M.A. ECONOMICS (COURSES)

First semester
Course-I Microeconomics
Course-II International Economics
Course-III Elementary Mathematical Economics

Second semester
Course-IV Macro Economics
Course-V Money and Banking
Course-VI Basic Statistics

Third semester
Course-VII Economics of Development and Planning
Course-VIII History of Economic Thought
Course-IX Any one from the following optional courses

i) Agricultural Economics
ii) Regional Economics
iii) Economics of Population
iv) Basic Econometrics

Fourth semester
Course-X Indian Economy
Course-XI Public Finance
Course-XII Any one from the following optional courses

i) Labour Economics
ii) Industrial Economics
iii) Environmental Economics
Course-I MICRON ECONOMIC

Unit I

Role and significance of assumption in economic models, Empirical testing of economic models. Theory of Demand: Utility analysis of demand; Indifference curves theory; Income and substitution effects: The Slutsky theorem; Compensated demand curves; The revealed preference theory.

Unit-II

Theory of Production: Stages of production function; Returns to factor proportions; Return to scale; Elasticity of substitution; Technical progress and production function; Cost and Revenue Analysis (traditional and modern theories of cost). Equilibrium of the firm-marginal analysis: Optimum factor combination and product combination.

Unit-III

Market Structures and Pricing Process: Equilibrium of firm and industry under perfect competition; Monopoly; bilateral monopoly; and Monopolistic competition; Excess capacity and imperfect competition: Pricing and output behaviour under oligopoly: Collusive and non-collusive models: Extensions of the oligopoly: models: Models of Bamuol, Marris and williamson.

Unit-IV


Unit-V

SUGGESTED READINGS


Unit-II


Unit-III


Unit-IV


Unit-V

Unit-I

Need for a separate theory of international trade. Theories of international trade classical, Neo-classical, Heckscher-Ohlin and Factor price equalization theories. Empirical verification of Classical and Heckscher-Ohlin theories, Factors reversal and Leontief paradox. Emmanuel’s theory of unequal exchange.

Unit-II

Impact of dynamic factors on international trade changes in tastes, technology, factor endowments. Rybeznki theorem and transportation costs. Derivation of offer curves-Marshal-Edgeworth, Mill and Meade. Terms of trade and measurement of gains from trade. Secular deterioration in the terms of trade of developing countries. Aid versus trade controversy.

Unit-III


Unit-IV


Unit-V

Capital requirements of developing countries. Development of International Monetary system since the 1970s and its reform, International reserves and problems of liquidity, IMF and the SDRs. Short-term International finance-its nature and magnitude; its merits and demerits for the developing countries.
SUGGESTED READINGS

Unit - I


Unit - II


Unit - III


Unit-IV


Unit-V.

ELEMENTARY MATHEMATICAL ECONOMICS

Maximum Marks:100

Unit-I  SETS, CONTINUITY AND DIFFERENTIATION


Unit II  DIFFERENTIAL AND DIFFERENCE EQUATIONS

Introduction, non-linear and linear differential equations of the first order and first degree. Solutions of differential equations when variables are separable, homogenous equations and non-homogenous equations, exact differential equations and linear equations. Solution of linear differential equations of second with constant coefficient.

Finite difference, difference equations. Solutions of homogeneous linear difference equation with constant coefficients, linear first-order difference equations, Linear second order difference equations with constant coefficients.

Application of differential and difference equations in economic models (dynamics of market price, Solow growth model, cob-web model, multiplier-accelerator interaction model, Domar growth model).

Unit III  ANALYTIC GEOMETRY

Introduction of a Straight Line, section formula, the gradient of a straight line, the equation of a straight line in intercept form, two-point form. Circle : The general equation of a circle, Parabola: equation of a parabola, the points of intersection of line and a parabola. Equation of a rectangular hyperbola. Problems based on applications of analytic geometry in economics.

Integration of function of one variable by parts and substitution. Integration of logarithmic and exponential functions. Definite integral and area between two curves. Simple applications of integration to the relationship between marginal functions and total functions, Consumer's surplus and producer's surplus. Investment and capital formation and the present value of a continuous flow.
THE INPUT-OUT-PUT MODEL

Its assumptions, technological coefficient matrix, closed and open input–output model, the Hawkins-Simon conditions. Solving the input-output models both open and closed using the inverse matrix.

An Introduction to Linear Programming

Linear equations, slack variables. Feasible and basic solutions. Degeneracy. Solving the primal and Dual with simplex method. Interpretation of the linear programming results.

SUGGESTED READINGS

- Dorfman, R., Linear Programming and Economic Analysis, McGraw Hill
- Burmeister, E., and R Dobell, Mathematical Theories of Economic Growth.
Unit-I

Micro Foundations of Macro Economics. The basic classical model of income and employment determination. The basic Keynesian model; equilibrium in product and money markets. Multiplier process and the different concepts of multiplier; balanced budget theorem. Macro Economic Theories of Consumption: Keynesian theory; Relative income, Permanent income, and Life cycle income hypotheses. Pigou effect and real balance effect on consumption demand.

Unit-II


Unit-III

The supply of Money and Definitions of Money Supply: Inside and outside money, the neutrality of money Equilibrium in money market. The classical and Keynesian dichotomies and their resolution by Patinkin’s real balance effect and through IS-LM model respectively. Keynesian and post-Keynesian theories of rate of interest.

Unit-IV

Growth Models: Harrod-Domar model; Neo-classical model; Golden rule of accumulation; Optimal growth turnpikes. Theories of Trade Cycles: Multiplier-Accelerator interaction model, Kaldor and Hicks models. Determination of General Price Level; Classical and Keynesian approaches. Theories of Inflation: Demand pull and cost-push inflation; short and long-run Phillips curve analysis; The Keynesian, the monetarist and the rational expectationists analysis.

Unit-V

SUGGESTED READINGS

Unit-I

Unit-II

Unit-III


Unit-IV


Unit-V

Unit I

Basic Concepts: Different approaches to the definition of money; Types, role and functions of money inside money and outside money; Measures of Money supply. Traditional quantity theory of money Fisher’s equation of exchange; Cambridge cash balance approach; Keynes reformulation of quantity theory of money; Modern quantity theory; Friedman’s approach.

Unit II

Theory of Commercial and Central Banking: Money markets and capital markets; commercial banks. Theories of commercial banking; Process of credit creation; Non-bank financial intermediaries (NBFI’s); Objectives and role of central banks in economic development; The currency and credit schools; Quantitative and qualitative methods of credit-controls.

Unit III

The Theories of Demand and Supply of Money: Theories of demand for money; Classical Keynesian and Monetarist. Theories of money supply; The Hô Theory of money Supply; Money multiplier process and its determinants; Commercial banks and the money multiplier; Factors affecting HôRBI analysis of money supply; Control of the money stock; Money stock and interest rates; monetary equilibrium: money in equilibrium and Non-equilibrium states; Neutrality of money.

Unit IV

Principles of Monetary Policy: Monetary Policy: Its meaning, objectives, frame work, targets and indicators of monetary policy; Transmission mechanism of monetary Policy; Restrictive Vs. accommodating monetary policy; Need and effectiveness of monetary policy; Lags in monetary policy; Role of monetary policy in developing countries; Monetary and credit planning; Monetarist and keynesian views on monetary policy.

Unit V

Indian Money Market and International Financial Institutions: India and NBARD. Reserve Bank of India (RBI); Its working, functions, performance and role in the economic development of India; RBI’s monetary policy; International Financial
Institutions
IMF, IBRD (World Bank), Asian Development Bank (ADB).
International Development Association (IDA).

Note: the examination in this course shall be of three hours duration. Ten questions in all, with two questions from each unit, shall be set in the examination. The examinees shall be required to attempt five questions in all selecting one question from each unit.

SUGGESTED READINGS

Unit I

Unit II

Unit III

Unit IV

Unit V
Unit: I

Measure of Central Tendency, Dispersion, Skewness and Kurtosis; Correlation; Meaning and methods of measuring correlation, Karl Pearson's method, Spearman's Rank Correlation coefficient, Limitations of Correlation analysis. Linear Regression; relation between correlation coefficient and regression coefficients, Fitting of regression equations, Standard error of estimates.

Unit: II

The General Linear Regression Model

An Introduction to the matrix formulation and solution of the general linear regression Model. Solution for a model with one dependent and two independent variables. Prediction for simple regression models of demand, supply, production and cost. Multiple and partial correlations and regressions. Relationship between the measures of multiple correlation and measures of partial correlation, Beta coefficients.

Unit III

Elements of Probability Theory

The Concept of Probability Distribution and a Density function. Mathematical expectation, Binomial distribution, the Normal distribution, Some properties of the normal distribution. Sampling and sample designs: simple random sampling, stratified random sampling, systematic sampling and cluster sampling. Large samples. Tests of significance. Limitation of sampling; procedure of testing hypothesis: Region of acceptance and rejection, two tailed and one tailed tests, Type I and Type II errors. Non Parametric Tests: The sign test, rank sum test, the Mann-Whitney U test, advantages and limitations of non parametric tests.

Unit IV

Tests of Significance

Standard error of the mean, Student's $t$ distribution and its properties, Use of the $t$ distribution to test hypothesis of the population means. Chi Square: general features of Chi Square ($\chi^2$), chi square as a test of goodness of fit, chi square as a test of independence. Contingency table and Yate's correction for continuity, testing homogeneity of several independent estimates of population variance. Analysis of variance; meaning, assumptions and techniques of analysis of variance, one way and two way analysis of variance problem. Inter relationship between $t$, Chi square and $F$ tests.

Unit V

Analysis of Time Series

Meaning and components of time series, Methods of estimating trend $T$ the semi average method, the moving average method and the least squares method. Fitting of straight line, second and third degree equations. Fitting of the modified exponential curve, Gompertz curve and the logistic curve. Measurement of Seasonal, Cyclical and irregular variations.

Index numbers: Meaning, problems in construction of index numbers. Classification of index numbers, unweighted price index numbers, relative of aggregate method and average of price relatives, Weighted price index numbers: Laspeyre's, Paasche's and Fisher's ideal index numbers. Time reversal test and factor reversal test and chain based index numbers. Uses and limitations of index numbers.
All proofs to be avoided. Questions should be application oriented.

SUGGESTED READINGS

Economics of Development and Planning

Unit I


Unit II


Unit III

Planning and the market mechanism State intervention vs. liberalization, and privatization debate. The core areas of State intervention under liberalization. Process of plan formulation. Investment criteria for plan projects, cost-benefit analysis. Determination of size, growth rate and priorities in planning. Use of input-output and linear programming techniques in planning.

Unit IV

Models in economic planning: policy models, projection models and development planning models. Models underlying various Indian Plans: Harrod-Domar model; Mahalanobis model, and the model underlying current Five Years Plan. Resource mobilization for planning: Domestic resources; mobilization of resources through fiscal measures and monetary regulation. Savings and inflationary finance. External resources-Dual gap analysis and foreign borrowings. Foreign borrowings Vs. foreign direct investment.

Unit V

India’s Five Year Plans: Objectives, strategies, achievements and constraints. Decentralized planning and people’s participation. Saving-investment rates-trends and problems. The policy debate in the post liberalization period debate-general down
Note: The examination in this course shall be of three hours duration. Ten questions in all, with two questions from each unit, shall be set in the examination. The examinees shall be required to attempt five questions in all selecting one question from each unit.

SUGGESTED READINGS

Unit I

Unit II

Unit III


Unit IV


Unit V


Unit I


Unit II

The Classical Period: Economic Thought of Adam Smith, David Ricardo, and J. S. Mill with special reference to their views on value, distribution international trade and economic development; Malthus theory of population; Say's law of market. Ricardo Malthus controversy on Say's law of market.

Unit III


Unit IV


Unit V


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Note: The examination in this course shall be of three hours duration. Ten questions in all, with two, questions from each unit, shall be set in the examination. The examinees shall be required to attempt five questions in all selecting one question from each unit.
SUGGESTED READINGS


Course- IX (Optional)
Option i) Agricultural Economics

Maximum Marks: 100

Unit-II


Unit-III

Models of agricultural development (Lewis, Fei-Ranis, Jorgenson, Mellor, Schultz, and Boserup. Modals). Technological change and new agricultural strategy (green revolution) in India. Agro-climatic zonal planning in India.

Unit-IV


Unit-V


SUGGESTED READINGS
Unit-I


Unit-II


Unit-III

Unit-IV

Unit-V
· Reserve Bank of India. All India Debt and Investment Survey, 1981-82, Bombay.

Course-IX
Option (ii) Regional Economics

Unit-II


Unit-III


Unit-IV

Techniques of Regional Analysis: Location Quotient (1Q) Localisation curve. Shift and share analysis. Specialisation Quotient. Basic and non basic sectors.

Regional flows: migration and mobility of labour, mobility of capital. Inter-regional savings and capital growth, commodity and service flows. Input-output analysis in regional economies applied to single region economy and inter regional flows. Linear programming models as applied to regional problems. Regional multiplier.

Unit-V


SUGGESTED READINGS

Maximum Marks:100
• Walter Isard. Location and Space Economy. 
• J.S. Haussen. Optimal Patterns of Location. 

Option ū iii) ECONOMICS OF POPULATION

Maximum Marks: 100
Unit I

Early theories of population (Malthus, Ricardo, Marx, J. M. Keynes and others). Effect of pre-industrial technological and institutional changes on population. Demographic transition. The concept of optimum population.

Unit II

Economic Determinants of Fertility: New household economics (Leibenstein theory and Gary Becker’s theory). Alternative economic approaches to fertility theory (Easterlin’s and Caldwell’s theory).

Unit III


Unit IV

Economic determinants of migration (Revenstein’s, Lee’s and Todaro’s model). Economic consequences of population growth (General views of Malthus, Marx, Simon Kuznets). Economic consequences of population growth (Dual sector models of Lewis, Renis Fei and Jorganson’s)

Unit V

Effects of population growth of savings and investment, population growth and labour supply, population growth and distribution of income. Effects of population growth on educational and human capital input facilities. Economic consequences of slowing population growth and population decline. Policy issues related to population and economic growth.

Note: The examination in this course shall be of three hours duration. Ten questions in all, with two questions from each unit, shall be set in the examination. The examinees shall be required to attempt five questions in all, selecting one question from each unit.

SUGGESTED READINGs
• Thomas P. Espenshade, the value and Cost of Children, Population Bulletin, Vol. 32, No. 1, 1977, pp. 3-32 only.
• Everett S. Lee, A Theory of Migration, Demography, February 1996.
• Books
  • Registrar General of India. Census of India, Government of India, New Delhi.


Unit I  The Simple Linear Regression Model


Unit III Violations of Assumptions of Linear Regression Model:


Unit IV Dummy and Lagged Variables:

Analysis with dummy variables as explanatory variables. Lagged variables and distributed lag models; The Koyck model, the adaptive expectation model, the partial adjustment model and the Almon scheme of polynomial lag. The method of instrumental variables. The method of maximum likelihood as applied to regression. The Cramer-Rao lower bound. Regression on dummy dependent variables. The linear probability and the Log it models.

Unit V Identification and Simultaneous Equation Models:

Least Squares model. Two stage least squares (2SLS) and the method of Instrumental Variables.

Note:
1. The examination in this course shall be of three-house duration. Ten questions in all, with two questions from each unit shall be set in the examination. The examinees shall be required to attempt five questions in all selecting one question from each unit.

2. Students shall be allowed the use of calculators, with six simple functions.

3. In numerical problems where statistical tables are required the examiner is requested to provide a choice of 3 or 4 values of which the student chooses the relevant statistical value to be used.

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SUGGESTED READINGS

Maximum Marks : 100

Unit ĭ I


Unit ĭ II

Growth of Agricultural and Industrial Sectors :


Unit ĭ III

Money Supply, Inflation and Public Policies :


Unit ĭ IV

International Trade Policies :

Composition and directions of India’s foreign trade. Factors determining the balance of payment. Disequilibrium in the balance of payment. Causes, consequences and policy measure. India’s policies towards foreign capital; collaboration, export promotion and import substitution. Exchange rate policy and the convertibility of Rupee.

Unit ĭ V

Development Policies :

India’s planned development; Successes and failures. Policies for social justice (with special reference to the alleviation of poverty, inequality and unemployment). Sectoral policies : Industrial and agrarian. Policies for liberalization and privatization.
The examination in this course shall be of three hours duration. Ten questions in all, with two questions from each unit, shall be set in the examination. The examinees shall be required to attempt five questions in all, selecting one question from each unit.

SUGGESTED READINGS

Unit I
- Dandekar, V. M. & N. Rath. Poverty in India; Indian School of Political Economy, Bombay.

Unit II

Unit III

Unit IV

Unit V


Unit I

Principles of public Finance:


Unit II

Principles of Taxation:

Meaning and type of taxes; requirements of a good tax structure. Approaches to taxation : micro analysis of direct and indirect taxes; individual income tax, corporation income tax, sales tax including value-added tax and expenditure tax. Incidence of taxes; nature of tax burden and principles of tax incidence. Theories and measures of tax incidence. Effects of taxes on work efforts, savings, investment, and growth. Trade-off between equity and efficiency. Taxable capacity.

Unit III

Economics of Public Debt and Public Expenditure:


Unit IV

Reforms in Budgeting System and Stabilization Policies:


Note: The examination in the course shall be of three hours duration. Ten questions in all, with two questions from each unit, shall be set in the examination. The examinees shall be required to attempt five questions in all selecting one question form each unit.

SUGGESTED READINGS

Unit I

Unit II

Unit III
Unit IV


Unit V

Rao, M. G. and T. Sen (1969). Fiscal Federalism in India, Macmillan, India,
Option (i) LABOUR ECONOMICS

Maximum Marks : 100

Unit I : Labour Market:

Nature and characteristics of labour markets in developing economics like India. Paradigms of labour market – classical, neo-classical and dualistic; Analysis of demand and supply forces, Demand for labour relating to choice of technology. Supply of labour in relation to growth of labour force. Labour force participation rates.

Unit II : Employment:


Unit III : Wage Determination:


Unit IV : Industrial Relations and Trade Unions:


Unit V : State and Labour in India:

Problems of rural labour. Government policy towards rural labour and women and child labour. Evaluation of recent employment policy in India.

Note: The examination in this course shall be of three hours duration. Ten questions in all, with two questions from each unit, shall be set in the examination. The examinees shall be required to attempt five questions in all, selecting one question from each unit.

SUGGESTED READINGS

Unit I

Unit II

Unit III

Unit IV

Unit V

Unit I

Theory of firm and pricing. Objectives of the firm: profit and non-profit maximizing models of the firm. Bais theory of limit pricing; Marginal cost versus full cost pricing; Allocation of costs in case of joint products; Welfare implications of monopoly pricing. Investment decision; conventional and modern approaches; risk, uncertainty and investment decision.

Unit II

Market structure, conduct and performance and interrelations among them. Industrial concentration: concepts and measurement; Extent, causes and likely effects of concentration. Analysis of diversification, Vertical integration and mergers in industry. Extent of monopoly and concentration in India; Public policy towards industrial concentration and monopoly power in India.

Unit III

Industrial location: Theories and factors affecting location; infrastructure for industrialization; Regional growth of industry in India. Tools of public policy. Indian policy for backward areas. Industrial finance in India. Role of term-leading institutions in industrial development of India. Indian capital market.

Unit IV

Issues in Indian industry: Phases of industrial growth and changes in industrial structure. India. Public sector rationale and organization; Public sector pricing policies. The question of efficiency in the context of special constraints; Overall performance of public sector in India. The concept of joint-sector in India. The problems of industrial sickness; Capacity utilization. Foreign collaborations; Multinationals in Indian joint ventures aboard. The recent liberalization trends. Large versus small scale industry debate in India.

Note: The examination in this course shall be of three hours duration. Ten questions in all, with two questions from each unit shall be set in the examination. The examinees shall be required to attempt five questions in all, selecting one question from each unit.

SUGGESTED READINGS

Unit I


Unit II

Unit III

Unit IV

Unit V
• Ahulwalia, I. J. (19850. INDUSTRIAL growth in India. Oxford University Press, Delhi.
Option (iii) ENVIRONMENTAL ECONOMICS

Maximum Marks : 100

Unit I


Environment as an important component in welfare; application of welfare economics to environmental issues such as pollution, urban congestion and the provisions of public goods, common property, externalities and the distribution of income.

Unit II


Unit III

Economic Evaluation of Environmental Resources Measuring environmental damage (Valuation Methodologies). Externalities and valuation of resources on the public lands. Measurement of benefits from the environmental resources. Irreversibility and the optimal use of natural environments (irreversibility in economic processes, irreversible Decisions and exhaustible resources, irreversible investment and project evaluation, determining the discount rate, inter-generational transfers determining the discount rate, inter-generational transfers and uncertainty). Divergence between social cost and private and uncertainty). Divergence between social cost and private cost. Cost-benefit analysis for environmental management.

Unit IV

Environmental Management Models : Environmental control under uncertainty. Economics of pollution control. Economics of renewable resource
Multi-objective optimization model for environmental decision making.

Unit V


Note: The examination in this course shall be of three hours duration. Ten questions in all, with two questions from each unit. Shall be set in the examination. The examiner shall be required to attempt five questions in all selecting one question from each unit.

SUGGESTED READINGS