

**DR. SHYAMA PRASAD MUKHERJEE
UNIVERSITY, RANCHI**

SYLLABUS FOR M.A. ECONOMICS

**GUIDELINE AND SYLLABUS FOR TWO (02) YEARS
FOUR (04) SEMESTERS UNDER CHOICE BASED
CREDIT SYSTEM (CBCS)**

2018 ONWARDS

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**APPROVED BY THE DEPARTMENTAL COUNCIL, DEPARTMENT OF
ECONOMICS IN ITS MEETING HELD ON 21st FEBRUARY, 2018 AT THE
POST-GRADUATE DEPARTMENT OF ECONOMICS, DR. SHYAMA
PRASAD MUKHERJEE UNIVERSITY, RANCHI COLLEGE, RANCHI**

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SYLLABUS FOR M.A. ECONOMICS

Under Choice Based Credit System,

DR. SHYAMA PRASAD MUKHERJEE UNIVERSITY, RANCHI

Introduction :

The University Grant Commission (UGC) has initiated several measures to bring equity, efficiency and excellence in the Higher Education system of the country. The measure include innovation and improvements in curriculum, teaching-learning process, examination. In this regards, Choice Based Credit System (CBCS) has been suggested by UGC for implementation in the Higher Education System in the country. The CBCS is expected to provided opportunity for the students to choose from the prescribed courses comprising core, elective/minor or skill based.

DR. SHYAMA PRASAD MUKHERJEE UNIVERSITY, Ranchi has decided to implement Choice Based Credit System at the Post Graduate level from Academic Session 2018-19. The Board of Studies of Department of Economics in its meeting held on 9th April, 2018 adopted the following as per UGC norms.

COURSE STRUCTURE

M.A. (Economics) is a full time two years Four Semester Course.

- **Foundation Courses (F.C.)** : The Foundation Courses may be of two kinds *Compulsory Foundation and Elective Foundation* Compulsory Foundation Courses are the courses based upon the content that leads to knowledge enhancement. They are mandatory for all disciplines.
- **Core Course (C.C.)** : There may be Core Courses in every semester. This is the course which is to be **Compulsorily** studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study.
- **Elective Course (E.C.)** : This is a course which can be chosen from a pool of papers.

GRADING SYSTEM

- a. **Letter Grades and Grade Points** : The method of absolute grading system (AGS), based on a predetermined class interval of the marks obtained in a examination as specified in the following table shall be followed in awarding grades to the students. The marks obtained by them in a examination shall be converted in to grades on the basis of the following 10 point grading system or as decided by the Academic Council of DSPM, University, Ranchi.

Grade (G)	Grade Point (GP)	Percentage Equivalent of Marks Obtained
O (Outstanding)	10	100%
A (Excellent)	9.0	90% to 99.99%
A	8.0	80% to 89.99%
A	7.5	75% to 79.99%
B ⁺	7.0	70% to 74.99%
B	6.0	60% to 69.99%
C ⁺	5.5	55% to 59.99%
C	5.0	50% to 54.99%
P	4.5	45% to 49.99%
F	0.0	LESS THAN 45%
Ab.	0.0	

- b. Computation of **Semester Grade Point Average (SGPA)** and Cumulative Grade Point Average (CGPA)
- c. In order to pass in a Semester Examination the minimum SGPA required is 4.5 and minimum of 4.5 GP in individual theory, Practical and other credit components.
- d. **Requirement for Promotion to Higher Semester** : A candidate shall be permitted to proceed from the First Semester to the 2nd, 3rd and 4th Semester provided he/she passed at least in 50% of the Courses in the respective Semester in theory and practical/project course separately.
- e. A candidate who fails to clear a course/courses in any Semester, will have to clear the same in the succeeding relevant Semesters but he/she shall have to clear all the failed courses of a programme within three years from the year of Admission/Registration in the programme concerned.

Award of Degree

- A candidate shall be eligible for the award of degree only if, he/she has completed the prescribed courses of study in a Department of this University for all the Four Semesters.
- Has passed all the Examinations prescribed for all the Four Semesters.
- Has secured the Total Number of credits including the Project/Dissertation of the concerned programme.

Examination Framework

Marks weightage and scheme of Examination

- a) Marks weightage and Scheme of a Course :** Each Course (FC/CC/EC) shall be of 100 marks having two components : **70 marks shall be assigned to the End Semester University Examination (ESUE), conducted by the University and 30 Marks for Internal Assessment (I.A.).** The marks of I.A. shall further break into, 20 for Internal Written Examination, 05 for Written Assignment and 05 for overall performance of a student including regularity in the class lectures/seminars and other activities of the Department. There shall be one written Examination for Internal Assessment each of 1 hour duration and each of 20 marks in a Semester. Appearing in the Internal Assessment Examination shall be compulsory. The Internal Assessment/Mid-Semester Examination shall be conducted by the University.

The written component of the Project (Project Report) shall be of 60 marks and 40 marks will be for the Viva-Voce Examination or as decided by the Academic Council of the University jointly conducted by an external examiner, appointed by the University and the internal Supervisor/Guide.

- b) ESUE :** A total of EIGHT questions will be set in each course for the ESUE. Any **FOUR** questions shall have to be answered by the Examinees out of **EIGHT** questions. The questions **will be of equal marks** and will be so framed that the students are able to answer them within the stipulated time.

GENERAL GUIDELINES

1. Post-Graduate degree course in Economics (M.A.) shall be of two years duration.
2. There shall be semester wise examination.
3. There shall be four (04) semester in two years semester -I and semester-II in first year and semester-III and semester-IV in the second year.
4. There shall be 16 paper altogether

EC-02

A student will be required to select any one of the followings as EC-02

EC-02 : MATHEMATICAL ANALYSIS OF MICRO ECONOMICS OR
BASIC ECONOMETRICS OR
AGRICULTURAL AND RURAL ECONOMY OR
THEORIES OF DEMOGRAPHY

EC-03

A student will be required to select any one of the followings as EC-03

EC -03 : MACROECONOMICS AND OPERATIONAL ANALYSIS OR
SIMULTANEOUS EQUATION SYSTEM OR
AGRICULTURE AND RURAL PROBLEMS OR
DEMOGRAPHIC FEATURES OF INDIA

5. Each Paper in each End Semester shall carry Seventy (70) as full marks.
6. There shall be in Semester Assessment/Internal Assessment/continuous appraisal/Mid-Semester Examination in the middle of each Semester carrying Thirty (30) as full marks.
7. There shall be total of 08 (eight) questions in each End-Semester Examinations.
8. Examinees are required to answer any four (04) questions out of Eight (08).
9. The duration of End-Semester Examination shall be of 03 (Three) hours in each theory paper of each Semester.

GUIDELINES FOR M.A. THEORY PAPER SETTERS AND ALL CONCERNED

1. Each End-semester theory paper shall carry 70 Marks as full marks.
2. The duration of examination shall be of 03 (three) hours in each theory paper of each end semester examination
3. Paper setter are required to set 08 (eight) questions in each theory paper of each semester.
4. Examinees shall be required to answer any four (04) questions out of 08.
5. All questions shall be of equal value
6. Paper setters are required to set (all theory papers) in analytical/descriptive pattern.
7. Paper setters are requested to set the questions in English (Roman Script) with its Hindi (Devnagri) transcription just below the English version.
8. Paper setters are requested to take utmost care to see that the questions are well within the prescribed syllabus and the general instructions regarding full marks, time allowed, distribution of marks, number of questions to be set, number of questions to be answered etc.
9. Paper setters are required to set questions in legible handwriting/ typewritten/ computer printed.
10. Paper setters are required to destroy all rough work/delete file in computer.
11. Press Copy of the question be kept in separate envelope marked as "Press Copy" and office copy kept in separate envelope marked as "Office Copy".
12. Paper setters are required to send the declaration Performa duly filled in and signed (with full name and address) with the question.
13. Paper setters are required to keep envelope marked as "Press Copy" and "Office Copy" in one separate envelope.

DRAFT OF QUESTION PAPER

Symbol

Year

Full Marks : 70

All Questions are of equal value

। Hkh i z uka ds eku cjkj gA

Answer Any Four questions.

fdUgh pkj i z uks ds mUkj nA

Examinees are required to give their answers in Hindi or English only

i j h { k k F k h z f g l n h v F k o k v a x s t h e a g h m U k j n A

Examinees are required to answer questions in their own words as far as practicable.

i j h { k k F k h z ; F k k l k k o v i u s ' k c n k a e a i z u k a d s m U k j n A

M.A. ECONOMICS

COURSE STRUCTURE UNDER CBCS

SEMESTER-I

- F.C.- 01 : Micro-Economic Analysis and welfare Economics.
- C.C. -01 : Macro Economic Analysis and Monetary Theory
- C.C. -02 : Mathematical Economics
- C.C. -03 : Statistical Analysis.

SEMESTER-II

- E.C.- 01 : Soft Skills Development in Economics
- C.C. -04 : Economics of Fluctuation and Public Economics
- C.C. -05 : Mathematical Economics
- C.C. -06 : Statistical Analysis.

SEMESTER-III

- C.C.- 07 : Environmental Economics
- C.C. -08 : Problems of Economics Development, Planning in India and International Economics.
- C.C. -09 : Macroeconomic Analysis and Distribution.

ELECTIVE COURSE

- E.C. -02 : (Any one from (04) four)**
 - i. Mathematical Analysis of Microeconomics OR
 - ii. Basic Econometrics OR
 - iii. Agricultural and Rural Economy OR
 - iv. Theories of Demography

SEMESTER-IV

- C.C.- 10** : Economics of Education, Health and Indian Economy.
- C.C. -11** : Approaches to Development and International Economics.

ELECTIVE COURSE

- E.C. -03** : **(Any one from (04) four)**
 - : Macroeconomics and operational analysis OR
 - Simultaneous equation system OR
 - Agricultural and Rural Problems OR
 - Demographic Features of India.

COMPULSORY COURSE : **Dissertation/Project Work**

Full Marks :60 for Written Work

40 for Viva-Voce Examination

SEMESTER WISE SYLLABUS FOR M.A.

SEMESTER-I

Full Marks :	70 for End Semester 30 for I.A./MS
Total Marks :	100

FC-PAPER-I

MICROECONOMIC ANALYSIS AND WELFARE ECONOMICS

Module 1 : Demand Analysis

Elasticity of Supply, Indifference curve (Income and Substitution effects; Slutsky Theorem, Compensated Demand Curve) and their applications; Revealed Preference theory; Revision of Demand theory by Hicks; Consumer's Surplus; Inter Temporal Consumption; Recent Developments in demand; Cobweb theorem; Lagged Adjustment in Interrelated markets.

Module 2 : Theory of Production and Cost

Isoquants least cost combination of inputs; Returns to Factors; Economics of Scale; Multiproduct Firm; Elasticity of Substitution; Euler's Theorem; Technical Progress and Production Function; Cobb-Douglas, (CES; Empirical work on, Production Function; Traditional and Modern Theories of Cost.)

Module 3 : Welfare Economics

Pigovian Welfare Economics; Pareto Optimal Condition; Value Judgement; Social Welfare; Compensation Principles; Theory of Second best-Arrow's Impossibility Theorem; Rawl's Theory of Justice.

Readings :

1. Kreps. David M.-A Course in Microeconomics
2. Koutsoyiannis. A- Modern Microeconomics
3. Sen A. – Microeconomics-Theory and Applications.
4. Broadway R. W. & N. Bruce-Welfare Economics
5. Mishan, E. J. – Welfare Economics
6. Little I. M.D.- Welfare Economics

M.A. COMPULSORY PAPER

CC-01

Full Marks : 70 for End Semester

30 for I.A./MS

Total Marks : 100

MACROECONOMIC ANALYSIS AND MONETARY THEORY

Module 1 : Consumption Function

Keynes psychological law of consumption, implications of the law; short run and long run consumption function; empirical evidence on consumption function; income-consumption relationship - absolute income, relative income, life-cycle and permanent income hypothesis.

Module 2 : Investment Function

Marginal efficiency of investment and level of investment; Marginal efficiency of capital and investment-long run and short run; The Accelerator and Investment behavior-impact of inflation; Influence of policy measures on Investment empirical evidence.

Module 3 : Neo Classical and Keynesian Synthesis

The IS-LM Model; Model with Government Sector; Relative effectiveness of monetary and Fiscal policies; Extension of IS-LM model with Labour Market and Flexible Prices.

Module 4 : Supply of Money

Behavioural model of Money supply determination, a demand determined money supply process, RBI approach to money supply; high-powered money and money multiplier; budget deficits and money supply and open economy.

Module 5 : Demand of Money

Classical Approach to Demand for Money-Quantity Theory Approach, Fisher's Equation, Cambridge Quantity -Theory, Keynes Liquidity Preference Approach, Transaction, Precautionary and speculative demand for money.

Module 6 : Post Keynesian Demand for Money

Post Keynesian Approaches to Demand for Money- Patinkin and the Real Balance Effect, Approaches to Baumol and Tobin; Friedman and the Modern Quantity Theory Crisis in Keynesian Economics and the revival of Monetarism:

Readings :

1. Ackley.G - Macroeconomic: Theory and Policy.
2. Branson.WA.- Macro Economic Theory and Policy.
3. Dornbusch. R.and F. Stantey.- Macroeconomics .
4. Shapiro.E - Macroeconomic Analysis.
5. Surrey. *M.J.C.* - Macroeconomic themes
6. Chakravarty S. C. - Report of the Committee to Review the working of the Monetary System
7. Ackley.G - Macroeconomic: Theory and Policy.
8. Dornbusch.R. and F. Stanle - Macro economics.
9. Hall. R. E. and J. B. Tayler- Macro economics.
10. Jha. R. - Contemporary Macro economic Theory and Policy.
11. Scarfe, B. L. - Cycles Growth and Inflation

M.A. COMPULSORY PAPER

CC-02

Full Marks : 70 for End Semester

30 for I.A./MS

Total Marks : 100

MATHEMATICAL ECONOMICS

Module 1 : Mathematical Method

Concept of function and types of functions; Limit continuity and derivative; rules of differentiation; interpretation of revenue, cost, demand, supply functions. Elasticity and their types; multi-variable functions; concept and types of production function; rules of partial differentiation and interpretation of partial derivatives; unconstrained and constrained optimization in simple economic problems; simple problems in market equilibrium; concept of integration; simple rules of integration; application to consumer's surplus and producer's surplus growth rates.

Readings :

1. Allen R. G. D. – Mathematical Analysis for Economics.
2. Chiang A. C. – Fundamental Methods of Mathematical Economics
3. Yamane Taro – Mathematics for Economists
4. Boumol W. J. – Economic Theory and Operations Analysis
5. MOnga G. S. – Mathematics and Statistics for Economics.

M.A. COMPULSORY PAPER

CC-03

Full Marks : 70 for End Semester

30 for I.A./MS

Total Marks : 100

STATISTICAL ANALYSIS

Module 1 : Statistical Methods – 1

Meaning, assumptions and Limitations of simple Correlation and Regression Analysis; Pearson's Product Moment and Spearman's Rank Correlation coefficients and their properties; Concept of the least squares and the lines of regression; Standard error of estimates, Partial and Multiple correlation and regression (applications only); Methods of estimation of non-linear equations Parabolic, exponential, geometric, modified exponential, Gompertz and Logistic Relationships.

Module 2 : Statistical Methods – 2

Deterministic and non-Deterministic experiments; Various types of events-classical and empirical definitions of probability, Laws of addition and multiplication; Conditional probability and concept of interdependence, Baye's Theorem and its applications; Elementary concept of random variables; probability mass and density functions; Expectations, moments and moment generating functions* properties (without derivations) of binomial, Poisson and normal distributions.

Readings :

1. Gupta S. C.- Fundamentals of Applied Statistics.
2. Spiegel M.R.- Theory and Problems of Statistics.
3. Yamane Taro- Mathematics for Economists.
4. Nagar A.L.-and R.K.Das- Basic Statistics.
5. Chou Y.- Statistical analysis.
6. Goon, A. M, M. K Gupta, and B Dasgupta - Fundamentals of Statistics
7. Hogg, P.. V. - A. T. Craig- An Introduction to Mathematical Statistics.
8. Miller, J - Statistics For Advanced Level.

SOFT SKILLS DEVELOPMENT IN ECONOMICS

EC-01

SEMESTER-II

Full Marks : **70 for End Semester**
 30 for I.A./MS

Total Marks : **100**

The Basic purpose of this is to develop primary data collection and analysis skills of the students. Besides this the students should be aware of some economic terms which are often asked for in various competitive examinations. This will enhance their skills in understanding and analysing socio-economic issues. This will also increase their employability.

DATA COLLECTION AND ANALYSIS

Method of collecting primary data quantitative and analitative techniques, preparation of questionnaire and schedules, interviews, case study methods, data coding, data entry in MS-Excel/MS-Access, analysis of primary and secondary data and report writing.

CONCEPTS OF

FEMA, FERA, SWAP, FORWARD TRADING, EXIM, MARKETABLE SURPLUS, TABLE SURPLUS.

RESUME WRITING AND SKILL TO FACE INTERVIEW

(A) RESUME WRITING AND SKILL TO FACE INTERVIEW

What is resume? Types of resume, chronological, Functional and Mixed Resume, Steps in the Preparation of Resume. Common Interview questions, Attitude, Body Language, Dress, Phone interview, Online Interview, Behavioural Interview.

(B) GROUP DISCUSSION AND TEAM BUILDING :

Basic of group discussion, Topics of Group Discussion, To make a point in the Group Discussion, Article based group discussion, Citation of Case Studies, Current Issues.

REFERENCES :

Keshva – Economics

Kothari, C.R. – Research Methodology.

SEMESTER-II

CC-04

Full Marks : 70 for End Semester

30 for I. A.

Total Marks : 100

ECONOMICS OF FLUCTUATIONS AND PUBLIC ECONOMICS

Module 1 : Business Cycles

Theories of Schumpeter, Kaldor, Samuelson and Hicks; Control of Business Cycle relative efficacy of monetary and policies.

Module 2 : Fiscal Policy

Objectives of Fiscal Policy-full employment, Anti-Inflation, Economic Growth, Redistribution of Income and Wealth; Interdependence of Fiscal and Monetary Policies; Budgetary Deficits and the its implications; Fiscal Policy for Stabilization-Automatic Vs. Discretionary Stabilization; Alternative measures of Resource Mobilization and their impact on growth, Distribution and Prices; Balanced Budget Multiplier.

Module 3 : Rationale of Public Policy

Allocation of resources provision of public goods; Voluntary exchange models; Impossibility of decentralized provision of public goods (contribution of Samuelson and Musgrave); Demand revealing schemes for public goods contribution of Clarks, Groves and Leyard, Tiebout model of club goods; Stabilization Policy-Keynesian case for stabilization policy; Uncertainty and expectations; Failure of inter-temporal markets; Liquidity Preference; Social goals; Poverty alleviation; Provision of infrastructural facilities, removing distributional inequalities and regional imbalances.

Module 4 : Indian Public Finance

Indian Tax system; Revenue of the Union States and Local Bodies; Major taxes in India: base-of taxes, direct and indirect taxes, taxation in agriculture, expenditure tax, reforms in direct and indirect taxes, taxes on services; Non-tax revenue of Centre, State and local bodies; Analysis of the Central and State government budgets; Lack of flexibility in Central and State budgets, shrinking size of development finance through budgets; Trends in public expenditure and public debt; Fiscal crisis and fiscal sector reforms in India; Report of Finance commission in India.

Readings :

1. Atkihson, A.B. and I.E. Stiglitz (-1980), Lectures on Public Economics, Tata McGraw Hill, New York.
2. Auerbach, A.J. and M. Feldstem (Eds) (1985), Handbook of Public Economics, Vol. 1, North Holland Amsterdam.
3. Buchanan, J.M. (1970), The Public Finances, Richard [> . Irwin, Homewood.
4. Goode, R. (1986), Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.
5. Houghton, J.M. (1970), The Public Finance Selected Readings, Penguin, Harmondsworth.
6. Jha, R. (1998), Modern Public Economics, Routledge, London.
7. Menutt, P. (1996), The Economics of Public Choice. Edward Elgar, U.K. Hill, Kogakhusa, Tokyo. Musgrave, R.A. (1959), The Theory of Public Finance, Theory and Practice, MacGraw Hill, Kogakhusa, Tokyo.
8. Shoup, C. S. (1970), Public Finance, Aldine, Chicago.
9. Shome, P. (Ed) (1995), Tax Policy: Handbook, Tax Division, Fiscal Affairs Department, International Monetary Fund, Washington, D.C.
10. Corners, R. and T. Sandier (1986), *The Theory of Externalities, -Public Goods and Club Goods*, Cambridge University Press, Cambridge.
11. Duff, I. (1997), *Government and Market*, Orient Longman, New Delhi
12. Herber, BvP. (1967);, *Modern Public Finance*, Richard D. Irwin, Homewood.
13. Spulber, N.- (1998), *Redefining the State*, Cambridge University.
14. Chillian Raja J. - Fiscal Policies in underdeveloped countries
15. Pecock, A and G. K. Show -The Economic theory of fiscal Policy.
16. Hicks J. R. - A Contribution to the Theory-of Trade Cycles

SEMESTER-II

CC-05

Full Marks : 70 for End Semester

30 for I.A./MS

Total Marks : 100

MATHEMATICAL ECONOMICS

Module 1 : Mathematical Methods - 1

Determinants and their basic properties; solution of simultaneous equations through Cramer's rule; concept of Matrix -their types, simple operations on matrices, matrix inversion and rank of a matrix; concept of vector - its properties; matrices and vectors; concept of quadratic forms -Eigen Roots and Eigen Vectors; Introduction to Input - Output Analysis; Difference Equation - solution of first order and second order difference equation; Application in Trade Cycle Models; Growth Models and Lagged Market Equilibrium Models.

Module 2 : Mathematical Methods – 2

Linear Programming basic concepts formulation of a Linear Programming Problem its Structure and variables; nature of feasible, basic and optional solution; solution of linear programming through graphical method; Statement of basic theorems of Linear Programming; Formulation of the dual of the program and its interpretation; concept of duality and statement of duality theorems; concept of Game; Strategies simple and mixed; value of a game; saddle point solution; simple applications.

Basic Readings :

1. Alien, R. G. D. (1974) – Mathematical Analysis for Economics, MacMillan Press and ELBS, London.
2. Chiang, A. C. (1986) : Fundamental Methods of Mathematical Economics, MacGraw Hill, New York.

SEMESTER-II

CC-06

Full Marks : 70 for End Semester
30 for I.A./MS
Total Marks : 100

STATISTICAL ANALYSIS

Module 1 : Statistical Methods -

Basic concepts of sampling-random and non-random sampling; Simple random; stratified random and p.p.s. Sampling; Concept of an estimator and its sampling distribution; Desirable properties of an estimator; Formulation/of statistical hypotheses Null and alternative; Goodness of fit; confidence levels and level of significance; Hypothesis testing based on Z, t, χ^2 (Chi square) and F Tests; Type-1 and Type-2 errors.

Basic Reading

1. Alien, R.G.D. (1974), *Mathematical Analysis for Economics*, Macmillan Press and ELBS, London.
2. Chiang, A.C. (1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.
3. Gupta, S.C. (1993), *Fundamentals of Applied Statistics*, S. Chand and Sons, New Delhi.
4. Handry, A. T. (1999), *Operations Research*, Prentice Hall of India, New Delhi.
5. Spiegel, M.R. (1992), *Theory and Problems of Statistics*, McGraw Hill Book Co, London.
6. Taha, H. A. (1997), *Operations Research A Introduction* (6th Edition), Prentice Hall of India Private Ltd., New Delhi.
7. Yamane, Taro (1975), *Mathematics for Economists*, Prentice

SEMESTER-III

CC-07

Full Marks : 70 for End Semester

30 for I.A./M.S.

Total Marks : 100

ENVIRONMENTAL ECONOMICS

Module 1 : Measurement of Environmental Values

Use Values, Option values and non-use values; Valuation methods- based on observed market behavior, Hedonic property values and household production models (Travel cost method and household health production function), Methods based on response to hypothetical markets, contingent valuation methods.

Module 2 : Economics of Natural Resource Management and Sustainable

Development

Theories of optimal use of exhaustible and renewable resources; Environmental and Development trade-off and the concept of sustainable development; Integrated environmental and economic accounting and the measurement of environmentally corrected GDP; Macroeconomic Policies and Environment.

Module 3 : Environmental and Natural Resource Problems in India.

Mechanism for environment regulation in India; Environmental laws and their implementation; Policy instruments for controlling water and air pollution and forestry policy; People's participation in the management of common and forest lands; The institutions of joint forest management and the joint project area management; social forestry rationale and benefits.

Readings :

1. Baumol, W.J. and W. E. Gates; (1988), *The Theory of Environmental Policy* (2nd edition), Cambridge University Press, Cambridge.

2. Burman, P. (Ed), (1995), *Health Sector Reform in Developing Countries : Making Health Development Sustainable*, and Boston : Harvard Series on Population and International Health.
3. Blaug, M. (1972), *Introduction to Economics of Education*, Penguin, London.
4. Bromely, D.W. (Ed), (1995), *Hand Book of Environmental Economics*, Blackwell, London.
5. Conn, E. and T. Gaske (1989), *Economics of Education*, Pergamon Press, London.
6. Fisher, A C. (1981), *Resource and Environmental Economics*, Cambridge.
7. Hanley, N., J.E. Shogern and B. White (1997), *Environmental Economics in Theory and Practice"* Macmillan.
8. Hussen, A.M. (1999), *Principles of Environmental Economics*, Routledge, London.
9. Jeroen, C, J .M.; van den Bergh, (1999), *Hand Book of Environmental and Resource Economics*, Edward Flgar Publishing Ltd., U.K.
10. Klarman, H.E., (1965), *The Economics of Health*, Columbia University Press, New York.
11. Kolstad; C.D., (1999), *Environmental Economics*, Oxford University Press, New Delhi.
12. Pearce, D. W. and R. Turner (1991), *Economics of Natural Resource Use and Environment*, John Hopkins University Press, Baltimore.
13. Perman, R: Ma and J. McGilvery (1996), *Natural Resource and Environmental Economics*, Longman, London.
14. Sfiankar, U. (Ed) (2001), *Environmental Economics*, Oxford University Press, New Delhi.
15. Schultz, T. W. (1971), *Investment in Human Capital*, Free Press, New York.
16. Tietenberg, T. (1994). *Environmental Economics and Policy*, Harper Collins, New York.

SEMESTER-III

CC-08

Full Marks : **70 for End Semester**
30 for I.A./M.S.

Total Marks : **100**

PROBLEMS OF ECONOMIC DEVELOPMENT, PLANNING IN INDIA AND INTERNATIONAL ECONOMICS

Module 1 : Economic Growth-1

Economic growth and development - Factors affecting economic growth; capital, labour, and technology; Growth Models - Harrod and Domar, instability of equilibrium; Neo-classical growth models - Solow and Meade, Mrs. Joan Robinson's growth models the capital controversy.

Module 2 : Economic Growth-2

Technological progress-embodied and disembodied technology progress; Hicks, Harrod; Learning by doing, production function approach to the economic growth; Growth models of Kaldor and Pasinetti; golden rule of accumulation; Stability of equilibrium; money in economic growth; Endogenous Growth; Intellectual capital; role of learning, education and research.

Module 3 : Social and Institutional Aspects of Development

Poverty - absolute and Relative; Measuring Development and development gap - per capital income, inequality of income, Human Development Index PGL9, GD9 and other indices of development and quality of life - Food security, and nutrition, Human resource development; Population problem and growth pattern of population - Theory of Demographic Transition; Population as limits to growth and ultimate source - Population, Poverty and Environment; Economic Development and Institutions - market and market failure, state and state failure, issues of good governance.

Module 4 : Planning In India

Objects and strategy of Planning Need for Planning, Evaluation of Indian Five Years Plan, Panchayats, NGO's and Pressure Group.

Module 5 : Theory of International Trade

The pure Theory of international trade - Theories of absolute, advantage, comparative advantage and opportunity costs, modern Theory of international trade; Theorem of factor Price equalization; Heckscher-Ohlin Theory of trade, Kravis and Linder Theory of trade; The Rybezynski's theorem-concept and policy implications of immiserizing growth; Causes of emergence and measurement of intra-industry trade and its impact on Developing Countries.

Module 6 : Measurement of Gains and Theory of Interventions

Measurement of gains from Trade and their distribution; Concepts of Terms of Trade, their uses and limitations; Hypothesis of secular deterioration of terms of trade, its empirical relevance and policy implications for less developed countries; Trade as all engine of economic growth; welfare implications - empirical evidence and policy issues; 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; Balance of Payments on trading partners both in partial and general equilibrium analysis. The political economy of non-tariff barriers and their implications; nominal) effective and optimum rates of tariffs - their measurement, impact and welfare implications; Trade under imperfectly competitive market.

Module 7 : Trade and Economic Development

International Trade as engine of growth; Static and dynamic gains from trade; Export-led growth; Dual gap analysis; Balance of Payments; Tariffs and effective protection; post-GATT international economic order; WTO and Developing Countries.

Basic Readings :

1. Adelman, I. (1961), *Theories of Economic Growth and Development*, Stanford University Press, Stanford.
2. Behrman, S. and T. N. Srinivasan (1995), *Hand Book of Development Economics*, Vol. 3, Elsevier, Amsterdam.
3. Brown, M. (.1966), *On the Theory and Measurement of Technical Change*, Cambridge University Press, Cambridge, Mass.

4. Chenery, H.B. et al (Eds) (1974), *Redistribution with Growth*, Oxford University Press, Oxford.
5. Chenery, H.B. and T.N. Srinivasan (Eds) (1989), *Hand Book of Development Economics*, Vol. 1 and 2, Elsevier, Amsterdam.
6. Dasgupta, P. (1993), *An Enquiry into Well-being and Destitution*, Clarendon Press, Oxford,
7. Ghatak, S. (1986), *An Introduction to Development Economics*, George Allen and Unwin, London.
8. Gills, M., D. H. Perkins, M. Romer and D. R. Snodgrass (1992); *Economics of Development (3rd edition)*, W.W. Norton, New
9. Gimmell, N. (1987), *Surveys in Development Economics*, Blackwell) Oxford.
10. Higgins, B. (1959), *Economic Development*, W.W. Norton, New York.
11. Hogendbrn, J. (1996) *.Economic Development*, Addison, Wesley ,New York.
12. Kahkonon, S. and M. Olson (2000), *A new Institutional Approach to Economic Development*, Vistaar.
13. Kindleberger, C.P. (1977), *Economic Development*, (3rd edition), McGraw Hill, New York.
14. Meier, G.M. (1995), *Leading Issues in Economic Development*,
15. Jain A. K., Economic Planning In India.
16. Bhagwati, J. N. – International Trade.
17. Kenen, P. B. – International Trade
18. Salvatore, D – International Economics

SEMESTER-III

CC-09

**Full Marks : 70 for End Semester
30 for I.A./M.S.**

Total Marks : 100

MACROECONOMIC ANALYSIS AND THEORIES OF DISTRIBUTION

Module 1 : Price and Output Determination

Marginal analysis as an approach to price and output determination Perfect competition short run and long run equilibrium of the firm and industry? price and output determination, Supply Curve, Monopoly short run and long run equilibrium? Price discrimination, welfare aspects, Monopoly control and regulation; Monopolistic competition general and Chamberlain approaches to equilibrium, equilibrium of the firm and the group with product differentiation and selling cost, excess capacity under monopolistic and imperfect competition, criticism of monopolistic competition; Oligopoly non-collusive (Cournot, Bertrand, Edge Worth, Chamberlain, kinked demand curve and Stackelberg's solution) and collusive (cartels and mergers, price leadership and basing point price system) models, Price and output, determination under Monopsony and bilateral monopoly; workable competition structure, conduct and performance norms.

Module 2 : Alternative Theories of the Firm

Baumol's sales revenue maximization model; Williamson's model of managerial discretion; Marris model of managerial enterprise; full-cost pricing rule; Bain's Limit pricing theory and it's recent developments including Sailos Labini's model: Behavioral model of the firm.

Module 3 : Distribution

Neo-classical approach marginal productivity theory; product exhaustion theorem; Elasticity of technical substitution, technical progress and factor shares; theory of distribution in imperfect product and factor markets; determination of rent, wages, interest and profit; Macro theories of distribution- Ricardian Marxian, Kalecki and Kaldor .

Module 4 : General Equilibrium

Partial and General equilibrium, Walrasian excess demand and input output approaches to general equilibrium, existence, stability and uniqueness of equilibrium and general equilibrium conditions and monopolies; production without consumption one sector model homogenous function, income distribution; production without consumption two sector model, relationship between relative commodity and factor Prices (Stopler-Samuelson Theorem) relationship between output mix and relationship factor Prices, effect of changes in factor supply in closed economy (Rybezynski's Theorem) production and consumption

Readings :

1. Henderson J. M. - Microeconomic Theory.
2. Bronfenbrenner N. - Income distribution theory
3. Koutsoyiannis A. - Modern Microeconomics
4. Stigler G. - Theory of price.
5. Varian H. - Microeconomic Analysis
6. Kreps David M. - A course in Microeconomics
7. Henderson J. M. - Microeconomic Theory.
8. Hirshleifer. J and A.Glazer –Price Theory and Application.
9. De Costa. G.C- Production Price and Distribution .
10. Green. Hand B. Walsh - Classical and Neo classical theories of General Equilibrium.
11. Quirk J. and R. Saposnik - Introduction of General Equilibrium theory.
12. Kreps - A course in Microeconomics
13. Koutsoyiannis A-Modern Microeconomics
14. Sen.A- Microeconomics- Theory and Applications

EC-02

Full Marks :	70 for End Semester 30 for I.A./M.S.
Total Marks :	100

MATHEMATICAL ANALYSIS OF MICROECONOMICS OR

Module 1 : Theory of Consumer Behaviour

Cardinal and ordinal utility: Ordinal utility maximization; Slutsky equation, compensated demand functions, Income, substitution, and Price effects; Concept of elasticities - generalizations to valuable case; Separate and additive utility functions; homogeneous and homothetic utility functional; constant elasticity of substitution (CES), and transcendental logarithmic utility functions; indirect utility function; duality theorem; consumer's surplus; Theory of Revealed Preference and index numbers; Linear expenditure system; treatment of demand for durable goods; Empirical demand functions; Consumer behaviour under risk and uncertainty .

Module 2 : Theory of Production

Production function - homogeneous and non-homogeneous; Properties of Cobb-Douglas Production function; VES; YES and trans-log production function; Simple derivation of short run and long run cost function; Modern Approach to the Theory of Costs; Cost function; Producer's equilibrium-Laws of Returns and Returns to Scale; Constrained optimization of a producer; Generalization to n variables case; Input demand functions; Adding-up Theorem; Technical progress through production function; Analysis of joint profit maximization and multi-product firm; Production possibility curve; Empirical uses of production function analysis.

Module 3 : Theory of Production

Price determination in perfect competition, monopoly, monopolistic competition, Duopoly, oligopoly and Monopsony. Pricing of factors of production; Bilateral monopoly.

Module 4 : Market Equilibrium

Single market equilibrium - Marshallian and Walrasian equilibrium conditions; Lagged market equilibrium, Multi-market equilibrium -General equilibrium systems of Walras and Debreu; Conditions of stability of equilibrium.

Basic Readings :

1. Allen R.G.D- Mathematical Economics
2. Arrow, K. J. - Hand book of Mathematical Economics
3. Henderson, J.M. - Micro economic theory; A mathematical approach
4. Chiang, A.C.- Fundamental Methods of Mathematical Economics

BASIC ECONOMETRICS OR

**Full Marks : 70 for End Semester
30 for I.A./M.S.
Total Marks : 100**

Module 1 : Basic Econometrics

Nature, Meaning and scope of econometrics; Simple and general Linear regression model-Assumptions, Estimation (through OLS» approach) and properties of estimators; Gauss-Markov Theorem; Concepts and derivation of R^2 and adjusted R^2 , Concept and analysis of variance approach and its application in regression analysis; Estimation of non-linear equations-parabolic, exponential, geometric, hyperbolic, modified exponential; Gornitz and logistic functions.

Module 2 : Problems in Regression Analysis

Nature test, consequences and remedial steps of problems of heteroscedasticity; Multicollinearity and auto-correlation; Problems of specification error; Errors of measurement.

Module 3 : Regression with Qualitative Independent Variables

Dummy variable technique-testing structural stability of regression models comparing to regression, interaction effects, seasonal analysis, piecewise linear regression, use of dummy variables regression with dummy dependent variables; The LPM, Logit, Probit and Tobit Models-Applications.

Module 4 : Dynamic Econometric Model

Autoregressive and distributed lag models; Koyak Model, partial adjustment model, adaptive expectations; instrumental variables problems of auto-correlation Application; Almon approach to distributed lag models; Error correlation mechanism, Causality test, Granger's Test and Sim's Test.

Basic Readings :

1. Amemiya, T. (1985), Advanced Econometrics, Harvard University' , Press, Cambridge, Mass.

2. Baltagi, B.H., (1998). Econometrics, Springer, New York .. , Dongherty, C. (1992), Introduction to Econometrics, Oxford University Press, New York.
3. Goldberger, A.S. (1998), Introductory to Econometrics, Harvard University Press, Cambridge, Mass, r Gujarat C.D.N., (1995), Basic Econometrics (2nd Edition), McGraw Hill, New Delhi.
4. Hill, R.C., E.G. William and G.G. Judge (1997), Undergraduate Econometrics, Wiley, New York.
5. Kennedy, P. (1998), A Guide to Econometrics (4th Edition) ,MIT Press, New York.
6. Kmenta, J. (1997) Elements of Econometrics (Reprint Edition), University of Michigan Press, New York.
7. Koutsoylannis, A. (1977), Theory of Econometrics ((Edition), The Macmillan Press Ltd., London.
8. Krishna, K. L. (Ed) (1997) Econometrics Applications in India, Oxford University-Press, New Delhi.
9. Application in India, Oxford University Press, New Delhi.
10. Maddala, G.S. (Ed.) (1993) Econometrics Methods and Application (2 Vols), Aldershot, U.K.
11. Theil, H. (1981) Introduction to Econometrics, Prentice Hall of India, New Delhi.

AGRICULTURAL AND RURAL ECONOMY OR

**Full Marks : 70 for End Semester
30 for I.A./M.S.**

Total Marks : 100

Module 1 : Agriculture and Economic Development

Nature, and scope of agricultural and rural economics: Traditional agriculture and its modernization; Role of agriculture in economic development; interdependence between agriculture and industry-some empirical evidence Models of interaction between agro and the rest of the economy; Agricultural development, poverty and environment.

Module 2 : Diversification of Rural Economic Activities

Livestock economics- livestock resources and their productivity; Problems of marketing; White revolution; Fishery and poverty development; Forestry, horticulture and floriculture; Issues and problems in rural industrialization and development of agro based industries .

Module 3 : Economic of Rural Infrastructure

Use of Land, water and energy; rural transport, communication, .banking, extension services, role, modes and problems of rural electrification; rural social infrastructure - education and health and information dissemination.

Module 4 : Agricultural Production and Productivity

Agricultural production resource use and efficiency production function analyses in agriculture. Factor combination and resources substitution cost and supply curves size of farm and laws of returns theoretical and empirical findings; Farm budgeting and cost of concepts; Supply response of individual crops and aggregate supply; Resource use efficiency in traditional agriculture; Technical change, Labour absorption and gender issues in Agricultural Service.

Module 5 : Land Reforms and Land Policy

Principles of land utilization; Land distribution structure and trends; Land values and rent; Land tenures and, farming systems- peasant, capitalist, collective and state farming; Tenancy and crop sharing-forms, incidence and effects; Land reform

measures and performance; Women and land reforms; Problems of marginal and small farmers.

Basic Readings :

1. Bhaduri, A. (1984), The Economic Structure of Backward Agriculture, Macmillan, Delhi.
2. Bilgrami, S.A.R. (1996) Agricultural Economics, Himalaya Publishing House, Delhi.
3. Dantwala, M.L. et. al (1991) Indian Agricultural Development Since Independence, Oxford and IBH, New Delhi.
4. Government of India (1976), Report of the National Commission on Agriculture, New Delhi.
5. Government of India, Economic Survey (Annual),New Delhi
6. Gulati, A. and T. Kelly (1999), Trade Liberalization and Indian Agriculture, Oxford University Press, New Delhi.
7. Joshi P.C. (1975), Land, Reforms in India: Trends and Prospects, Allied Publishers, Bombay.,
8. Kahlon, A.S. and D.S. Tyagi (1983), Agriculture Price Policy in India, Allied Publishers, New Delhi.
9. Rao C. H. Hanumantha (1975), Agricultural Growth, Rural Poverty and Environmental Degradation in India, Oxford University Press, New Delhi.
10. Reserve Bank of India, Report on Currency and Finance (Annual), Mumbai.

THEORIES OF DEMOGRAPHY

**Full Marks : 70 for End Semester
30 for I.A./M.S.
Total Marks : 100**

Module 1 : Population and Development

Meaning and scope of Demography; Components of population -growth and their interdependence, Measure of Population change; structure, distribution and sources of population data, Theories of population-Malthus, Optimum Theory of Population; Theory of demographic transition, view of Meadows, Enke and Simon population and development.

Module 2 : Structure of Population

Population trends in the Twentieth Century; Population explosion- Threatened or real, distant or imminent, International aspects of population growth and distribution, pattern of age and sex structure in more developed and less developed countries, determinate, of age and sex structure, demographic effect of sex and age structure, economic and social implications age structure Demographic effect of sex and age structure economic and social implication, age pyramids and projections - individual ageing and population ageing.

Module 3 : Fertility, Nuptiality and Mortality

Importance of study of Fertility - total fertility rate, gross reproduction rate and net reproduction rate, levels and trends of fertility in more less developed countries, factor affecting fertility - socio- economic factors economic status, health, education nutrition caste, religion race, region rural urban status of husband and wife, nuptiality concept and analysis of marital status, single mean age at marriage, synthetic cohort methods, trends in age at marriage, Mortality - Death rate crude and age specific Mortality at birth and infant mortality rate, Factors for decline in Mortality in recent past.

Module 4 : Migration and Urbanization

Concept of -types-temporary, internal and international; International migration-its effect on population growth and pattern; factors affecting migration; Theories of migration related to internal migration Urbanization - growth and distribution of rural- urban population developing countries.

Basic Readings :

1. Agarwala, S.N. (1972), India's Population Problem, Tata McGr Hill Co., Bombay.
2. Bose, A. (1996), India's Basic Demographic Statistics, B. Publishing Corporation, New Delhi
3. Bogue, D.J. (1971), Principles of Demography, John Wiley, N York.
4. Chenery, H. and T.N.Srinivasan, (Eds) (1989), Handbook Development Economics, Vol. 1 and 2, Elsevier, Amsterdam
5. Choubey, P.K. (2000), Population Policy in India, Kanish Publication, New Delhi.
6. Coale, A. J. and E.M. Hoover (1958) Population Growth a Economic Development in Low Income Countries: A case st of India's prospects, Princeton Univearsity Press, Princeto
7. Gulati, S.C. (1988), Fertility in India; An Econometric Study A Metropolis, Sage Publications, New Delhi.
8. Simon, J.L. (1992), Population and Development in Pel Countries, Princeton University Press J.
9. Srinivasan, K. (1988), Basic.Demographic Techniques a Applications, Sage Publications, New Delhi.

SEMESTER-IV

CC-10

Full Marks : **70 for End Semester**
 30 for I.A./M.S.
Total Marks : **100**

ECONOMICS OF EDUCATION, HEALTH AND INDIAN ECONOMY

Module 1 : Economics of Education

Education as an instrument of economic growth; Human capital -Human capital Vs Physical capital, components of human capital;, demand for education - private and social demand; determinants of demand; cost of education- expenditure on education, private and social costs and wastage and stagnation; benefits of education -direct and indirect, private and social benefits; Educational planning and economic growth - cost benefit analysis, production function models; education and labour market -effects of education, ability and family background on earnings, poverty and income distribution; economics of educational planning in developing countries with special emphasis on India.

Module 2 : Economics of Health

Health dimensions of development; determinants of development-poverty, malnutrition and environmental issues; economic dimensions of health care-demand and supply of health care; Financing ,of health care and resource constraint; the concept of human life value; theory and empirical studies of production of health care; inequalities of health - class and gender perspectives; institutional issues in health care delivery.

Module 3 : The Industrial Sector

Industrial policy: Public sector enterprise and their performance; problem of sick units in India; Privatization and disinvestments debate; Growth and pattern of industrialization; Small scale sector; Productivity in industrial sector; Exit policy issues in labour market reforms; Approaches for employment-generation.

Module 4 : Financial and Monetary System

Financial sector reforms; Interest rate policy; Review of monetary policy; Review of Monetary policy of RBI, Money and Capital Markets; Working of SEBI in India.

Module 5 : External Sector

Balance of Payment; Issues in export import policy and FEMA; Exchange rate policy; Foreign capital and MNC's in India; the Progress of trade reforms in India.

Module 6 : Economic Reforms

Rationale of external and internal reforms; Globalization of Indian Economy; WTO and its impact on different sectors of the economy; Need for and issues in good governance; Issues of competition and safety nets in Indian economy.

Readings :

1. Ahluwalia, L.I. and L.:tvf.D.Litteld (Eds) (1999), *India's Economic Reforms and Development (Essays in honor of Manmohan Singh)*: Oxf01-d University Press, New Delhi.
2. Bardhan, P.K. (9th Edition) (1999), *The Political Economy of Development in India*, Oxford Univesity Press, New Delhi.
3. Bawa, R.S. and P.S. Raikhy (Ed) (1997), *Structural Changes in the Indian Economy*, Guru Nanak Dev University Press, Amritsar.
4. Brahmanand, P.R. and \'.R. Panchmukhi (EDs) (2001») *Development Experience in the Indian Economy Inter state perspectives*, Bookwel1, Delhi.
5. Chakravarty, S. (1987), *Development Planning : The Indian Experience*, Oxford University Press, New Delhi.
6. Dantwala, M.L"(1996), *Dilemmas of Growth: The Indian Experience*, Sage Publications, New Delhi.
7. Datt, R. (Ed) (2001), *Second Generation Economic Reforms in India*, Deep & Deep Publications, New Delhi.
8. Government of India, *Economic Survey, (Annual)*, Ministry of Finance, New Delhi.
9. Jain, A.K. (1986),. *Economc Planning in India*, Ashish Publishing House, New Delhi.
10. Jalan, B. (1992), *The Indian Economy Problems and Prospect*, Viking.-New Delhi.
11. Jalan, B. (1996), *India's Economic Policy- Preparation for the Twenty First Century*, Viking, New Delhi.
12. Joshi, V. and L. M.D. Little (1999), *India Macro Economics and Political Economy, 1964,1991*, Oxford University Press, New Delhi.
13. Parikh, K.S. (1999), *India Development Report- 1999-2000*, Oxford University Press, New Delhi.
14. Reserve Bank of India, *Report on Currency and Finance (Annual)*.
15. Sandesra, J.C. (1992), *Industrial policy and Planning, 1947*
16. Baumol, W.J. and W.E. Gates, (1988), *The Theory of environmental Policy* 2nd edition, Cambridge University Press, Cambridge.

17. Burman, P. (Ed), (1995), *Health Sector Reform in Developing Countries : Making Health Development Sustainable*, and Boston : Harvard Series on Population and International Health.
18. Blaug, M. (1972), *Introduction to Economics of Education*, Penguin, London.
19. Bromely, D. W. (Ed), (1995), *Hand Book of Environmental Economics*, Blackwell, London.
20. Conn, E. and T. Gaske (1989), *Economics of Education*, Pergamon Press, London.
21. Fisher, A C. (1981), *Resource and Environmental Economics*, Cambridge.
22. Hanley, N., J.E. Shogem and B. White (1997), *Environmental Economics in Theory and Practice"* Macmillan.
23. Hussen, A.M. (1999), *Principles of Environmental Economics*, Routledge, London.
24. Jeroen, C, J.M. ; Van Den Bergh, (1999), *Hand Book of Environmental and Resource Economics*, Edward Flgar Publishing Ltd., U.K.
25. Klarman, H.E., (1965), *The Economics of Health*, Columbia University- Press, New York.
26. Kolstad, C.D., (1999), *Environmental Economics*, Oxford University Press New Delhi.
27. Pearce, D. W. and R. Turner (1991), *Economics of Natural Resource Use and Environment*, John Hopkins University Press-, Baltimore.
28. Perman, R. Ma and J. McGilvery (1996), *Natural Resource and Environmental Economics*, Longman, London.
29. Sfiankar, U. (Ed) (2001); *Environmental Economics*, Oxford University .Press, New Delhi.
30. Schultz, T. W. (1971), *Investment i n Human Capital*, Free Press, New York.
31. Tietenberg, T. (1994). *Environmental Economics and Policy*, Harper Collins, New York

SEMESTER-IV

CC-11

Full Marks : 70 for End Semester
30 for I.A./M.S.

Total Marks : 100

APPROACHES TO DEVELOPMENT AND INTERNATIONAL ECONOMICS

Module 1 : Approaches to Development

Partial theories of growth and development-vicious circle of poverty, circular causation, unlimited supply of Labour, Big push, Balanced Growth, Unbalanced Growth, Critical Minimum Effort Thesis, Low-Income Equilibrium Trap, Dualism-Technical, Behavioral and Social, Rains and Fei Model, Dependency Theory of Development; Structural View of Development.

Module 2 : Theories of Development

Classical Theory of Development –Contribution of Adam Smith Ricardo, Malthus and James Mill, Karl Marx and Development of Capitalistic Economy-Theory of Social Change, Surplus Value and Profit, Crisis in Capitalism.

Module 3 : Macroeconomic Policies for Development And Allocation of Resources

Role of monetary and Fiscal Policies in Developing Countries Inflation and Growth External Resources – FEI, Aid vs. Trade, Technology inflow, Need for investment criteria in Developing Countries-present Vs. Rapture, Alternative Investment Criteria, Cost-Benefit Analysis, Shadow Price.

Module 4 : Balance of Payments

Meaning and components of Balance of Payments; equilibrium and disequilibrium in the Balance of Payments; 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 monetary approach to , the Theory of Balance of Payments adjustment; foreign trade multiplier with and without foreign repercussions and determination of National 9 Income and output; relative merits and demerits of fixed and flexible exchange rates in the context of growth and development in Developing Countries.

Module 5 : Theory of Regional Blacks And Trade Policies in India

Rationale and economic progress of SAARC/SAPTA and ASFAN Regions. Problems and prospects of forming a customs union in the Asian Region. Regionalism (EU, NAFTA); Multilateralism and WTO; need adequacy and determinants of International reserves,

conditionality clause of IMF; emerging International monetary system with special relevance to Post-Maastricht Development and Developing Countries; Theory of short term capital movement; and East Asian Crisis and Lessons for developing countries; International Trade and Financial Institutions, Functions of GATT/WTO (TRIPS, TRIMS), UNCTAD, IMF, World Bank, W.T.O. Trade Problems and Trade Policies in India during the last five decades; Recent Changes in the Direction and Composition of India's foreign Trade. Rationale and impact of trade Reforms since 1991. On Balance of Payments, Employment and Growth Problems of India's International debt working regulation of MNC's in India, Export Promotion in India.

Readings :

1. Crockett, A-International Money : Issues and Analysis
2. Heller H, Robert- International Monetary Economics
3. Aggrawal M. R. – Regional Economics
4. Bhagwati, J. N. – India : Planning for Industrialization.
5. Adelman, I. (1961), Theories of Economics Growth and Development, Stanford University Press, Stanford.
6. Behrman, S. and T. N. Srinivasan (1995), Hand Book of Development Economic, Vol-3, Elsevier, Amsterdam.
7. Brown, M. (1966), On the Theory and Measurement of Technical Change, Cambridge University Press, Cambridge, Mass.
8. Chenery, H. B. and T. N. Srinivasan (Eds) (1989), Hand Book of Development Economics, Vol.-1 and 2, Elsevier, Amsterdam.
9. Dasgupta, P. (1993), An Enquiry into Well-Being and Destitution, Clarendon Press, Oxford.
10. Ghatak, S. (1986), An Introduction to Development Economics, George Allen And Unwin, London.
11. Gills, M., D. H. Perkins, M. Romer and D. R. Snodgrass (1992), Economics of Development, 3rd Edition, W. W. Norton, New York.
12. Gimmell, N (1987), Surveys in Development Economics, Blackwell, Oxford.
13. Higgins, B. (1959), Economic Development, W. W. Norton, New York.
14. Hogendbrn, J. (1996), J. (1996), Economic Development, Addition, Wesley, New York.
15. Kahkonon, S. and M. Olson (2000), A New Institutional Approach to Economic Development, Vistaar.
16. Kindleberger, C. P. (1977), Economic Development, 3rd Edition, McGraw Hill, New York.
17. Meier, G. M. (1995), Leading Issues in Economic Development, Oxford University Press, New Delhi.

EC-03

Full Marks : 70 for End Semester
30 for I.A./M.S.
Total Marks : 100

MACROECONOMICS AND OPERATIONAL ANALYSIS OR

Module 1 : Determination of Income and Fluctuations in Income

Classical and Keynes Macro system: Static and dynamic multiplier; Determinants of Investment; Accelerator, Trade Cycle, Model of Samuelson and Hicks, Goodwin, Kalecki and Philips; Stabilization Policy; Rational Expectations and Economic policy; Lucas's Model.

Module 2 : Growth Models

Harrod problem; Neo-classical model of growth, Solow and Meade growth models with technical progress; optimal growth; golden rule of accumulation; 'Turnpike theorem; Endogenous growth.

Module 3 : Game Theory, Linear Programming and Input-Output Analysis

Concept of Game-two person zero sum game, Pay-off matrix, pure and mixed strategies, max/min and minimax solutions, saddle point solution; Non constant sum game' Prisoner's dilemma' Linear Programming primal and dual problem, Simplex Method; Transport and storage problems and other applications of Linear Programming in Economics; Input-Output Analysis Open and closed systems, Simon Hawkins condition; Leontief's dynamic system; Testing consistency of planning models.

Readings :

1. Alien, R.G.D. (1976), Mathematical Economics, Macmillan; London.
2. Arrow, K.J. and M, Intrilligator, (Eds) (1982), Hand Book of Mathematical Economics, Vol. 1,2 and 3, North Holland, Amsterdam.
3. Henderson, J.M. and R.R. Quandt (1980), Micro Economic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
4. Kothari, C.R. (1992), An Introduction to Operations Research, Vikas Publishing House Pvt. Ltd., Delhi.
5. Kuhn, Harold W. (Ed), (1997), Classics in Game Theory, Princeton University Press, Princeton.
6. Mustafi, C. K. (1992), Operations Research; Methods and Practice, Weley Eastern, New Delhi.
7. Nash, J. F. (1996), Essays on Game Theory, Cheltenham, U.K.

SIMULTANEOUS EQUATION SYSTEM OR

**Full Marks : 70 for End Semester
30 for I.A./M.S.**

Total Marks : 100

Module 1 : Simultaneous Equation System

Simultaneous equation bias and inconsistency of OL estimators; Structural and Recursive from Models; the identification problem- Rules of identification; order and rank conditions.

Module 2 : Simultaneous Equation Models-2

Methods of estimating simultaneous equation system; Recursive methods and OLS; Indirect Least squares (ILS); 2 SLS, 3SLS an ML methods-Applications.

Module 3: Time Series Analysis

Stationary, unit roots, co-integration-spurious regression, Dickey Fuller test" Engle Granger test, Random walk model, Forecasting with ARIMA modelling; Box-Jenkins methodology; Vector auto-regression; Problems with VAR Modeling-Applications; Time varying parameters and Kalman filter.

Module 4: Multivariate Analysis

Multivariate probability distribution, marginal and conditional probability distribution, multivariate normal distribution and its properties) Discriminate analysis.

Readings :

1. Amemiya, T. (1985) Advanced Econometrics, Harvard University Press, Cambridge, Mass.
2. Baltagi, B. H., (1998). Econometrics, Springer, New York.
3. Dongherty, C. (1992), Introduction to Econometrics, Oxford University Press, New York.
4. Goldberger, A. S. (1998), Introductory to Econometrics, Harvard University Press, Cambridge, Mass. Gujarati, D. N., (-1995), Basic Econometrics, 2nd Edition, McGraw Hill, New Delhi.
5. Hill, R.C., E.G. William and G.G. Judge (1997), Undergraduate Econometrics, Wiley, New York.
6. Kennedy, P. (1998), A Guide to Econometrics, 4th Edition, MIT Press, New York.
7. Kmenta, J. (1997) Elements of Econometrics (Reprint Edition), University of Michigan Press, New York.
8. Koutsoyannis, A. (1977), Theory of Econometrics (2nd Edition), The Macmillan Press Ltd., London.

9. Krishna, K. L. (Ed) (1997) *Econometrics Applications in India*, Oxford University Press, New Delhi.
10. *Application in India*, Oxford University Press, New Delhi.
11. Maddala, G.S. (Ed.) (1993) *Econometrics Methods and Application* (2 Vols), Aldershot U.K

Additional Readings Module : 1 & 2

12. Chow, G.e. (1983) *Econometrics*, IvfcGraw Hill, New York. Intrilligator, M. D. (1978) *Econometric Methods, Techniques and Application*, Prentice'Hall!, Englewood Cliffs, New Jersey. Pindyck, R.S. and D. I. Rubinfeld (1976) *Econometrics Models and Economic Foreacasts*, Mcfiraw Hill, Kogakusha, Tokyo.

Module 3 & 4

13. Dhrymes *P. J.* (1970), *Econometrics - Statistical Foundation and Application*, Harper and Row Publishers, New York. Franses, P.R (1998) *Time Series Models for Business and Economic Forecasting*, Cambridge University Press, Cambridge. Hansen P.R. and S. Johansson (1998), *Workbook on Cointegration*, Oxford University Press, New York. Intrilligator, *M. D.* (1978) *Econometrics Methods, Techniques and Application*; Prentice Hall, Englewood Cliffs, New Jersey.

AGRICULTURAL AND RURAL PROBLEMS OR

**Full Marks : 70 for End Semester
30 for I.A./M.S.**

Total Marks : 100

Module 1 : Rural Labour Market

Rural Labour Supply, Interlocking of factor markets; Mobility of labour and segmentation in labour-markets, marginalisation of rural labour; Nature extend and trends in rural unemployment Agricultural wages in India, male-female wage differences, Non-Agricultural rural employment- trends and determinants.

Module 2: Rural Finance

Role of capital and rural credit; Organized and unorganized capital market; rural savings and capital formation; Characteristics and sources of rural credit - Institutional and non institutional; reorganization of rural credit- cooperatives, commercial banks, Regional rural banks, Role of NABARD.

Module -3 : Cooperation in India

Cooperative movement; Genesis and growth of cooperative sector; agricultural cooperation in India; Problems and prospects of cooperative institutions.

Module 4 : Agricultural Prices

Marketing and state Policy; Agricultural markets and marketing efficiency; Marketing functions and costs; Market structure and imperfections regulated marketed and marketable and marketable surplus Behaviour of agricultural price - Cabweb modle Price and income stability; State policy with respect to agricultural marketing Warehousing; Prices, Taxation and crop insurance; Terms of trade between agriculture and non-agricultural Prices; Need for state intervention; Objectives of agricultural, Price policy; instruments and evaluation; Food security India and public distribution system.

Module 5 : Agricultural Growth in India

Recent trends in agricultural growth in India, Inter regional variation in growth of output and productively , cropping pattern shifts, supply of inputs - irrigation power, seed and fertilizers; Pricing of inputs and role of subsidies, distribution of gains from technological change Role of public investment and capital formation in Indian agriculture Strategy of agricultural development and technological progress Sustainable agriculture- indigenous practices; Bio-technologic practices and growth potential.

Module 6 : Agricultural And External Sector

International Trade in agricultural commodities; Commodity agreements-Role of World-Trade Organization, Issues in liberalization agreement of domestic and International trade in agriculture- Nature and feature of agri-business; Role of MNCs Globalization of Indian economy and problems and prospects of Indian Agriculture Impact of World Trade Organization on Indian Agriculture.

Readings :

1. Bhaduri, A. (1984), *The Economic Structure of Backward* Macmillan, Delhi.
2. Bilgrami, S.A.R. (1996), *Agricultural Economics*, Hima U Publishing House, Delhi.
3. Dantwala, M.L. et. al (1991) *Indian Agricultural Development Since independence*, Oxford and IBM, New Delhi.
4. Government of India (1976), *Report on the National Commission, - Agriculture*, New Delhi.
5. Government of India, *Economic Survey (Annual)*, New Delhi,
6. Gulati, A. and T. Kelly (1999) *Trade Liberalization and Ind Agriculture*, Oxford University Press, New Delhi.
7. Joshi, P.C. (1975) *Land Reforms in India, Trends and Prospects*, Allied Publishers, Bombay.

DEMOGRAPHIC FEATURES OF INDIA

Full Marks :	70 for End Semester
	30 for I.A./M.S.
Total Marks :	100

Module 1 : Demographic Data Base in India

Study of census in India - Methodology and characteristics of census; nature of information collected in 1971, 1981, 1991 and 2001 census' India; National Family Health Survey 1 and 2 and rapid household survey, Changing characteristics of population in India; Population growth rates, trend and regional variations in sex ratio; Age structure population, foetal, infant and child mortality rates, Maternal mortality rates; Life expectancy; Appraisal of Kerala Model; Pattern of urbanization and Migration in India.

Module 2 : Population and Development with Reference to India

Population, economy and environment linkages-population, health, nutrition, productivity nexus, Population and human development issues; Culture and fertility, Education and fertility; demography and household economic behaviour.

Module 3 : Population Policy in India

Evolution of population policy in India-shift in policy from population control to family welfare, to women empowerment; Family planning strategies and their outcomes, Reproductive health, maternal nutrition and child health policies; Population and strategies for human development of different social groups; Social impact of new productive techniques and their regulation; The new population policy; Tasks before the National Population Commission.

Readings :

1. Agrawala, S. N. – India's Population Problems.
2. Bose, A. – India's Basic Demographic Statistics.
3. Bogue, D. J. – Principles of Demography
4. Choubey, P. K. – Population Policy in India.

COMPULSORY COURSE

DISSERTATION/PROJECT WORK

Full Marks :	60 for Written Work & 40 for Viva-Voce Examination
Total Marks :	100