SCHEME OF EXAMINATION
Master of Arts (Economics)
Two Years Program
2023-24
FIRST YEAR
First Semester

Paper Code	Nomenclature	Term End Examination (Theory)	Assignment	Total Marks	Credit	Exam Time
23ECO21C1OM	Micro Economics-I	80	20	100	5	3 Hours
23ECO21C2OM	Macro Economics-I	80	20	100	5	3 Hours
23ECO21C3OM	Economics of Growth and Development-I	80	20	100	5	3 Hours
23ECO21C4OM	Mathematics for Economists-I	80	20	100	5	3 Hours
23ECO21C5OM	Statistical Methods-I	80	20	100	5	3 Hours

Second Semester

Paper Code	Nomenclature	Term End Examination (Theory)	Assignment	Total Marks	Credit	Exam Time
23ECO22C1OM	Micro Economics-II	80	20	100	5	3 Hours
23ECO22C2OM	Macro Economics-II	80	20	100	5	3 Hours
23ECO22C3OM	Economics of Growth and Development-II	80	20	100	5	3 Hours
23ECO22C4OM	Mathematics for Economists-II	80	20	100	5	3 Hours
23ECO22C5OM	Statistical Methods-II	80	20	100	5	3 Hours
20GENF1OM	Moral Education	40	10	50	2	2 Hours
20JRMO1OM	Media & Society	80	20	100	3	3 Hours

2024-25
SECOND YEAR
Third Semester

Paper Code	Nomenclature	Term End Examination (Theory)	Assignment	Total Marks	Credit	Exam Time
24ECO23C1OM	Indian Economy-I	80	20	100	5	3 Hours
24ECO23C2OM	International Trade & Finance-I	80	20	100	5	3 Hours
24ECO23D1OM	Agriculture Economics-I	80	20	100	5	3 Hours
24ECO23D2OM	Mathematical Economics-I	80	20	100	5	3 Hours
24ECO23D5OM	Public Economics-I	80	20	100	5	3 Hours
21ENVO2OM	Disaster Management	80	20	100	3	3 Hours

Fourth Semester

Paper Code	Nomenclature	Term End Examination (Theory)	Assignment	Total Marks	Credit	Exam Time
24ECO24C1OM	Indian Economy-II	80	20	100	5	3 Hours
24ECO24C2OM	International Trade & Finance-II	80	20	100	5	3 Hours
24ECO24D1OM	Agriculture Economics-II	80	20	100	5	3 Hours
24ECO24D2OM	Mathematical Economics-II	80	20	100	5	3 Hours
24ECO24D5OM	Public Economics-II	80	20	100	5	3 Hours

CENTRE FOR DISTANCE AND ONLINE EDUCATION
MAHARSHI DAYANAND UNIVERSITY, ROHTAK

Syllabus
Master of Arts (Economics)
Two Year Programme
w.e.f. Session 2023-24

PSO1   To impart in depth knowledge to students about economic theory regarding utilization and allocation of resources including labour, natural resources and capital.

PSO 2   To develop students understanding about how market for goods and services function and how income is generated and distributed.

PSO3   To give students in depth knowledge into special fields of choice like agricultural economics, industrial economics, financial market, development economics, international trade, urban economics econometrics, mathematical economics etc.

PSO4   To make students familiar with economic theories and their relevance, econometrics, quantitative techniques and applied research in a wide variety of fields within economics.

PSO5   Students would know how the economy is influenced by economic policy, technological advances and demographic conditions

The entire course will be of four semesters.

Master of Arts (Economics)
FIRST YEAR
First Semester
Micro Economics-I
Paper Code 23ECO21C1OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

CO1. It will familiar students on creating an understanding among students on the basic reasoning of Economics.

CO2. It will make students aware about how various economic agents behave optimally given the scare economic resource and other constraints.

CO3. Students are better able to understand various economic issues and applied part of the economics.

CO4. A comprehensive knowledge of Micro Economics will empower students to explain the social reality with better arguments and optimum solutions.

Unit-I

Nature and scope of Economics and Microeconomics. Positive and normative analysis. Role of assumptions in economic analysis. Circular flow of economic activity. Concepts of household, firm, factors of production, equilibrium – partial and general, static, comparative static and dynamic analysis, margin and slope.

Elasticity – need and measures – Relationship between revenue and elasticity.

Unit-II

Analysis of consumer behaviour, demand function, law of demand – cardinal, ordinal and revealed preference approaches, income-consumption curve, Engel curve, substitute and complimentary goods. Market demand curve; consequences of Bandwagon, Snob and Veblen effect. Concept of consumer surplus.

Unit-III

Laws of Production: short run and long run. Internal and External economies and diseconomies. Concept of cost, derivation of short and long run cost curves. Optimum input combination Simple case of a multiproduct firm. Technical progress and production function – Hick's classification. Elasticity of substitution. Properties of Cobb-Douglas and CES production function.

Unit-IV

Pricing process and equilibrium of firm and industry under perfect competition, monopoly (including discriminating and bilateral monopoly), monopolistic competition. Welfare effects of price control, price support and production quota.

Note:

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit)).

Suggested Readings:

- Koutsoyiannes. A. "Modern Microeconomics" (Macmillan)
- Lipsey, R.G. and Chrysal, K. Alec "An Introduction to Positive Economics" (OUP)-
Salvatore, D. "Microeconomics Theory" (Schaum's Outline series, Tata McCraw Hill)

First Semester
Macro Economics-I
Paper Code 23ECO21C2OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes:
CO1. Students will be aboe to explain the concept of opportunity costs, trade –off and benefits of economics.
CO2. Students will learn the concept of fiscal and monetary policies and their effect on economy.
CO3. It will demonstrate knowledge of laws of supply and demand and equilibrium.
CO4. Students will be familiar about a clear picture of circular flow model.

Unit I
Determination of Output and Employment: Classical Approach – Output and Employment in Classical Theory; The Quantity Theory of Money and the Price Level; Classical Model without saving and investment; Classical Model with saving and investment;
Keynesian Approach _ Two Sector Model, Three Sector Model and Four Sector Model.

Unit-II
Determination of Output and Employment: The Extended Model (Hicks-Henson Synthesis): Fixed Price Level – The goods Market and The Money Market; Equilibrium in Goods Market and Money Market; Changes in Aggregate Demand; Govt. spending, Taxation and Aggregate Demand; The IS-LM Elasticities and Monetary Fiscal Policies.

Unit-III
The Extended Model: Variable Price Level – Deviation of Aggregate Demand Curve and Determination of equilibrium price and output levels; wage-price flexibility and the Full Employment equilibrium; Monetary – Fiscal policies and the Full-Employment Equilibrium.

Unit-IV
Behavioral Foundation: Theories of consumption – The Absolute Income Hypothesis, The Relative Income Hypothesis; The Permanent Income Theory of Consumption; The Life cycle theory of consumption; Theories of Investment – The Present Value of Criterion for investment; The Marginal Efficiency of Capital and Investment; the accelerator theory; financial Theory of investment.

Note:
(A) Nine questions would be set in all.
(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.
(C) There would be two questions (16 marks each) from each of four units.
(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))
.

Suggested Readings:
- Ackley, G (1978), *Macroeconomics: Theory and Policy*, Macmillan, New York.
- Banson, W.A. (1989), *Macroeconomic Theory and Policy, (3rd Edition),* Harper and Row, New York.
- Dorn Busch, R. and F. Stanley (1997), *Macroeconomics,* McGraw Hill, Inc. New York.

- Heijdra, B.J. and V.P. Fredericck (2001), *Foundation of Modern Macroeconomics*, Oxford University Press, New Delhi.
- Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
- Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publication, New Delhi.
- Survey, M.J.C. (Ed.) (1976), *Macroeconomic Themes*, Bo and Reed Geoffrey (1994), *International Economics*, Macmillan Press Ltd.
- Peterson, W.C. (1978), Income, Employment and Economic Growth, Norton, New York.
  - Sheffrin, Steven M. (1996), Rational Expectations, 2nd edition, Cambridge University Press.

First Semester
Economics of Growth and Development – I
Paper Code 23ECO21C3OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes:
CO1   Students would be acquainted with the various perspectives of economic growth and its relevance.
CO2   Students would become familiar with factors affecting economic growth and development.
CO3   Students would understand the conceptual bases of income measurement, physical quality of life index, poverty, inequality and development gap and role of various institutions in economic growth and development.
CO4   Students would have knowledge about the nature and classical theories of development. Students would be able to apply economic theories and concepts to contemporary social issues, as well as formulation and analysis of policy and recognize the role of ethical values in economic decisions.
CO5   Students would learn the key tools to analyze agricultural economies, with an eye towards understanding a wide array of impacts, from agricultural policies to trade and climate change and what the role agriculture and industry have in economic development.

Unit 1
Economic Growth and Development
Factors affecting Economic Growth: capital, labour and technology; Historical Perspective of Economic Growth and its relevance; Structural Diversity and common characteristics of developing nations.
Unit-II
Development and Underdevelopment
Measuring Development: Income Measures, Basic Needs Approach, PQLI and HDI and Capabilities Approach; Poverty, Inequality and Development: Measurement, Impact and Policy options; Development Gap: concepts and measurement.
Unit-III
Classical Theories of Development
Contributions of Adam Smith, Ricardo, Karl Marx and Schumpeter.
Unit-IV
Growth Models
Harrod and Domar: Instability of equilibrium; Neo Classical Growth Models: Solow and Meade; Growth Models of Joan Robinson and Kaldor.
Note:
(A) Nine questions would be set in all.
(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.
(C) There would be two questions (16 marks each) from each of four units.
(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))

Suggested Readings :
- Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.
- Barro, R. and X. Salai- Martin, Economic Growth, McGraw Hill, New York.
- Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics, Vol. 3, Elsevier, Amsterdam.
- Brown, M. (1966), On the Theory and Measurement of Technical Change, Cambridge, University Press, Cambridge, Mass.
- Chakravarti, S. (1982), Alternative Approaches to the Theory of Economic Growth, Oxford University Press, New Delhi.
- Chenery, H. and T.N. Srinivasan (Eds.) (1989), Handbook of Development Economics,Vols. 1 & 2, Elsevier, Amsterdam.
- Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.
- Gillis, M., D.H. Perkins, M. Romer and D.R. Snodgrass (1992), Economics of Development, (3rd Edition), W.W. Norton, New York.
- Higgins, B. (1959), Economic Development, W.W. Norton, New York.
- Jones, HG.(1975), An Introduction to Modern Theories of Economic Growth, Nelson, London.
- Kindleberger, C.P. (1977), Economic Development, (3rd Edition), McGraw Hill, New York.
- Meier, G.M. and J.E.Rauch (2005), Leading Issues in Economic Development, (8th Edition), Oxford University Press, New Delhi.
- Sen, A.K. (Ed.) (1990), Growth Economics, Penguin, Harmondsworth.
- Todaro, M.P. and S.C. Smith (2003), (8th Edition), Economic Development, Pearson Education, Delhi.
- Thirwal, A.P. (1999), (6th Edition), Growth and Development, Macmillan, U.K
- Meir, G.M. (1995), Leading Issues in Economic Development, Oxford University Press, New Delhi.
- Mishra S.K. and V.K. Puri, Economics of Development and Planning, Himalaya Publishing House, Mumbai.
- Todaro, M.P. Economic Development, Latest Edition, Longman, London.
- Thiwal, A.P. (2003), (6th Edition), Growth and Development, Seventh Edition, Macmillan, New York.
        - Hogendorn, J. (1996), Economic Development, Addison, Wesley, New York.

First Semester
Mathematics for Economists-I
Paper Code 23ECO21C4OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes:
CO1. Students will learn different types of functions and their applications.
CO2 Students will be familiar with the maxima and minima of functions.
CO3 it will impart knowledge about the use of lagrange multiplier methods.
CO4 Students will gain knowledge about the use of net present value and other related concepts.

Unit-I
Basics: real number system, sets and set operations, relations and functions, inverse functions; solution of linear equations in two variables, solution of quadratic equations, logarithms and exponents; exogenous and endogenous variables.

Unit-II
Fundamentals of Matrices; Determinants. Solution of a system of upto 3 equations by matrix inversion and Cramer's rule. Input-Output analysis – Static open model.

Unit-III
Differentiation – idea of limit (but not its evaluation) meaning and economic interpretations of derivative. Rules of differentiation including logarithmic and exponential functions. Unconstrained optimization – single choice variable, global and local.

Unit-IV
Calculus of multivariable functions, higher order derivatives, constrained optimization with upto 2 equality constraints

Note 1:
Purpose of the course is to learn application of mathematical tools with understanding in economics. Derivations and proofs are to be avoided.

Note 2:
(A) Nine questions would be set in all.
(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.
(C) There would be two questions (16 marks each) from each of four units.
(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit)

Suggested Readings:
- Chiang, Alpha C. "Fundamental Methods of Mathematical Economics" (Mc-Graw Hill)
- Dowling, Edward T "Mathematics for Economists" (Schaum's outline Series, Tata Mc-Graw Hill)

First Semester
Statistical Methods-I
Paper Code 23ECO21C5OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes:
CO1. Students would learn the common statistical techniques and terminologies used in the course and understand the concept of a frequency distribution for sample data, and able to summarise the distribution by diagrams and statistics.
CO2 Students would be able to apply fundamental concepts and use appropriate software tools for data summary and exploratory data analysis.
CO3 Students would gain knowledge to interpret examples of methods for summarising data sets, including common graphical tools and summary statistics.
CO4 Students would develop an understanding of the basic concepts of probability, random variables, and sampling distribution of a statistic.
CO5 Students would learn the measurement of central tendency, hypothesis testing, analysis of variance and multiple regression and correlation analysis.
CO5 Students would become familiar with the sources of vital statistics data, how to interpret such data and how to perform basic tests to evaluate them which will help students in their doctoral research.

Unit –I
Diagrammatic and graphic representation of statistical data. Measures of central tendency: A.M., G.M., H.M., Median, quartiles, deciles, percentiles, mode, relationship between A.M., G.M. and H.M., Selection of an average, Limitations of Averages.

Unit-II
Measures of dispersion: range, interquartile range, quartile deviation, mean deviation, standard deviation, standard deviation of the combined series, variance, coefficient of variation, relation between various measures of dispersion, Lorenz curve, skew ness and Kurtosis, moments

Unit-III
Index numbers: Problems and methods of construction of various types of indices, Laspeyres, Pasche's and Fisher's ideal index numbers, Time reversal, factor reversal and circular tests; chain base indices, base shifting splicing and deflating the index nos., costs of living index numbers and consumer price index numbers. Time series: components of time series and their decomposition, Methods of measuring trend, cyclical, seasonal and irregular variation.

Unit-IV
Random experiment, random variable, sample space, events, fundamental principles of counting, classical, relative frequency and axiomatic approaches to probability, basic results on probability, conditional probability, Baye's thereon.

Note:
(A) Nine questions would be set in all.
(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.
(C) There would be two questions (16 marks each) from each of four units.
(D) Candidates would be required to attend five questions (one compulsory and selecting one

from each unit))

Suggested Readings:

- Gupta S.C. "Fundamentals of Statistics" S. Chand & Sons New Delhi (1993)
- Spiegel, Murry R "Theory and problems of Statistics" (Schaum's outline series, McGraw Hill, 1992)
- Karmal P.H. and Polasek M. "Applied Statistics for Economists (4th edition), Pitman, Australia.

Second Semester
Micro Economics-II
Paper Code 23ECO22C1OM

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M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

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Course Outcomes:
CO1.   It will familiarized the students with different types of economic models..
CO2   Students will get to know the different market structure..
CO3   It will provide information to the students about the distribution of income and wealth.

Unit-I
Oligopoly: non collusive models – Cournot, Bertrand, kinked demand model; collusive models – joint profit maxmising, market sharing and leadership cartels. Critique of neo-classical theory of firm. Theory of Games – Two-person, Zero-sum game, Pure and Mixed strategy, Saddle Point Solution.

Unit-II
Alternative theories of firm: Baumol's Sales maximization model (simple, static without advertisement model) Morris and Williamson Average/full cost pricing, Bain's limit pricing model, behaviouralist model of Cyert and March.

Unit-III
Neoclassical theory of factor pricing under competitive conditions, with monopolistic power in product market, monoposonistic power in factor market, bilateral monopoly in factor market, monopoly in factor market. Product exhaustion problem. Neoclassical theory of rent, quasi-rent, interest and profit. Issues in General Equilibrium analysis.

Unit-IV
Concept of social welfare, some early criteria, Pareto optimality criterion and efficiency conditions, Bergson's social welfare function, idea of theory of second best and Arrow's impossibility theorem, compensation criterion. Market structure and welfare maximization. Market failure – case of externality and public goods; and ways of correcting it.

Note:
(A) Nine questions would be set in all.
(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.
(C) There would be two questions (16 marks each) from each of four units.
(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))

Suggested Readings :
- Koutsoyiannes. A. "Modern Microeconomics" (Macmillan)
- Lipsey, R.G. and Chrysal, K. Alec "An Introduction to Possitive Economics: (OUP)
    - Salvatore, D. "Microeconomics Theory" (Schaum's Outline series, Tata McCraw Hill)

Second Semester
Macro Economics-II
Paper Code 23ECO22C2OM

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M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs
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Course Outcomes:
CO1. It will help the students to apply supply and demand models to analyze responses of market to external events.
CO2 It will help students to describe ISLM model.
CO3 The course will illustrate the role of financial institutions in the economy.
CO4 Students will be able to explain concept of gross domestic product, inflation and unemployment.

Unit-I
The Demand for and supply of money: Classical Approach to Demand for Money – Quantity Theory Approach; ;Fisher's equilibrium; Cambridge Quantity theory; Keynes Liquidity Approach – Transaction; Precautionary and Speculative Demand for Money Aggregate Demand for Money; Friedman, Patinkin Baumol and Tobin.
Determinants of money supply, High-powered money, Money multiplies.
Unit-II
Inflation: Definition of Inflation; Economics effects of Inflation – The effect of Inflation of the distribution of Income and Wealth, The effect of Inflation on output, Employment and the Growth Rate; Demand Side and Supply Side theories of inflation.
Unit-III
Inflation and unemployment: The Phillips Curve, The Inflationary Pressure Curve: Phillips Curve, Inflationary Pressure Curve and the Rate of Inflation. The Phillipis Curve; Trade off and Non Trade Off. Adaptive Expectation and Rational Expectation Keynesianism Vs Monetarism.
Unit-IV
Trade Cycles – Models of Samuelson, Hicks and Kaldor, Economic Growth: Harrod- Domar Model; Neo-Classical Model (with money & without money). International Adjustment: The Determination of National Income in Open Economy; The International Transmission of Disturbance: Transmission under Fixed Exchange Rate; Transmission under Floating Exchange Rate (Mudel Fleming Model).
Note:
(A) Nine questions would be set in all.
(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.
(C) There would be two questions (16 marks each) from each of four units.
(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))

Suggested Readings:
- Ackley, G (1978), *Macroeconomics: Theory and Policy*, Macmillan, New York.
- Banson, W.A. (1989), *Macroeconomic Theory and Policy, (3rd Edition),* Harper and Row, New -York.
- Dorn Busch, R. and F. Stanley (1997), *Macroeconomics,* McGraw Hill, Inc. New York.

- Heijdra, B.J. and V.P. Fredericck (2001), *Foundation of Modern Macroeconomics*, Oxford - University Press, New Delhi.
- Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
- Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publication, New Delhi.
- Survey, M.J.C. (Ed.) (1976), *Macroeconomic Themes*, Bo and Reed Geoffrey (1994), - *International Economics*, Macmillan Press Ltd.
- Peterson, W.C. (1978), Income, Employment and Economic Growth, Norton, New York.
- Sheffrin, Steven M. (1996), Rational Expectations, 2nd edition, Cambridge University Press.

Second Semester
Economics of Growth & Development – II
Paper Code 23ECO22C3OM

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M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

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Course Outcomes

CO1   Impart understanding of the basic assumption and features of economic growth and development.

CO2   Provide understanding of the relevance of historical perspective of economic growth.

CO3. To impart theoretical knowledge about the concepts of poverty, inequality and development gap.

CO4. To explore diverse dimension and measures of development, as well as the application of microeconomic analysis to issues of development in poor countries, including the study of household decisions and the analysis of institutions and norms influencing development.

Unit –I

Sectoral Aspects of development; Importance of agriculture and industry in economic development. Role of institutions – government and markets.
Poverty – indicators and measurement.

Unit-II

Trade and development: trade as an engine of growth, two gap analysis, Prebisch, Singer and Myrdal views, gains from trade and LDCs; Role of foreign Direct investment (FDI) and Multi-national corporations (MNCs) in the emerging scenario.

Unit-III

Objects and role of monetary and fiscal policies in economics development; Choice of techniques and appropriate technology; Investment Criteria; Cost-benefits analysis.

Unit-IV

Techniques of planning; Plan Models in India; Planning in a market-oriented economy; Endogenous growth; role of education research and knowledge – Explanation of Cross country differentials in economic development and growth.

Note:

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit)).

Suggested Readings:

- Behrman, S. and T.N. Srivasan (1995), Handbook of Development Economics, Vol.-3, Elsevier, Amsterdam.
- Chenery, H.B. et. al. (Eds.) (1974), Redistribution with Growth, Oxford University Press, Oxford.
- Higgins, B. (1959), Economic Development, W.W. Norton, New York.

- Chatak, S. (1986), An introduction to Development Economics, Allen and Unwin, London.
- Kindleberger, C.P. (1977), Economic Development, (3rd Edition), McGraw Hill, New York.
- Todaro, M.P. (1996), (6th Edition), Economic Development, Longman, London.
- Thiwal, A.P. (1999), (6th Edition), Financing Economic Development.
- Singh S.P (ed.), From underdevelopment to Development.

Second Semester
Mathematics for Economists-II
Paper Code 23ECO22C4OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes:

CO1. The course will introduce the concepts of differentiation and integration and application in economics.

CO2 The course will impart knowledge of matrices and determinants to the students and their applications in economics.

CO3 The course will form the base for higher studies in research work.

Unit-I

Integration – meaning and economic interpretation. Indefinite and definite integration. Simple techniques including integration by substitution and integration by parts.

Unit-II

Differential equation – basic concepts, solution of first order linear differential equation. Non-linear differential equation – exact and variable separable type only. Linear differential equation of second order with constant coefficient and term.

Unit-III

Difference equation – basic concepts, solution of first and second order linear difference equation with constant term and coefficient.

Unit-IV

Linear Programming – Relevance and basic concepts, Graphic, simplex and dual solution. Economic interpretation of dual

Note 1:

Purpose of the course is to learn application of mathematical tools with understanding in economics. Derivations and proofs are to be avoided.

Note 2:

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit)

Suggested Readings:

- Chiang, Alpha C. "Fundamental Methods of Mathematical Economics" (Mc-Graw Hill)
- Dowling, Edward T "Mathematics for Economists" (Schaum's outline Series, Tata Mc-Graw Hill)

Second Semester
Statistical Methods-II
Paper Code 23ECO22C5OM

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M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

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Course Outcomes

CO1   To make the students familiar with the terminology of statistical terms: Population, Sample, Parameter, Statistic, and Descriptive Statistic.

CO2   The objective of this course is to impart knowledge of probability and standard statistical distributions to students and make them able to perform complex data management and analysis.

CO3   To provide an understanding for the students on statistical concepts to include measurements of location and dispersion, probability, probability distributions, sampling, estimation, hypothesis testing, regression, and correlation analysis, multiple regression and business/economic forecasting and to make them familiar with binomial, Poisson, normal and log-normal probability distributions.

Unit –I

Probability distribution of a random variable, concept and use of mathematical expectation, mean and variance of a distribution in terms of expectation, moments, density functions. Joint and marginal probability distributions. Binomial, Poisson and Normal distributions, properties and inter relationships. Fitting of distributors.

Unit-II

Census versus sample enumeration. Methods and types of sampling, sampling error, small and large sample, concept of an estimator and its sampling distribution; properties of a good estimator, concepts of point and internal estimation, OLS and ML estimators of regression parameters.

Unit-III

Elements of statistical Inference: Parameter and estimators; concepts of sampling distribution of a statistic, standard error, hypothesis testing, tests of significance, Type I and Type II errors, level of significance, Power of a test, z, t, chi-square and F tests.

Unit-IV

Correlation and regression: simple correlation, Pearson, spearman's correlation coefficients, multiple and partial correlation analysis, specification of a simple linear regression model, least square estimation of linear regression coefficients, interpretation of correlation and regression coefficients and their properties.

Note:

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))

Suggested Readings:

- Gupta S.C. "Fundamentals of Statistics" S. Chand & Sons New Delhi (1993)
- Spiegel, Murry R "Theory and problems of Statistics" (Schaum's outline series, McGraw Hill) (1992)
- Karmal P.H. and Polasek M. "Applied Statistics for Economists (4th edition), Pitman, Australia.

(Foundation Elective Paper)
MORAL EDUCATION
Paper Code: 20GENF1OM

Total Marks: 50
Time: 02 Hours   **External Marks: 40**
                                                                                          Internal Marks: 10
Instructions
There will be a total of five questions. Question No. 1 will be compulsory and shall contain eight to ten short answer type questions without any internal choice and it shall cover the entire syllabus. The remaining four questions will include two questions from each unit. The students will be required to attempt one question from each unit. The students will attempt three questions in all.

UNIT I
Guiding principles for life
Ethics
a. Guidelines set by society
b. Changes according time and place
Morals
c. Guidelines given by the conscience
d. Always constant

Ethics in the workplace
a. Respect for each other
b. Obedience to the organization
c. Dignity of labour
d. Excellence in action

UNIT II
Concept of Trusteeship
a. Everything belongs to society
b. Man is only a caretaker
c. Our responsibility to ensure welfare of all

Importance of service
a. Responsibility of an individual
b. Man is only a caretaker
c Our responsibility to ensure welfare of all

Master of Arts (Economics)
Second Semester
MEDIA AND SOCIETY
Paper Code 20JRM01OM

Time Allowed 3 hrs

Max. Marks 100
Theory Marks 80
Assignment 20

UNIT I
1. Media Definition
2. Relationship of Media in Society
3. Impact of Media on society – recent trends
4. Media and Social Development

UNIT II
1. Media Literacy
2. Impact of Media on children and youth
3. Media and gender issues
4. Media and Rural Society

UNIT III
1. Media and Violence
2. Media and Rising Crime
3. Media and Democracy
4. Media and development of Scientific temperament
5. Media and environmental issues

UNIT IV
1. Media Accountability.
2. Media and Economic development
3. Media and Nation Building
4. Popular culture and media

Master of Arts (Economics)
SECOND YEAR
Third Semester
Indian Economy-I
Paper Code 24ECO23C1OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes

CO1 To have knowledge about the issues in Indian Economy like planning, poverty, unemployment etc.

CO2 To know about relationship between monetary policy, fiscal policy and economic development.

CO3 To know about framework of policy making for the development of Indian economy

CO4 To know about the preparation of budgeting and its utilization for Indian economy.

Unit-I

Features of Indian economy; Nature and Characteristics of Indian economy; Planning; objectives and strategies; failures and achievements of plans.

Basic economic indicators-National income, performance of different sectors. Trends in prices and money supply.

Unit-II

Institutional structure: Land-reforms in India; Agricultural marketing and warehousing; Issues in food security - policies for sustainable agriculture; Agricultural finance policy; Agricultural price policy.

Unit-III

Malthusian theory of population, optimum theory of population, theory of demographic transition, population as 'Limits to Growth' and as 'Ultimate Source'

Concepts of Demography- Vital rates, life tables, composition and uses.

Measurement of fertility - Total fertility rate, gross and net reproduction rate - Age pyramids, population projectionnstable, stationary and quasi-stationary population; Characteristics of Indian population through recent census.

Unit-IV

Financial Sector: Monetary policy of RBI; Money and Capital markets; Growth and problem; Role of commercial banks in India; Banking sector reforms since 1991

Note:

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))

Reading List:
- Bardhan. P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University
Press, New Delhi. .
- Brahmanada, P.R. and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy:
Inter-State Perspectives, Bookwell, Delhi.
- Datta, R. and KP.M. Sundhram (2003), Indian Economy. S. Chand & Company Ltd. New Delhi.
- Government of India, Economic Survey, (AnnuaJ), Ministry of Finance, New Delhi.
- Mishra, S.K and V.K Puii Indian Economy- 151 Development Experience, Himalaya Publishing House, Mumbai, Latest Edition.
- Rudra Ashok, Indian Plan Models.
- Todaro, P. Development Planning: Models and Methods.
- United Nations, Guidelines for Project Evaluation.

Third Semester
International Trade and Finance-I
Paper Code 24ECO23C2OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes

CO1 Students would know the country's position regarding international trade, payments and foreign exchange.

CO2 The students would learn the methods regarding improvement in terms of trade, international debt and balance of payments positions.

CO3 Students would know about the policies regarding increase in exports, to deal with international institutions and to maintain relation with other countries. Since globalization and international relations can increase the rate of growth and solve domestic problems like inflation, unemployment and value of currency etc.

Unit-I

The pure theory of international trade - Theories of absolute advantage, comparative advantage and opportunity costs, modem theory of international trade; Theorem of factor price equalization; Empirical testing of the theory of absolute cost and comparative cost-Heckscher-Ohlin theory of trade. Kravis and Linder theory of trade Role of dynamic factors, i.e. change in tastes, technology and factor endowments in explaining the emergence of trade;

Unit-II

The Rybczynski theorem-concept and policy implications of immiserizing growth; Causes of emergency and measurement of intra-industry trade and its impact on developing economies. Measurement of gains from trade and their distribution; Concepts of terms of trade, their uses and limitations for less developed countries; Trade as an engine of economic growth; Welfare implications - empirical evidence and policy issues;

Unit-III

The Theory of interventions (Tariffs, Quotas and non-tariff barriers); Economic effects of tariffs and quotas on national income, output, employment, terms of trade, income distribution and Balance of payments on trading partners both in particle and general equilibrium analysis. The political economy of non-tariff barriers and their implications; Trade under imperfectly competitive market.

Unit-IV

Meaning and components of balance of payments; Equilibrium and disequilibrium in the balance of payments; The process of adjustment under system of gold standard, fixed exchange rates and flexible exchange rates; Expenditure-reducing and expenditure-switching policies and direct controls for adjustment; Policies for achieving internal and external equilibrium simultaneously under alternative exchange rate regimes; a critical review of the Absorption and monetary approaches to the theory of balance payment adjustment;

Note:
(A) Nine questions would be set in all.
(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.
(C) There would be two questions (16 marks each) from each of four units.
(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))

Reading List:
- Bhagwani, J. (Ed.) (1981), International Trade, Selected Readings, Cambridge University press, Massachusetts.
- Carbouth, M. (1999), International Economics, International Thompson Publishing, New York.
- Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
- Dana, M.S. (2000), International Economics: Study Guide and Work Book (5th Edition), Rutledge
Publishers, London.
- Dunn, R.M. and J.H. Mutt (2000), International Economics, Rutledge Publishers, London.
- Kenen, P.B. (1994), The international Economy, Cambridge University Press, London.
- Kindleberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.
- King, P.G. (1995), International Economics and International Economic Policy: A Reader, McGraw Hill International, Singapore.
- Krufrnan, P.R. and M. Obstfeld (1994), International Economic: Theory and Policy, Glenview, Foresman.
- Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J. New York.
- Soderston, BO (1991), International Economics, The Macmillan Press Ltd., London

Third Semester
Agricultural Economics-I
Paper Code 24ECO23D1OM

Course Outcomes

CO1 Course provides knowledge agricultural background, farm and agro business activities, agri finance and management.

CO2 It introduces learner applied part of economics instead theoretical, which deals with allocation of land under various crops, specialization, diversification and other policy amplifications.

CO3 Course offer relevant production and various techniques to understand agri production, cost benefit analysis and enhance learner to make frontier-production function at least cost.

Unit-I

Agricultural Economics and Economic Development: Definition of agricultural Economics, its scope and nature; Regional disparities in Indian agriculture; Difference between agriculture and Industry; Need for a separate study of Agricultural Economics. Agriculture and Economic Development: Role of agriculture in Economic Development; Contribution of industry to the development of agriculture; Interdependence ·of agriculture and industry.

Unit-II

Approaches to Agriculture Development: Schultz, Mellor, Boserup, Lewis and Ranis-Fie.

Unit-III

Economics of Agriculture Production: The Production Function; Factor-Product Relationship; Factor-Factor Relationship; Product- Product Relationship. Equilibrium of the capitalist form, peasant family farm and share tenant farm.

Unit-IV

Analysis for Farm Management: The Production Function Approach; Farm-budgeting Approach. Measures of Farm Efficiency; Supply response in agriculture; Size of the farm and Productivity Debate.

Note:

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))**.**

Reading List:

- South-worth, H.M. and B.F. Johnston (ed.) Agricultural Development and Economic Growth (Cornell University Press, London, 1974).
- Heady, E.O. Economics of Agricultural Production and Resources Use (Prentice Hall India Ltd. New Delhi - 1964).
- Schult, T.Z. Transforming Traditional Agriculture (Yale University Press, 1964).
- Metacalf D. The Economics of Agriculture.

- Basu, K. Agrarian Structure and Economic Under Development (Harwood Academic, London 1980).
- Sadhu, AN. and A Singh, Agricultural Problems in India (Himalaya Publishing House, Bombay).
- Mellor, J. W. The Economics of Agricultural Development (Vora and Co. Bombay, 1966).
- Donner, Peter: Land Reforms and Economic Development.
- Kahlon, AS. and Tyagi, D.S. Agricultural Price Policy in India (Allied Pub. New Delhi, 1983).
- Patnaik, Utsa (ed) Agrarian Relations and Accumulation. The mode of production in India.
- Kaur, Rajbans Agricultural Price Policy in Economic Development.
- The Indian Society of Agricultural Economics, Agricultural Development in Developing Countries in Asia and south East Asia since World War II.
- Ellis, Frank Peasant Economics (Cambridge University Press 1963).
- Bhalla G.S. and Y.K. Alagh Performance of Indian Agriculture a district-wise Study.
- Rao, C.H.H. Technological change and Distribution of gains in Indian Agriculture.
- Lehman, Davir (ed) Agrarian Reform and Agrarian reformism in India.
- Ghatak, S. and Ken Ingersent Agriculture and Economic Development.
- Bilgrami, SAR An Introduction to Agricultural Economics (Himalaya Pub. House, Bombay).
- Rudra Ashok Indian Agricultural Economics: Myth and Realties (Allied Pub. New Delhi 1982).
- Soni, RN. Leading Issues in Agricultural Economics (Sohan Lal Nagin Chand Co. Jalandhar, 2006).
- Khusro, AM. Reading in agricultural Development.
- Vandana Shiva The Violence of Green Development.
- Frankel, Francis, R India's Gren Revolution, Economic Gain and Political Costs (OUP Bombay 1971).
- Dantwala, M.L. (ed.). Indian Agricultural Development Since Independence.
- Hayami, Y and Rattan, V.W. Agricultural Development: An International Perspective.
- ICSSR Alternative in Agricultural Development.
- Ellis, F. Agricultural Policies in Developing Countries.
- Lekhi R.K. & Singh Joginder, Agricultural Economics, Kalyani Publishers, New Delhi.
- Sankhayan P.L., Introduction to the Economics of Agricultural Production, Prentice Hall of India Private Limited, New Delhi.
- Johl S.S. & Kapur T.R, Fundamentals of Farm Business Management, Kalyani Publishers, Ludhiana. .
- Reddy S. Subha, Raghu Ram P. Sastry T.V. Neelakanta & Devi I Bhavani, Agricultural Economics, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.
- Acharya, S.S. & Agarwal N.L., Agricultural Prices - analysis and policy, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.

Third Semester
Mathematical Economics-I
Papers Code 24ECO23D2OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes:

CO1.Students would learn how to deal economic problems with the help of mathematics.

CO2 Students would know different types of economic functions like utility functions, production functions etc.

CO3 It will impart knowledge about the use of lagrange multiplier methods in various economic problems of maximization and minimization.

Unit-I

Cardinal and ordinal utility maximization: Sudsy equation, compensated demand function, income, substitution, and price effects; Concept of elasticities; Consumer services.

Unit-II

Separable and additive utility functions; homogeneous and homothetic utility functions; Indirect utility functions; transcendental logarithmic utility functions; duality theorem;

Unit-III

Theory of revealed preference and index numbers; Linear expenditure systems; Treatment of demand for durable goods; Empirical demand functions; Consumer behaviour under risk and uncertainty.

Unit-IV

Production function - homogeneous and non-homogeneous; Laws return & return to scale; Properties of Cobb-Douglas production function; CES'VES and Translog (TL) production;

Note:

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))

Reading List:

- Allen, R.G.D. (1976), Mathematical Economics, Macmillan, London.
- Arrow, KJ. and M. Intrilligator (Eds.) (1982), Handbook of Mathematical Economics,
Volumes I, II and III, North Holland, Amsterdam.
- Henderson, J.M. and R.E. Quandt (1980), Microeconomic Theory: A Mathematical
Approach, McGraw Hill, .
- New Delhi.
- Chung, J.W. (1993), Utility and Production: Theory and Applications Basil Blackwell,

London.

- Ferguson, C.E. (1976), Neo-Classical Theory of Production and Distribution.

Semester-III
Public Economics-I
Paper Code 24ECO23D5OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes

CO1 The students would learns of the feature the federal structure and financial relationship among them.

CO2 The course would develop the analytical ability of students to distinguish between beneficial and detrimental effects of a government policy and their effect on macroeconomics framework of an economy.

CO3 It will helps students to critically analyse the fiscal reforms and policy choices of the government in developed and developing countries.

Unit-I

Economic rationale of government, fiscal functions; market failures: imperfections, decreasing costs, externalities and public goods; concepts of private goods, pure public goods, mixed goods and merit goods; theory of public goods; free Rider's problem, the optimal provision of public goods, contributions of Samuelson arid Musgrave. Lindhal equilibrium; public choice and fiscal decision making, voting systems, majority voting.

Unit-II

Budgeting: various concepts, reforms in expenditure budgeting, zero based budgeting and performance budgeting. Budgets of the Union Government in India, budget making process in India; public expenditure in India: trends and issues.

Unit-III

Public Expenditure: structure and growth of public expenditure; Wagner's hypothesis, Peacock-Wiseman hypothesis; economic effects of public expenditure; criteria for public investment, social cost-benefits analysis: valuation of benefits and costs, discount rate.

Unit-IV

Theory of Taxation: Various approaches to taxation, neutrality, equity, ability to pay, benefit principle, revenue maximization, income maximization; analysis of incidence of taxes, elasticity, buoyancy and taxable, capacity, efficient tax design: optional taxation, effects of taxation on work effort, savings, investment and growth; classification of taxes: direct and indirect taxes, progressive, proportionate and regressive taxes, Advalorem and specific taxes; tax systems in India; structure, composition and various economic issues.

Note: (A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))
.

Reading List:

- Masgrave R.A and Masgrave P.B., Public Economics in Theory and Practice, McGraw Hill.
- Stiglitz, J,E., Economics o/Public Sector, J.W. Norton & Company.
- Singh, S.K., Public Finance in Theory and Pratice, S. Chand & Co.
- Government of India, Ministry of Finance: Economics Survey (of various years).
- Raja J. Challiah, Towards Sustainable Growth, Essays in Fiscal and Financial Sector Reforms in India,
  o Oxford University Press, Delhi, 1996
- Deena Khatkhate (ed.), Money and Finance: Issue, Institutions, Policy, Sameeksha Trust, Orient Longman, 1998.
- Kunal Sen & Rajendra R. Vidya (ed.), Process of Financial Liberalization in India, Oxford University
  o Press, 1997.
- Mundel Sudipto (ed.) Public Finance: Policy Issue of India.
- Brown C.V. and Jackson P.M. (1990), Public Sector Economic, Basil Balackwell, Oxford.
- M. Govindia Rao and Tapan Sen (1998), Financial Federalism in India.
- Atkinson A.B. and Stightz, J.E. (1980), Lectures on Public Finance, Tata Mcgraw HilL
- Auerbach, A.J. and M. Feldstern (ed.) (1985), Handbook of Public Economics, Vol-I, North Holland,
  o Amsterdam.
- Raghabendra Jha (1999), Modern Public Economics, Rotledge, London.
- Srivaslava D.K. (ed.) (2000), Fiscal Federalism in India, Har-Anand Publication Ltd., New Delhi.
- Bhargava P.K. (1991), India's Fiscal Critis, Ashish Publishing House, New Delhi.
- Govt. of India, Ministry of Finance (1988), Sarkaria Comission Report on Centre-State Finance Relations.

Third Semester
Disaster Management
Paper Code 21ENVO2OM

Note:
1. Seven questions will be set in all.
2. Question No. 1 will be objective covering the entire syllabus & compulsory. The remaining six questions will be set with two questions from each unit. The candidate will be required to attempt five in total, Question I and four by selecting at least one from each unit.

UNIT- I
Disaster- Causes and phases of disaster, Rapid onset and slow onset disasters. Nature and responses to geo-hazards, trends in climatology, meteorology and hydrology. Seismic activities. Changes in Coastal zone, coastal erosion, beach protection. Coastal erosion due to natural and manmade structures.

UNIT- II
Floods and Cyclones: causes of flooding, Hazards associated with flooding. Flood forecasting. Flood management, Integrated Flood Management and Information System
(IFMIS), Flood control. Water related hazards- Structure and nature of tropical cyclone, Tsunamis – causes and physical characteristics, mitigation of risks.

UNIT- III
Earthquakes: Causes and characteristics of ground-motion, earthquake scales, magnitude and intensity, earthquake hazards and risks, Volcanic land forms, eruptions, early warning from satellites, risk mitigation and training, Landslides.

Mitigation efforts: UN draft resolution on Strengthening of Coordination of Humanitarian Emergency Assistance, International Decade for Natural Disaster Reduction (IDNDR), Policy for disaster reduction, problems of financing and insurance.

Reference Books:
1. Bolt, B.A. Earthquakes , W. H. Freeman and Company, New York. 1988
2. Carter, N,W. Disaster Management: A Disaster Manager's Hand Book, Asian Development Bank, Manila. 1992

3. Gautam Ashutosh. Earthquake: A Natural Disaster, Ashok Publishing House, New Delhi. 1994
4. Sahni, P.and Malagola M. (Eds.).Disaster Risk Reduction in South Asia, Prentice-Hall of India, New Delhi. 2003.
5. Sharma, V.K. (Ed.). Disaster Management, IIPA, New Delhi. 1995.
6. Singh T. Disaster management Approaches and Strategies, Akansha Publishing House, New Delhi. 2006
7. Sinha, D. K. Towards Basics of Natural Disaster Reduction, Research Book Centre, New Delhi. 2006
8. Smith, K. Environmental Health, Assessing Risk and Reduction Disaster, 3rd Edition, Routledge, London. 2001 21.

Fourth Semester
Indian Economy-II
Paper Code 24ECO24C1OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes
CO1 To have knowledge about the issues in Indian Economy like planning, poverty, unemployment etc.
CO2 To know about relationship between monetary policy, fiscal policy and economic development.
CO3 To know about framework of policy making for the development of Indian economy.
CO4 To know about the preparation of budgeting and its utilization for Indian economy.

Unit -I
Agriculture: Role and features of Indian agriculture; Technological change in agriculture; Trends in agricultural productions and productivity; WTO and Indian agriculture.
Poverty in India - Absolute and relative analysis of poverty.

Unit-II
Industry: Growth and pattern of industrialization; New industrial policy and liberalisation - impact on Indian economy; Public Sector enterprises - trends and performance; Small and cottage industries; issues of privatization. Unemployment and Migration in India.

Unit-III
External sector: Structure and direction of foreign trade; Balance of payments; Issues in export-import policy and FEMA Exchange rate policy; Foreign capital and MNCs in India.

Unit-IV
Environment as necessity-amenity and public goods; causes of environmental and ecosystem degeneration-policies for controlling pollution-economic and persuasive; their relative effectiveness in LDCs; Relation between population, poverty and environment degradationmicro-planning for environment and eco-preservation-water sheds, joint forest management and self-help groups.
Role of State in environmental preservation -f Review of environmental legislation in India.

Note:
(A) Nine questions would be set in all.
(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.
(C) There would be two questions (16 marks each) from each of four units.
(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))**.**

Reading List:
- **Sen, R.K. and B. Chatterjee (2001), Indian Economy: Agenda/or 21st Century:**
- **Dhar, P.K., Indian Economy - Its growing dimensions, Kalyani Publishers, New Delhi (Latest Edition) Mishra, S.K. and V.K. Puri Indian Economy - 1st Development Experience, Himalaya Publishing House, Mumbai, Latest Edition.**
- **Economic Surveys, Governrnnet of India, various issues.**
- **Reserve Bank of India, Report on Currency and Finance (Annual).**

Fourth Semester
International Trade and Finance-II
Paper Code 24ECO24C2OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes

CO1 Students would know the country's position regarding international trade, payments and foreign exchange.

CO2 The students would learn the methods regarding improvement in terms of trade, international debt and balance of payments positions.

CO3 Students would know about the policies regarding increase in exports, to deal with international institutions and to maintain relation with other countries. Since globalization and international relations can increase the rate of growth and solve domestic problems like inflation, unemployment and value of currency etc.

Unit-I

Foreign trade multiplier with and without foreign repercussions and determination of national income and output; Relative merits and' demerits of fixed and flexible exchange rate in the context of growth and development in developing countries. Forms of economic cooperation; Static and Dynamic effects of a custom union and free trade areas.

Unit-II

International Monetary System and Trade Policies in India: Multilateralism and WTO; Rise and fall off gold standard and Bretton-Wood system; Need, adequacy and determinants of international reserves; Conditionality clause of IMP; Emerging International Monetary System with special reference to Post Maastrishit developments and developing countries; Reforms of the International Monetary System, Theory of regionalism at global level - collapse of Brettonwood system. Optimum currency Areas - Theory and impact in the developed and developing countries.

Unit-III

Indian and developing countries; Functions of GATT/WTO (TRIPS; TRIMS); Recent changes in the direction and composition of trade and their implication; Rationale and impact of trade reforms since 1991 on balance of payments, employment and growth.

Unit-IV

Problems of India's International debt; Working and regulations of MN9 in India, Instrument of export promotion and recent import and export policies and agenda for future.

Note:

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))

Reading List:

- Bhagwani, J. (Ed~) (1981), International Trade, Selected Readings, Cambridge University press, Massachusetts.
- Carbouth, M. (1999), International Economics, International Thompson Publishing, New York. Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
- Dana, M.S. (2000), International Economics: Study Guide and Work Book (5'/1Edition), Rutledge Publishers, London.'
- Dunn,R.M. and I.H. Mutt (2000), International Economics, Rutledge Publishers, London.
- Kenen, P.B. (1994), The International Economy, Cambridge University Press, London.

Fourth Semester
Agricultural Economics-II
Paper Code 24ECO24D1OM

Course Outcomes

CO1 Course provides knowledge agricultural background , farm and agro business activities, agri finance and management.

CO2 It introduces learner applied part of economics instead theoretical, which deals with allocation of land under various crops, specialization, diversification and other policy amplifications.

CO3 Course offer relevant production and various techniques to understand agri production, cost benefit analysis and enhance learner to make frontier-production function at least cost.

Unit-I

Land Reforms in India: Agricultural Development and Tenurial conditions: Land Reforms – The Theoretical Issues (Meaning, Important changes caused by Land Reform and Objectives of Land Reforms); Land Reforms; Ceiling on Land Holdings; Implementation of Land Reforms in India. Strategy for Development of Indian Agriculture; The Green Revolution; Factors responsible for Green Revolution; Economics Benefits of Green Revolution; Measures for making Green Revolution all pervasive; Regional disparities created by Green Revolution; Inter-farm disparity in Income; Green Revolution and Employment. Trends in Migration and Labour markets; Minimum Wages Act.

Unit-II

Terms of Trade between Agriculture and Industry: Meaning; Impact of change in terms of trade in favour of and against agriculture; changes in terms of trade between agriculture and industry during the course of economic development; Terms of trade between agriculture and industry in India since Independence; Agricultural Marketing: Need for an efficient system of agricultural marketing; Efficiency of agricultural Marketing system in India; Measures to improve the efficiency of agricultural marketing in India. Cooperative movement in India – organization structure and development of different types of cooperatives in India.

Unit-III

Agricultural Credit: Importance of agricultural credit; Sources (formal and informal), problems and Government policies since Independence. Capital formation in the rural sector - savings, assets and credits. Issues in Agriculture price policy: objectives of Agricultural Price Policy;

Main elements of Agricultural Price Policy; Agricultural Price Policy in India: Its evolution; objectives of Price policy in India; Important constitution of Agriculture Price Policy in India; Critical Evaluation of India's Agriculture Price Policy; Need for Revision of Agricultural Price Policy in India.

Unit-IV

The New Economic Policy and Indian Agriculture: Macro Economic Stabilization measures; structural Adjustments in the Agricultural Sector. World Trade Organization and Indian Agriculture; Model of Production Debate: Private V /s Public investment in Agriculture; Trends in public and private investment in Indian Agriculture.

Note:
(A) Nine questions would be set in all.
(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.
(C) There would be two questions (16 marks each) from each of four units.
(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))

Reading List: As suggested in Semester 3rd.

Fourth Semester
Mathematical Economics-II
Paper Code 24ECO24D2OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes
CO1 The course would help the students to meet the needs of those who have a strong
   quantitative background wishing to study economics.
CO2 The advance and technically rigorous nature of course would serve as an excellent
   foundation for students for studying economic with the help of mathematical tools.
CO3 To familiarise the students to study economics with the help of mathematics.

Unit-I
Constrained optimization of a producer; Generalization of n variable case; Input demand function; Adding up theorem; Technical progress through production function; Analysis of joint profit maximization and multiproduct firm; Production possibility curve; Empirical uses of production function analysis.

Unit-II
Idea of self dual functional form; derivation of short run -long run cost function; Cobb- ouglas (CD) and Translog (TL) cost functions.

Unit-III
Price determination in perfect competition, monopoly, monopolistic competition, duopoly, oligopoly; Pricing of factors of production; Bilateral monopoly; Single market equilibrium – Marshallian and Walrasian equilibrium conditions; Lagged market equilibrium: Multi-market equilibrium system of Walras;

Unit-IV
Classical and Keynes' macro system; Static and dynamic multiplier; Determinants of investment; Accelerator; trade cycle model of Samuelson and Hicks; harrod problem; Neoclassical model of growth; Solow and Meade growth models with technical progress; Optimal growth; and golden rule of accumulation.

Note:
(A) Nine questions would be set in all.
(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.
(C) There would be two questions (16 marks each) from each of four units.
(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit)).

Suggested Reading :-
- Allen, R.G.D. (1976), Mathematical Economics, Macmillan, London.
- Arrow, K.J. and M. Intrilligator (Eds.) (1982), Handbook of Mathematical Economics, Volumes I, II and III, North Holland, Amsterdam.
- Henderson, J.M. and R.E. Quandt (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
- Chung, J.W. (1993), Utility and Production: Theory and Applications Basil Blackwell,

London.
- Ferguson, C.E. (1976), Neo-Classical Theory of Production and Distribution.

Fourth Semester
Public Economics-II
Paper Code 24ECO24D5OM

M. Marks = 100
Term End Examination = 80
Assignment = 20
Time = 3 hrs

Course Outcomes

CO1 The students would learns of the feature the federal structure and financial relationship among them.

CO2 The course would develop the analytical ability of students to distinguish between beneficial and detrimental effects of a government policy and their effect on macroeconomics framework of an economy.

CO3 It will helps students to critically analyse the fiscal reforms and policy choices of the government in developed and developing countries.

Unit-I
Fiscal Federalism: Principles of multi-unit finance; principles of grant design; Indian fiscal federalism, vertical and horizontal imbalances, assignment of functions and sources of revenue; constitutional provisions; Finance . Commissions and Planning Commission.

Unit-II
Centre-State financial relations in India, problems of State's resources and indebtedness; transfer of resources from Union to States and, States to Local Bodies. Public Finance - Trends in revenue and expenditures of the Central and State G6vernments.

Unit-III
Fiscal Policy: Instruments and transmission mechanisms; fiscal policy for stabilization automatic vs. discretionary stabilization; various concepts of budgetary deficits; fiscal deficit in India: extend, trend and, implication.

Unit-IV
Public debts: India's public debt since 195 I-growth, composition, ownership pattern and debt management. Fiscal reforms in India.

Note:

(A) Nine questions would be set in all.

(B) Question No. 1 based on the entire syllabus, would be compulsory. It would contain eight short answer questions of two marks each.

(C) There would be two questions (16 marks each) from each of four units.

(D) Candidates would be required to attend five questions (one compulsory and selecting one from each unit))

Reading List:

- Masgrave R.A and Masgrave P.B., Public Economics in Theory and Practice, McGraw Hill.
- Stiglitz, J.E., Economics of Public Sector, J.W. Norton & Company.
- Smgh, S.K., Public Finance in Theory and Pratice, S. Chand & Co.
- Government of India, Ministry of Finance: Economics Survey (of various years).
- Raja J. Challiah, Towards Sustainable Growth, Essays in Fiscal and Financial Sector

Reforms in India, Oxford University Press, Delhi, 1996
- Deena Khatkhate (ed.), Money and Finance: Issue, Institutions, Policy, Sameeksha Trust, Orient Longman, 1998. .
- Kunal Sen & Rajendra R. Vidya (ed.), Process of Financial Liberalization in India, Oxford University , Press, 1997.
- Mundel Sudipto (ed.) Public Finance: Policy Issue of India.
- Brown C.V. and Jackson P.M. (1990), Public Sector Economic, Basil Balackwell, Oxford.
- M. Govindia Rao and Tapan Sen (1998), Financial Federalism in India.
- Atkinson A.B. and Stightz, J.E. (1980), Lectures on Public Finance, Tata Mcgraw Hill.
- Auerbach, AJ. and M. Feldstern (ed.) (1985), Handbook of Public Economics, Vol-I, North Holland, Amsterdam.
- Raghabendra Jha (1999), Modem Public Economics, Rotledge, London.
- Srivaslava D.K. (ed.) (2000), Fiscal Federalism in India, Har-Anand Publication Ltd., New Delhi.
- Bhargava P.K. (1991), India's Fiscal Critis, Ashish Publishing House, New Delhi.
Govt. of India, Ministry of Finance (1988), Sarkaria Comission Report on Centre-State Finance Relations.