specific death rate - Early neonatal, neonatal and infant mortality rate - Life table, complete and abridged life table and their construction - Trends of mortality in developed and developing countries - Determinants of mortality.

UNIT VI: Introduction to Agricultural Economics

Nature of Agricultural economics - Interdependence and complementarities between agriculture and industry - Agriculture, poverty and environment - Fanning Systems - Farm size and practices - Farm efficiency measure - Resource management in agriculture.

UNIT VII: Issues in Farm Management

Nature of agricultural production function: Cobb-Douglas, Spillmans - Risk and uncertainty in agricultural production and prices - Decision theory - Cobweb theorem - Nerlove's model - Agricultural marketing - Marketed and marketable

surplus - Mathur-Eizkel hypothesis - Farm size and productivity - Pricing policy (including support price).

UNIT VIII: Theories of Agricultural Development

Problems of labour surplus economy - Lewis' and Jorgenson's models - Theories of agricultural development: Schultz, Mellor and Boserup - Farm household models: Chayanov, Barnum-Squire and Low's models.

UNIT IX: Institutions and Agriculture

Land tenure system - Types of tenancy - Tenant-landowner model: Marshall and Cheung models - Rural credit market: Lenders' risk hypothesis, monopolistic credit market - Characteristics of semi-feudalism - Stagnation under semi-feudalism (Bhaduri's model), criticism of Bhaduri's model.

UNIT X: Issues in Agricultural Development in India

Agricultural system in India - Problems of diffusion of new technology - Limited spread of green revolution - Mode of production debate in India: Rudra, Patnaik and Chattopadhya's views only - Intersectoral terms of trade - Food security - The state and agriculture - WTO and Indian agriculture.

Recommended Readings:

1.   Heady, E.O., *Economies of Agricultural Production and Resource Use*, Prentice Hall.

2.Ellis, Frank, *Peasant Economics*: *Farm Household and Agrarian Development*, Cambridge University Press.

3.Foster, G.W. and M.C. Leoger, *Elements of Agricultural Economics*, Prentice Hall.

4.Bardhan, P .K., *Interlocking Factor Markets and Agrarian Development: A Review of Issues*, Oxford Economic Paper, Vol- 32, No., 1980.

5.Bardhan, P.K., Land, *Labour and Rural Poverty,* Oxford University Press, 1984.

6.Basu, K., *The Less Developed Economy: A Critique of Contemporary Theory,* Oxford University Press, 1984.

7.Basu, K., *Analytical Less Developed Economy*, Oxford University Press.

8.Hanley N, J.F. Shogern and Ben White, *Environmental Economics in Theory and Practice*, Macmillan, 1997.

9.Kolstad, C.D., *Environmental Economics,* Oxford University Press, New Delhi, 1999.

10.Sankar,U. (Ed), *Environmental Economics,* Oxford University Press, New Delhi, 2001.

11.Dasgupta, Partha, *The Control of Resources,* Oxford University Press, New Delhi, 1982.

12.Chopra, K., G.K. Kadekodi and K.N. Murty*, Participatory Development: An Approach to the Management of Common Property Resources*, SAGE, New Delhi, 1990.

13.Dasgupta, P.S. and G.M: *Heal, Economic Theory and Exhaustible Resources*, Cambridge University Press, Cambridge, 1985.

14.Bhattacharya, R.N. (Ed), *Environmental Economics - An Indian Perspective*, Oxford University Press, New Delhi, 2001.

15.   Shryock, H., *The Methods and Materials of Demography*.

16.Bogue, D J., *Principles of Demography*

17.Goon, Gupta & Dasgupta, *Fundamental Statistics* (Vol-II)

18.Kapoor, V K, *Fundamental of Applied Statistics*.

19.Saxena, P. C. and Talwar P. P. (Eds.), *Recent Advances in the Techniques of Demographic Analysis,* Himalayan Publishers, Bombay, 1988.

20.Coale, A. J. and E. M. Hoover, *Population Growth and Economic Development in Low Income Countries*, Oxford University Press.

21.Agarwala, S. N., *India's Population Problems*, Tata - Mcgraw Hill, New Delhi.

22.Srinivasan, K., *Basic Demographic Techniques and Applications*, Sage Publications, New Delhi, 1992.

23.Bhende and Kanitkar, *Principles of Population Studies*, Himalaya Publishing House, Delhi, 2003.