



M.D.S.U, AJMER

SYLLABUS

M.A. ECONOMICS
(SEMESTER SCHEME)

I & II Semester Examination 2026-2027

III & IV Semester Examination 2027-2028

MASTER OF ARTS IN ECONOMICS

Scheme of Evaluation

(A) Internal Evaluation – 30 Marks

(i) For Affiliated Colleges

The internal assessment shall consist of the following components: -

- First Internal Test – 10 Marks
- Second Internal Test – 10 Marks
- Hand written Assignment – 05 Marks
- (to be written in approximately 500 words)
- Attendance – 05 Marks

Total – 30 Marks

(ii) For University Departments

The concerned Department shall devise its own scheme for Internal Assessment and intimate the same to the University Examination Section.

Both the University Department and the Affiliated Colleges shall submit the consolidated Internal Assessment marks (out of 30 marks) to the Examination Section within the prescribed time.

The detailed records and supporting documents relating to Internal Assessment shall be maintained by the respective Departments/Colleges in accordance with the Standard Operating Procedure issued by the University Examination Section.

(B) End Semester Examination – 70 Marks

There shall be a Terminal Examination at the end of each Semester carrying 70 marks. The question paper shall comprise three sections **Section A, Section B and Section C.**

Section A

Section shall be of **20 marks** and consist of **10 questions** carrying **2 marks** each to be answered in approximately *20 words* each. All questions shall be compulsory. The examiner shall set the question paper choosing at least 3 questions from each unit.

Section B

Section shall be of **30 marks** and consist of **9 questions** carrying **5 marks** each to be answered in approximately *250 words* each. A Candidate shall attempt any six questions. The examiner shall set the questions ensuring that at least three questions are drawn from each Unit.

Section C

Section shall be of **20 marks** and consist of three questions carrying 10 marks each to be answered in *500 words* each. A Candidate shall attempt any two questions. The examiner shall set one question from each Unit.

Distribution of Marks Component: -

- **Internal Evaluation – 30 marks**
- **End-Semester Examination – 70 marks**

Note: –

- (i)** For Non- Collegiate Students, there shall be only One Terminal Examination of 100 containing the Section A, B and C. (Theory Paper will be of 70 Marks, the marks obtained from 70 Marks

will be proportionately upgraded to as marks obtained from 100 Marks and will be awarded in Mark sheet.

- (ii) The examiner shall ensure adequate coverage of the prescribed syllabus while setting the question paper and, maintain a balanced representation of all Units.
- (iii) The Teacher concerned, shall upload the marks online and submit awards in **3 Copies**, one will be retained by the Head / Principal and Two Copies of awards duly signed both by the Head/ Principal and the Teacher concerned shall be sent to the University Examination Section.
- (iv) A Copy of the Proforma shall be sent every college/ department by the University Examination Section.
- (v) The student has to qualify both the Internal Assessment and External Assessment separately. The minimum qualifying marks in both shall be 40 percent.
- (vi) The scheme will be applicable only to Major/ Multidisciplinary Subject (Not to AEC, SEC and VAC) opted by the student.

MASTER'S PROGRAMME IN ECONOMICS

Credit Score and Scheme

TABLE 1: STRUCTURAL FRAMEWORK OF THE TWO YEARS M.A./ M.Com. PROGRAM UNDER NEP-2020				
SEMESTER	SEM-I	SEM-II	SEM-III	SEM-IV
Core Courses	DCC-01-Th (4 Cr) DCC-02 Th (4 Cr) DCC-03 Th (4 Cr) DCC-04 Th (4 Cr) DCC-05 Th (4 Cr)	DCC-06-Th (4 Cr) DCC-07 Th (4 Cr) DCC-08 Th (4 Cr) DCC-09 Th (4 Cr)	DCC-10-Th (4 Cr) DCC-11 Th (4 Cr) DCC-12 Th (4 Cr)	DCC-13-Th (4 Cr) DCC-14 Th (4 Cr) DCC-15 Th (4 Cr)
Discipline Specific Elective (DSE)		DSE– 01 Th (4 Cr)	DSE-02 Th (4 Cr) DSE-03 Th (4 Cr)	DSE-04 Th (4 Cr) DSE-05 Th (4 Cr)
Total No. of Credits	20 + 0 = 20	16 + 4 = 20	12 + 8 = 20	12 + 8 = 20
	60 (DCC) + 20 (DSE) = 80			

- Duration of examination of each course shall be 3 hours (for Theory courses) and 4 hours (for Practical courses).
- Each Core and Elective course will be of 100 marks (70+ 30).
- It is mandatory to clear Theory and Internal Assessment courses separately. The minimum qualifying marks in both shall be 40 percent.

The semester wise details of Master's Course are given below.

2.0 SCHEME OF TWO YEARS POSTGRADUATE M.A. / M.Com. DEGREEPROGRAM IN ECONOMICS

ProgrammeCode:

ProgrammeFaculty:

ProgrammeName: TWOYEARPOST-GRADUATEDEGREEPROGRAMINECONOMICS

SCHEMEANDWEIGHTAGEOFCOURSES

S. No.	Course Category	Title ofthe Course	Credits			Credits earned	Evaluation			Remarks
			L	T	P		IA	ESA	Total	
SEMESTER – I										
1	DCC – 01	MICROECONOMICS I	4	0	0	4	30	70	100	All Courses re compulsory Courses
2	DCC – 02	MACROECONOMICS I	4	0	0	4	30	70	100	
3	DCC – 03	STATISTICAL METHODS AND QUANTITATIVE TECHNIQUES I	4	0	0	4	30	70	100	
4	DCC – 04	PUBLIC ECONOMICS I	4	0	0	4	30	70	100	
5	DCC – 05	INDIAN ECONOMIC DEVELOPMENT AND POLICY	4	0	0	4	30	70	100	
			Total Credits in Semester I			20	Total Marks in Semester I		500	
SEMESTER – II										
6	DCC – 06	MICROECONOMICS II	4	0	0	4	30	70	100	
7	DCC – 07	MACROECONOMICS II	4	0	0	4	30	70	100	
8	DCC – 08	STATISTICAL METHODS AND QUANTITATIVE TECHNIQUES II	4	0	0	4	30	70	100	
9	DCC – 09	PUBLIC ECONOMICS II	4	0	0	4	30	70	100	
10	DSE– 01A	INDIAN BANKING SYSTEM	4	0	0	4	30	70	100	Student may

	DSE – 01B	COMPUTER APPLICATION IN ECONOMICS								opt any one
	DSE – 01C	INDIAN FINANCIAL SYSTEM								
			Total Credits in Semester II			20	Total Marks in Semester II		500	
SEMESTER – III										
11	DCC – 10	ECONOMICS OF GROWTH AND DEVELOPMENT I	4	0	0	4	30	70	100	
12	DCC – 11	INTERNATIONAL TRADE AND FINANCE I	4	0	0	4	30	70	100	
13	DCC – 12	DEMOGRAPHY I	4	0	0	4	30	70	100	
14	DSE – 02A	MATHEMATICAL ECONOMICS I	4	0	0	4	30	70	100	Student may opt any one
	DSE – 02B	INDUSTRIAL ECONOMICS I								
	DSE – 02C	AGRICULTURAL ECONOMICS I								
	DSE – 02D	ECONOMICS OF INFRASTRUCTURE I								
15	DSE – 03A	LABOR ECONOMICS I	4	0	0	4	30	70	100	Student may opt any one
	DSE – 03B	ENVIRONMENTAL ECONOMICS I								
	DSE – 03C	HEALTH ECONOMICS I								
			Total Credits in Semester III			20	Total Marks in Semester III		500	
SEMESTER – IV										
16	DCC – 13	ECONOMICS OF GROWTH AND DEVELOPMENT II	4	0	0	4	30	70	100	
17	DCC – 14	INTERNATIONAL TRADE AND FINANCE II	4	0	0	4	30	70	100	
18	DCC – 15	DEMOGRAPHY II	4	0	0	4	30	70	100	
19	DSE – 04A	MATHEMATICAL ECONOMICS II	4	0	0	4	30	70	100	Student may opt any one
	DSE – 04B	INDUSTRIAL ECONOMICS II								
	DSE – 04C	AGRICULTURAL ECONOMICS II								

	DSE – 04D	ECONOMICS OF INFRASTRUCTURE II								
20	DSE – 05A	LABOR ECONOMICS II	4	0	0	4	30	70	100	Students may opt any one
	DSE – 05B	ENVIRONMENTAL ECONOMICS II								
	DSE – 05C	HEALTH ECONOMICS II								
	DSE – 05D	ECONOMETRICS								
			Total Credits in Semester IV			20	Total Marks in Semester IV		500	
		Total Credits in all semester (20+20+20+20)				80	Total Marks in all semesters		2000	

Note:

Course Categories: DCC–Discipline Core Course ;DSE–Discipline Specific Elective;

Contact Hours: Lecture-1 Credit=1Hour/ Week

SEMESTER I

DCC – 01: MICROECONOMICS I

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Introduction and Basic Concepts: Basic Economic Problem - Choice and Scarcity; Deductive and Inductive Methods of Analysis; Positive and Normative Economics; Economic Models; Characteristics of Equilibrium and Disequilibrium Systems.

Demand Analysis

Elasticities (price, cross, income) of demand - theoretical aspects and empirical estimation; elasticity of supply; Theories of demand - utility; indifference curve (income and substitution effects, Slutsky theorem, compensated demand curve) and their applications; Revealed preference theory; Revision of demand theory by Hicks. Recent developments in demand analysis (pragmatic approach and linear expenditure systems); Consumer's surplus.

UNIT II

Theory of Production and Costs: Production function - short period and long period; law of variable proportions and returns to scale; Isoquants - Least cost combination of inputs; Returns to factors; Economies of scale; Multi-product firm; Elasticity of substitution; Euler's theorem; Technical progress and production function; Cobb-Douglas and CES: Cost of Production - Economic cost and accounting cost. Opportunity cost. short run and long run cost curves.

UNIT III

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.

BASIC READING LIST

- Kreps, David M. (1990), A Course in Microeconomic Theory, Princeton University Press, Princeton.
- Koutsoyiannis, A. (1979), Modern Macroeconomics, (2nd Edition), Macmillan Press, London.
- Layard, P.R.G. and A.W. Walters (1978), Microeconomic Theory, McGraw Hill, New York.
- Sen, A. (1999), Microeconomics : Theory and Applications, Oxford University Press, New Delhi.
- Stigler, G. (1996), Theory of Price, (4th Edition), Prentice Hall of India, New Delhi.
- Varian, H. (2000), Microeconomic Analysis, W.W. Norton, New York.

ADDITIONAL READING LIST

- Baumol. W.J. (1982), Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.
- Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.
- Henderson, J.M. and R.E. Quandt (1980), Microeconomic Theory : A Mathematical Approach, McGraw Hill, New Delhi.
- Broadway, R.W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, London.
- Graff, J. De V. (1957), Theoretical Welfare Economics, Cambridge University Press, Cambridge.
- Mishan, E.J. (1969), Welfare Economics : An Assessment, North Holland, Amsterdam.

- Quirk, J. and R. Saposnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.
- Weintrub, E.R. (1974), General Equilibrium Theory, Macmillan, London.
- Arrow, K.J. and M.D. Intriligator (Eds.) (1981), Handbook of Mathematical Economics, Vol. I, North Holland, Amsterdam.
- Borch, K.H. (1968), The Economics of Uncertainty, Princeton University Press, Princeton.

DCC – 02: MACROECONOMICS I

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Nature of Macro Economics & National Income Accounting: Nature and scope of Macro Economics. The background and schools of macroeconomics. Macroeconomic policy: objectives and tools. Main areas of controversies in Macro Economics.

National income accounting in four sector economy. Different forms of national income accounting - social accounting, input-output accounting, flow of funds accounting and balance of payments accounting. Matrix representation of national income. GNP and quality of life.

UNIT II

Consumption Function: Income-consumption relationship - absolute income, relative income, life cycle and permanent income hypotheses.

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.

UNIT III

Supply of Money: Financial intermediation - a mechanistic model of bank deposit determination. Theory of money supply - RBI approach to money supply; High powered money and money multiplier; budget deficits and money supply; control of money supply.

Theory of Employment/Income/ Output: Complete classical model of employment. Keynesian criticism against classical theory. Keynesian theory of employment - partial and general equilibrium.

BASIC READING LIST

- Ackley, G. (1978), Macroeconomics : Theory and Policy, Macmillan, New York.
- Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2 vols.) Oxford University Press, London.
- Branson, W.A. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New York.
- Dornbusch, R. and F. Stanley (1997), Macroeconomics, McGraw Hill, Inc., New York.
- Hall, R.E. and J.B. Taylor (1986), Macroeconomics W.W. Norton, New York.
- Heijdra, B.J. and V.P. Fredericck (2001), Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
- Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.
- Rome, D.L. (1996), Advanced Macroeconomics, McGraw Hill Company Ltd., New York.

- Scarfe, B.L. (1977), Cycles, Growth and Inflation, McGraw Hill, New York.
- Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.
- Survey, M.J.C. (Ed.) (1976), Macroeconomic Themes, Oxford University Press, Oxford.
- Vaish, M. C. Macro Economics.

ADDITIONAL READING LIST

- Duesenberry, J.S. (1949), Income, Saving and the Theory of Consumer Behaviour, Harvard University, Press, Harvard.
- Friedman, M. (1957), The Theory of Consumption Function, Princeton University Press, Princeton.
- Keynes, J.M. (1936), The General Theory of Employment, Interest and Money, Macmillan, London.
- Mueller, M.G. (1966), Readings in Macroeconomics, Holt Rinehart and Winston, New York.
- Culbertson, J.M. (1968), Macroeconomic Theory and Stabilization Policy, McGraw Hill, Kogekosh, Tokyo.
- Chakravarty, S.C. (1985), Report of the Committee to Review the Working of the Monetary System, Reserve Bank of India. Bombay.
- Gupta, S.B. (1995), Monetary Planning in India, Oxford University Press, New Delhi.
- Gurley, J. and E.S. Shaw (1960), Money in a Theory of Finance, Brookings Institution, Washington.
- Mcinen, G.E. (1978), Money, The Price Level and Interest Rates, Prentice Hall of India, New Delhi.
- Reddy, Y.V. (2000), A Review of Monetary and Financial Sector Reforms in India - A Central Banker's Perspective, UBSPD, New Delhi.
- Friedman, M. (1956), Studies in the Quantity Theory of Money, The University of Chicago Press, Chicago.
- Levacic, R. and A. Rebman (1986), Macroeconomics : An Introduction to Keynesian and Neo-Classical Controversies, Macmillan, London.
- Rakshit, M. (1998), Studies in the Macroeconomics of Developing Countries, Oxford University Press, New Delhi.
- Hicks, J.R. (1974), The Crisis in Keynesian Economics, Oxford University Press, New Delhi.
- Jha. R. (1999), Contemporary Macroeconomic Theory and Policy, New Age International (P) Ltd. New Delhi.
- Iaidler, D.F.W. (1977), Demand for Money : Theory and Evidence, Dum-Don Valley, New York.
- Patinkin, D. (1965), Money, Interest and Prices, Harper and Row, New York.
- Gordon, R. and S.G. Harris (1998), Macroeconomics, Addison Wesley, Massachusetts.
- Mankiw, N.G. and D. Romer (Eds.) (1991), New Keynesian Economics, (2 vols.), MIT Press, Cambridge.
- Frisch, H. (1983), Theories of Inflation, Cambridge University Press, Cambridge.
- Hagger, A.J. (1977), Inflation : Theory and Policy, Macmillan, London.
- Hudson, J. (1982), Inflation : A Theoretical Survey and Synthesis, George Allen and Unwin, London.
- Sheffrin, S.M. (1996), Rational Expectations, Cambridge University Press, Cambridge.
- Gordon, R.A. and L.R. Klein (Eds.) (1965), Readings in Business Cycles, Irwin, Homewood.
- Hicks, J.R. (1950), A Contribution to the Theory of Trade Cycles, Clarendon Press, Oxford.
- Lucas, R. (1981), Studies in Business Cycle Theory, M.I.T. Press, Cambridge, Massachusetts.

DCC – 03: STATISTICAL METHODS AND QUANTITATIVE TECHNIQUES I

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Concept of function and types of functions; Limit, continuity and derivative; Rules of differentiation; Interpretation of revenue, cost, demand, supply functions; Elasticities and their types; Multivariable functions; Concepts and types of production functions; Rules of partial differentiation and interpretation of partial

derivatives; Problems of maxima and minima in single and multivariable functions. Concept of integration; Simple rules of integration; Applications to consumer's surplus and producer's surplus; Growth rates and simple properties of time path of continuous variables.

UNIT II

Determinants and their basic properties; Solution of simultaneous equations through Cramer's rule; concepts of matrix - their types, simple operations on matrices, matrix inversion and rank of a matrix; Concept of vector - its properties; Matrices and vectors.

Linear programming - Basic concept; Formulation of a linear programming problem - its structure and variables; Nature of feasible, basic and optimal solution; Solution of linear programming through graphical and simplex method; Statement of basic theorems of linear programming.

UNIT III

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 estimate; Partial and multiple correlation and regression (applications only);

Methods of estimation

of non-linear equations - parabolic, exponential, geometric, modified exponential, Gompertz and logistic relationships.

BASIC READING LIST

- Allen, R.G.D. (1974), *Mathematical Analysis for Economists*, Macmillan Press and ELBS, London.
- Chiang, A.C. (1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.
- Gupta, S.C. (1993), *Fundamentals of Applied Statistics*, S. Chand & Sons, New Delhi.
- Handry, A.T. (1999), *Operations Research*, Prentice Hall of India, New Delhi.
- Yamane, Taro (1975), *Mathematics for Economics*, Prentice Hall of India, New Delhi.
- Gupta, S.P. (2001), *Statistical Methods*, Sultan Chand and Sons

ADDITIONAL READING LIST

- Baumol, W.J. (1984), *Economic Theory and Operations Analysis*, Prentice Hall, Englewood Cliffs, New Jersey.
- Monga, G.S. (1972), *Mathematics and Statistics for Economists*, Vikas Publishing House, New Delhi.
- Chou, Y. (1975), *Statistical Analysis*, Holt, Reinhart and Winston, New York.
- Croxton, Crowden and Klein (1971), *Applied General Statistics*, Prentice Hall of India, New Delhi.
- Millar, J. (1996), *Statistics for Advanced Level*, Cambridge University Press, Cambridge.
- Nagar, A.L. and R.K. Das (1993), *Basic Statistics*, Oxford University Press, New Delhi.
- Sukhatme, P.V. and B.V. Sukhatme (1970), *Sampling Theory of Survey with Applications*, Iowa State University Press, Ames.

DCC – 04: PUBLIC ECONOMICS I

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Role of Government in organized society; Changing perspective-government in a mixed economy: public and private sector, cooperation or competition; Government as an agent for economic planning and development; Club goods; private goods, public goods, and merit goods; Market failure - imperfections, decreasing costs, externalities, public goods.

Private and public mechanism for allocating resources; Problems for allocating resources; Problems of preference revelation and aggregation of preferences; Voting systems; Arrows impossibility theorem.

UNIT II

Allocation of resources - provision of public goods; Voluntary exchange models; Impossibility of decentralized provision of public goods (contributions of Samuelson and Musgrave). Stabilization Policy - Keynesian case for stabilization policy.

Wagner's law of increasing state activities; Wiesman - Peacock hypothesis; Pure theory of public expenditure; Structure and growth of public expenditure; Criteria for public investment; Social cost-benefit analysis - Project evaluation, Estimation of costs, discount rate; Reforms in expenditure budgeting, Programme budgeting and zero-base budgeting.

UNIT III

Theory of incidence; Alternative concepts of incidence - Allocative and equity aspects of individual taxes; Benefit and ability to pay approaches; Theory of optimal taxation; Musgrave optimal budgeting model Excess burden of taxes; Tradeoff between equity and efficiency; Theory of measurement of dead weight losses; The problem of double taxation.

BASIC READING LIST

- Goode, R. (1986), Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.
- Jha, R. (1998), Modern Public Economics, Routledge, London.
- Menutt, P. (1996), The Economics of Public Choice, Edward Elgar, U.K.
- Musgrave, R.A. (1959), The Theory of Public Finance, McGraw Hill, Kogakhusa, Tokyo.
- Musgrave, R.A. and P.B. Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.
- Shoup, C.S. (1970), Public Finance, Aldine, Chicago.

ADDITIONAL READING LIST

- Stiglitz, J.E. (1986), Economics of Public Sector, Norton, New York.
- Dorfman, R. (Ed.) (1970), Measuring the Benefits of Government Investment, Brookings Institution, Washington.
- Barman, K. (1986), Public Debt Management in India, Uppal Publishing House, New Delhi.
- Peacock, A. and G.K. Shaw (1976), The Economic Theory of Fiscal Policy, George Allen and Unwin, London.
- Bhargava, P.K. (1982), Centre State Resource Transfers in India, The Academic Press, Gurgaon.
- Gulati, I.S. (1979), Centre State Financial Relations : An Assessment of the Role of Finance Commission, M.S. University of Baroda, Baroda.

- Reports of various Finance Commissions
- Srivastava, D.S. (Ed.) (2000), Fiscal Federalism in India, Har-Anand Publications Ltd., New Delhi.
- Gandhi, V.P. (1970), Some Aspects of India's Tax Structure, Vora and Company, Bombay.
- Jain, A.K. (1975), Taxation of Income in India, Macmillan Company of India Ltd., New Delhi.

DCC – 05: INDIAN ECONOMIC DEVELOPMENT AND POLICY

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Natural Resource in India- Land, water and minerals population- Size Composition; Quality and Growth Trends. Characteristics of Indian Population through Recent Census, Population Policy and Economic Effects of Population Pressure. Poverty, Unemployment and human development during plan Period- Appraisal of Government Measure India's Human Development Record in Global Perspective.

UNIT II

Agricultural Development in India-Institutional Aspects-Land Reforms, Green Revolution, Technological Aspects- Agricultural inputs and Shifts in Production Function, Agricultural Cost and Price Policy, Agricultural Marketing and Credit, Food Policy and Security, Subsidy and Public Distribution System, Capital Formation in Indian Agriculture- A Need for Second Green Revolution.

UNIT III

Industry- Strategy of Industrial Development and Industrial Policy Reforms, Small Scale and Cottage Industries, Reservation Policy Relating to Small Scale Industries. Sources of Industrial Finance-Banks, Share Market, Insurance Companies, Pension Funds, Non- Banking Sources and FDI, role of Foreign Capital for Direct Investment and Portfolio Investment, Public Sector Reforms, Privatization and Disinvestment.

BASIC READING LIST:

- Dutt and Sundaram: Indian Economy, S. Chand (Latest Edition) (Hindi and English).
- A.N. Agrawal: Indian Economy, New Age International Pub.(P) Limited, (Latest Edition) (Hindi and English).
- Laxmi Narayan Nathuramka, Bhartiya Arthashastra, College Book House, Jaipur (Latest Ed.).
- Mishra & Puri: Indian Economy, Himalaya Publishing House, (Latest Ed.) (Hindi and English).

SEMESTER II

The M.A. Economics Second Semester Examination shall consist of four compulsory Core Course (CCC) papers, each carrying 5 Credits:. Each paper will be of three hours' duration and carry a total of Minimum Marks: 70 marks.

The question paper shall comprise two parts. Part I will consist of 10 compulsory short-answer questions of 2 marks each, to be answered in approximately 50 words, carrying a total of 20 marks.

Part II will carry 50 marks and shall be divided into three units. Each unit will contain three essay-type questions of 10 marks each, requiring answers of approximately 300 words. Candidates will be required to attempt a total of five questions from all the units, with at least one question compulsorily attempted from each unit. In addition, Internal Assessment shall carry 30 marks and will be based on Class Tests, Assignments/Projects, and Attendance

DCC – 06: MICROECONOMICS II

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Monopolistic competition - general and Chamberlin approaches to equilibrium, equilibrium of the firm and the group with product differentiation and selling costs, excess capacity under monopolistic and imperfect competition, criticism of monopolistic competition; Oligopoly - Non-collusive (Cournot, Bertrand, Edgworth, Chamberlin, 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.

UNIT II

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; Theories of rent, wages, interest and profit.

UNIT III

Pigovian welfare economics; Pareto optimal conditions; Social welfare function; Compensation principle; Inability to obtain optimum welfare - Imperfections, market failure, decreasing costs, uncertainty and non-existent and incomplete markets; Theory of Second Best - Arrow's impossibility theorem; equity- efficiency trade off.

BASIC READING LIST

- Kreps, David M. (1990), A Course in Microeconomic Theory, Princeton University Press, Princeton.
- Koutsoyiannis, A. (1979), Modern Macroeconomics, (2nd Edition), Macmillan Press, London.
- Layard, P.R.G. and A.W. Walters (1978), Microeconomic Theory, McGraw Hill, New York.
- Sen, A. (1999), Microeconomics : Theory and Applications, Oxford University Press, New Delhi.
- Stigler, G. (1996), Theory of Price, (4th Edition), Prentice Hall of India, New Delhi.
- Varian, H. (2000), Microeconomic Analysis, W.W. Norton, New York.

ADDITIONAL READING LIST

- Baumol. W.J. (1982), Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.
- Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.
- Henderson, J.M. and R.E. Quandt (1980), Microeconomic Theory : A Mathematical Approach, McGraw Hill, New Delhi.
- Broadway, R.W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, London.
- Graff, J. De V. (1957), Theoretical Welfare Economics, Cambridge University Press, Cambridge.
- Mishan, E.J. (1969), Welfare Economics : An Assement, North Holland, Amsterdam.
- Quirk, J. and R. Saposnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.
- Weintrub, E.R. (1974), General Equilibrium Theory, Macmillan, London.
- Arrow, K.J. and M.D. Intrilligator (Eds.) (1981), Handbook of Mathematical Economics, Vol. I, North Holland, Amsterdam.
- Borch, K.H. (1968), The Economics of Uncertainty, Princeton University Press, Princeton.

DCC – 07: MACROECONOMICS II

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Neo-classical and Keynesian Synthesis: Neo-classical and Keynesian views on interest and income, The IS-LM model; Extension of IS-LM model with government sector, Relative effectiveness of monetary and fiscal policies; Extension of IS-LM models with labour market and flexible prices.

UNIT II

Pre & post-Keynesian Demand for Money: Fisher's , Cambridge and Keynesian views on money. Post-Keynesian approaches to demand for money - Patinkin and the Real Balance Effect, Approaches of Baumol and Tobin; Friedman and the modern quantity theory.
Keynesian and monetarist debate: basic tenets, policy implications and evidence supporting monetarism.
Macroeconomics in an Open Economy: Monetary approach to balance of payments. Fiscal policy and crowding out - direct and indirect crowding out. Crowding out in Aggregate demand and Aggregate Supply Model. Transmission mechanism of money supply. Relative effectiveness of monetary and fiscal policy - empirical evidences.

UNIT III

Theory of Inflation: Classical, Keynesian and Monetarist approaches to inflation; Structural theory of inflation; Philips curve analysis - Short run and long run Philips curve; Samuelson and Solow- the natural rate of unemployment hypothesis; Tobin;s modified Philips curve; Adaptive expectations and rational expectations Framework for monetary policy Rules versus discretion. Recent developments in monetary policy conduct - interest rate versus high powered money.
Business Cycles: Theories of Schumpeter, Kalador, Samuelson and Hicks, Goodwin's model; Control of business cycles - relative efficacy of monetary and fiscal policies.
New Classical Macroeconomics: The new classical critique of micro foundations, the new classical approach; Policy implications of new classical approach - empirical evidence.

BASIC READING LIST

- Ackley, G. (1978), *Macroeconomics : Theory and Policy*, Macmillan, New York.
- Blackhouse, R. and A. Salansi (Eds.) (2000), *Macroeconomics and the Real World* (2 vols.) Oxford University Press, London.
- Branson, W.A. (1989), *Macroeconomic Theory and Policy*, (3rd Edition), Harper and Row, New York.
- Dornbusch, R. and F. Stanley (1997), *Macroeconomics*, McGraw Hill, Inc., New York.
- Hall, R.E. and J.B. Taylor (1986), *Macroeconomics* W.W. Norton, New York.
- Heijdra, B.J. and V.P. Fredericck (2001), *Foundations of Modern Macroeconomics*, Oxford University Press, New Delhi.
- Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
- Rome, D.L. (1996), *Advanced Macroeconomics*, McGraw Hill Company Ltd., New York.
- Scarfe, B.L. (1977), *Cycles, Growth and Inflation*, McGraw Hill, New York.
- Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publications, New Delhi.
- Survey, M.J.C. (Ed.) (1976), *Macroeconomic Themes*, Oxford University Press, Oxford.
- Vaish, M. C. *Macro Economics*.

ADDITIONAL READING LIST

- Duesenberry, J.S. (1949), *Income, Saving and the Theory of Consumer Behaviour*, Harvard University, Press, Harvard.
- Friedman, M. (1957), *The Theory of Consumption Function*, Princeton University Press, Princeton.
- Keynes, J.M. (1936), *The General Theory of Employment, Interest and Money*, Macmillan, London.
- Mueller, M.G. (1966), *Readings in Macroeconomics*, Holt Rinehart and Winston, New York.
- Culbertson, J.M. (1968), *Macroeconomic Theory and Stabilization Policy*, McGraw Hill, Kogakusha, Tokyo.
- Chakravarty, S.C. (1985), *Report of the Committee to Review the Working of the Monetary System*, Reserve Bank of India. Bombay.
- Gupta, S.B. (1995), *Monetary Planning in India*, Oxford University Press, New Delhi.
- Gurley, J. and E.S. Shaw (1960), *Money in a Theory of Finance*, Brookings Institution, Washington.
- Mcinen, G.E. (1978), *Money, The Price Level and Interest Rates*, Prentice Hall of India, New Delhi.
- Reddy, Y.V. (2000), *A Review of Monetary and Financial Sector Reforms in India - A Central Banker's Perspective*, UBSPD, New Delhi.
- Friedman, M. (1956), *Studies in the Quantity Theory of Money*, The University of Chicago Press, Chicago.
- Levacic, R. and A. Rebman (1986), *Macroeconomics : An Introduction to Keynesian and Neo-Classical Controversies*, Macmillan, London.
- Rakshit, M. (1998), *Studies in the Macroeconomics of Developing Countries*, Oxford University Press, New Delhi.
- Hicks, J.R. (1974), *The Crisis in Keynesian Economics*, Oxford University Press, New Delhi.
- Jha, R. (1999), *Contemporary Macroeconomic Theory and Policy*, New Age International (P) Ltd. New Delhi.
- Laidler, D.F.W. (1977), *Demand for Money : Theory and Evidence*, Dum-Don Valley, New York.
- Patinkin, D. (1965), *Money, Interest and Prices*, Harper and Row, New York.
- Gordon, R. and S.G. Harris (1998), *Macroeconomics*, Addison Wesley, Massachusetts.
- Mankiw, N.G. and D. Romer (Eds.) (1991), *New Keynesian Economics*, (2 vols.), MIT Press, Cambridge.
- Frisch, H. (1983), *Theories of Inflation*, Cambridge University Press, Cambridge.
- Hagger, A.J. (1977), *Inflation : Theory and Policy*, Macmillan, London.
- Hudson, J. (1982), *Inflation : A Theoretical Survey and Synthesis*, George Allen and Unwin, London.
- Sheffrin, S.M. (1996), *Rational Expectations*, Cambridge University Press, Cambridge.
- Gordon, R.A. and L.R. Klein (Eds.) (1965), *Readings in Business Cycles*, Irwin, Homewood.
- Hicks, J.R. (1950), *A Contribution to the Theory of Trade Cycles*, Clarendon Press, Oxford.
- Lucas, R. (1981), *Studies in Business Cycle Theory*, M.I.T. Press, Cambridge, Massachusetts.

DCC – 08: STATISTICAL METHODS AND QUANTITATIVE TECHNIQUES II

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Theory of Probability: Elements of theory of probability-Classical and empirical definition of probability, Laws of addition and multiplication, Conditional probability and concept of inter dependence; Baye's theorem and applications. Properties (without derivation) of Binomial, Poisson and Normal D distributions.

UNIT II

Association of attributes, Chi-Square test, Index numbers - simple and weighed index numbers, laspeyres, Paasche's and Fisher's Ideal Index numbers, Interpolation - Binomial, Newton and Lagrange's method. Vital Statistics

Measurement of Fertility crude birth rate, specific fertility rate, general fertility rate, reproduction rates - GRR and NRR measures of Mortality - Crude Death rate, infant Mortality rate - construction of Human Development index.

UNIT III

Basic concept of sampling - random and non-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 intervals and level of significance; Hypothesis testing based on Z, t, χ^2 (Chi-square) and F test; Type 1 and Type 2 errors.

BASIC READING LIST

- Allen, R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS, London.
- Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
- Gupta, S.C. (1993), Fundamentals of Applied Statistics, S. Chand & Sons, New Delhi.
- Handry, A.T. (1999), Operations Research, Prentice Hall of India, New Delhi.
- Yamane, Taro (1975), Mathematics for Economics, Prentice Hall of India, New Delhi.
- Gupta, S.P. (2001), Statistical Methods, Sultan Chand and Sons

ADDITIONAL READING LIST

- Baumol, W.J. (1984), Economic Theory and Operations Analysis, Prentice Hall, Englewood Cliffs, New Jersey.
- Monga, G.S. (1972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.
- Chou, Y. (1975), Statistical Analysis, Holt, Reinhart and Winston, New York.
- Croxton, Crowden and Klein (1971), Applied General Statistics, Prentice Hall of India, New Delhi.
- Millar, J. (1996), Statistics for Advanced Level, Cambridge University Press, Cambridge.
- Nagar, A.L. and R.K. Das (1993), Basic Statistics, Oxford University Press, New Delhi.
- Sukhatme, P.V. and B.V. Sukhatme (1970), Sampling Theory of Survey with Applications, Iowa State University Press, Ames.

DCC – 09: PUBLIC ECONOMICS II

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Public Debt: Classical view of public debt; Compensatory aspect of debt policy; Burden of public debt; Sources of public debt; Debt through created money; Public borrowings and price level; Crowding out of private investment and activity; Principles of debt management and repayment.

UNIT II

Fiscal Policy: Objective of a fiscal policy - full employment, anti-inflation, economic growth, redistribution of income and wealth; Interdependence of fiscal and monetary policies; Budgetary deficits and its implications; Fiscal policy for stabilization - automatic vs. discretionary stabilization. Balanced budget multiplier. Fiscal federalism in India; Assignment of function and sources of revenue; Constitutional provisions; Recommendation of 13th and 14th Finance Commission and; Devolution of resources and grants; Criteria for transfer of resources; Centre- State financial relations in India; Problems of states' resources and indebtedness; Transfer of resources from Union and states to local bodies.

UNIT III

Indian Public Finances: Indian tax system, GST-concept, council, rates, benefits, limitations, return file & penalties Revenue of the Union, States and local bodies; major taxes in India; direct and indirect taxes, taxation of agriculture, reforms in direct and indirect taxes, taxes on services; Non-tax revenue of Centre, State and local bodies, Analysis of Central and State government budgets, Trends in public expenditure and public debt, Fiscal sector reforms in India.

BASIC READING LIST

- Goode, R. (1986), Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.
- Jha, R. (1998), Modern Public Economics, Routledge, London.
- Menutt, P. (1996), The Economics of Public Choice, Edward Elgar, U.K.
- Musgrave, R.A. (1959), The Theory of Public Finance, McGraw Hill, Kogakusha, Tokyo.
- Musgrave, R.A. and P.B. Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.
- Shoup, C.S. (1970), Public Finance, Aldine, Chicago.

ADDITIONAL READING LIST

- Stiglitz, J.E. (1986), Economics of Public Sector, Norton, New York.
- Dorfman, R. (Ed.) (1970), Measuring the Benefits of Government Investment, Brookings Institution, Washington.
- Barman, K. (1986), Public Debt Management in India, Uppal Publishing House, New Delhi.
- Peacock, A. and G.K. Shaw (1976), The Economic Theory of Fiscal Policy, George Allen and Unwin, London.
- Bhargava, P.K. (1982), Centre State Resource Transfers in India, The Academic Press, Gurgaon.
- Gulati, I.S. (1979), Centre State Financial Relations : An Assessment of the Role of Finance Commission, M.S. University of Baroda, Baroda.
- Reports of various Finance Commissions
- Srivastava, D.S. (Ed.) (2000), Fiscal Federalism in India, Har-Anand Publications Ltd., New Delhi.
- Gandhi, V.P. (1970), Some Aspects of India's Tax Structure, Vora and Company, Bombay..

DSE – 01A: INDIAN BANKING SYSTEM

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Indian Banking System as on the eve of bank Nationalization. Structure and Development of commercial banks in India since 1969. Branch expansion Programme and policy, deposit mobilization and sectoral allocation of bank credit. Concept of social and mass banking. Priority sector advances and advance to the neglected sections of the society. Financial Sector Reforms- Context, need and objectives. Implementations of the Narsimha Committee recommendation. Issues in financial reforms.

UNIT II

Rural Banking- Overall structure and review of the contribution of major credit cooperatives, commercial banks and Regional Rural banks including NABARD. Human Resource Development-Present and future HRD needs for banks employees in India, Recruitment, training and appraisal of bank employees. Khandelwal Committee Recommendations on Human resource in public sectors banks.

UNIT III

The Reserve Bank of India- Functions and Role. Autonomy of the RBI. Liquidity management monetary Policy. Goals, targets and indicators. RBI's monetary policy- Objectives and Techniques. Impact of RBI's monetary policy on economic growth and price stability.

BASIC READING LIST:

- S.B. Gupta: Monetary Planning for India (latest Ed.)
- L.M. Bhole: Impacts of Monetary Policy.
- Harendra Badhav (ed) Challenges to Indian Banking Competition, Globalization and Financial Markets. McMillan.
- Anand Swaroop: Bharatiya banking vyawastha, vittiya pranali vittiya sansthan. Bluserose Publication.
- Report of committee (Narsimham) on Financial Nov., 1991.
- Raghuram Rajan Committee Report on Financial Sector reforms, Planning Commission.
- I.B.A. Bulletin Annual Special Issues.
- RBI Report on trend and progress of Banking in India. (latest ed).
- Y.V.Reddy Monetary and Financial Sector Reforms in India. UBSPD. New Delhi.
- Hanson and Kathuria (ed): A Financial Sector for 21 st Century. Oxford Publication.

DSE – 01B: COMPUTER APPLICATION IN ECONOMICS

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Introduction to Computers: What is Computer and its applications? Data Representation: Introduction to Number System: Binary system, Octal number system, Hexadecimal number system, Decimal number system. Converting form one number to another number: converting to binary from octal, converting to octal from binary, converting to decimal from binary, octal, hexadecimal, converting to binary from hexadecimal, converting to hexadecimal from binary. Floating Point Arithmetic: Addition, Subtraction, Multiplication, Division of Floating point.

UNIT II

Data Processing, Techniques and Algorithms: Concept of data, record and file, Types of data and data structure. Data operations: Algorithms like sorting, merging, joining and bifurcation. Database concepts and operations on database: DBMS and RDBMS. MS Excel: Worksheet Overview, entering information, Worksheet Creation, Opening and Saving, Workbook, Formatting numbers and texts, protecting cells, Producing Charts and Printing Operations.

UNIT III

Statistical Processing Techniques and Methods: Time and frequency series, Presentation of charts and scatter plots-line, sub divided, multiple, Pie graphs, estimation if growth rates, C.V., trend equations and regression equations – Estimation of Simple Econometric Model using Analysis Tool- Introduction to SPSS, E-Views and STATA. IT Applications to Economics online banking electronic transaction: Document delivery: Authentication and validation transaction processing – Document and transaction security and digital signature.

BASIC READING LIST:

- Rajaraman, V. 2010. Fundamentals of Computers, 5th Edition. New Delhi: Prentice Hall India Learning Pvt. Limited.
- Gurvinder Singh, Rashpal Singh: P.C. Computing, Kalyani Publishers.
- BPB Publishers: Complete Reference M.S. Office.
- Sanders D.H.(1988), Computers Today, McGraw Hill (3rd Edition) Intrilligator, M.D. (1978), Economic Models.

DSE – 01C: INDIAN FINANCIAL SYSTEM

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Financial System - Meaning. Structure and Functions of Financial system. Financial System and economic development. Financial intermediaries and financial markets, Financial Inclusion and Financial literacy. Money Market - Designation, nature and role of money market in the economy. Indian money market - call money market, treasure, bills market, commercial bill market, markets for commercial paper and certificate of deposits. The discount market. Discount and Finance house of India and securities trading corporation of India.

UNIT II

Government Security Market - Nature and Organization of Government security market, volume and composition of Issues. Secondary market transactions, prices and yield. Implications of monetary policy, Recent development in Government security market.

UNIT III

Industrial Security Market- Organization and Structure. Listing, trading and settlement. Primary and secondary market. Drawbacks of Indian stock market. Recent development in industrial security market. Markets for futures, option and other financial derivatives.

BASIC READING LIST:

- S.B. Gupta: Monetary Planning for India (latest Ed.).
- K.Rao.: Management of Commercial Banks.
- L.M. Bhole : Impacts of Monetary Policy.
- Harendra Badhay (ed.) Challenges to Indian Banking Competition, Globalisation and Financial Markets. Mc millan.
- N.S. Yher: Non-Performing Advances in Banks. Skylark. New Delhi.
- Report of the committee (Narsimhan) on the Financial System Nov., 1991.

SEMESTER III

The M.A. Economics Third Semester Examination shall consist of two compulsory Core Course (CCC) papers and three Elective Course (ECC) papers, each carrying 4 Credits. The candidates are required to select any three elective courses from the given courses. Each paper will be of three hours' duration and carry a total of Minimum Marks: 70 marks.

The question paper shall comprise two parts. Part I will consist of 10 compulsory short-answer questions of 2 marks each, to be answered in approximately 50 words, carrying a total of 20 marks.

Part II will carry 50 marks and shall be divided into three units. Each unit will contain three essay-type questions of 10 marks each, requiring answers of approximately 300 words. Candidates will be required to attempt a total of five questions from all the units, with at least one question compulsorily attempted from each unit. In addition, Internal Assessment shall carry 30 marks and will be based on Class Tests, Assignments/Projects, and Attendance.

DCC – 10: ECONOMICS OF GROWTH AND DEVELOPMENT I

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

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 model; Cambridge criticism of Neo-classical analysis of growth. The capital controversy.

UNIT II

Technological progress - embodied and disembodied technical progress; Hicks, Harrod; learning by doing, production function approach to the economic growth; Total factor productivity (TFR) and growth accounting; Growth models of Kaldor and, optimal savings and Ramsay's rule, golden rule of accumulation, Stability of equilibrium; money in economic growth, Tobin, Levhari, Patinkin and Johnson; Endogenous growth; AK model - Explanations of cross-country differentials in economic growth.

UNIT III

Classical theory of development - contributions of Adam Smith, Ricardo, Malthus and James Mill; Karl Marx and development of capitalistic economy - Crisis in capitalism - Schumpeter and capitalistic development innovation role of credit, profit and degeneration of capitalism; Structural analysis of development; imperfect market paradigm. Gandhian, Sukhmoy Chakravorty and Pt. Deen Dayal Upadhyaya's views on economic growth and development.

BASIC READING LIST

- Adelman, I. (1961). Theories of Economic Growth and Development, Stanford University Press, Stanford.
- Chennery, 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.
- Higgins, B. (1959), Economic Development, W.W. Norton, New York.
- Meier, G.M. (1995), Leading Issues in Economic Development (6th Edition), Oxford University Press, New

Delhi.

- Todaro, M.P. (1996), (6th Edition), Economic Development, Longman, London.

ADDITIONAL READING LIST

- Sen, A.K. (Ed.) (1990), Growth Economics, Penguin, Harmondsworth.
- Taylor, L. (1979), Macro Models for Developing Countries, McGraw Hill, New York.
- Brahmananda, P.R. and C.N.Vakil (1956), Planning for an Expanding Economy, Vora and Co. Bombay.
- Jadhav, N. (1995), Monetary Economics for India, Macmillan, New Delhi.
- Little, I.M.D. (1982), Economic Development: Theory and International Relations, Basic Books, New York.
- Mehrotra, S. and J. Richard (1998), Development with a Human Face, Oxford University Press, New Delhi.
- World Bank (1994), Infrastructure and Development, World Bank, Washington D.C.
- UNITED Nations (1994), Human Development Report, UNITED Nations, New York.
- Mishan, E.J. (1975), Cost-Benefit Analysis, (2nd Edition), Allen and Unwin, London.
- Bhagwati, J. and P. Desai (1970), India : Planning for Industrialization, Oxford University Press, London.
- Thirlwal, A.P. (1974), Inflation, Saving and Growth in Developing Economics, Macmillan, London.
- Todaro, M.P. (1971), Development Planning : Models and Methods. Oxford University Press, Oxford.

DCC – 11: INTERNATIONAL TRADE AND FINANCE I

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

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; Empirical testing of theory of absolute cost and comparative cost - Heckscher-Ohlin theory of trade. Kravis and Linder theory of trade

UNIT II

Role of dynamic factors, i.e., The Rybczynski theorem - concept and policy implications of immiserizing growth; Causes of emergence and its impact on developing economies; 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

UNIT III

Trade as an engine of economic growth; Welfare implications - The Theory of interventions (Tariffs, Quotas and non-tariff barriers); Economic effects of tariffs and quotas terms of trade, income distribution. Trade problems and trade policies in India since June 1991; Recent changes in the direction and composition of trade and their implications

BASIC READING LIST

- 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.

- Krugman, P.R. and M. Obstfeld (1994), International Economics: 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.

ADDITIONAL READING LIST

- Niehans, J. (1984), International Monetary Economics, John Hopkins University Press, Baltimore.
- Aggarwal, M.R. (1979), Regional Economic Cooperation in South Asia, S. Chand and Co., New Delhi.
- Mundell, R. (1968), International Economics, The Macmillan Company Ltd., New York.
- Nayyar, D. (1976), India's Exports and Export Policies in the 1960s, Cambridge University Press.
- Panchmukhi, V.R., K.M. Rajpuria and R. Tandon (1987), Money and Finance in World Economic Order (RIS), Indus Publishing Co., Delhi.
- Panchmukhi, V.R. (1978), Trade Policies of India - A Quantitative Analysis, Concept Publishing Company, New Delhi.
- Pomfret, R. (1996), International Trade: An Introduction to Theory and Policy, Basil Blackwell, Oxford.
- Soloman, R. (1982), The International Monetary System 1945-1981, Harper and Row Publishers, New York.
- Tew, B. (1985), The Evaluation of the International Monetary System: 1945-85, Hutchinson.
- Whalley, John (1985), Trade Liberalization Among Major Trading Areas, Cambridge University Press, Mass.
- Bhagwati, J. and P. Desai (1970), India: Planning for Industrialization, Oxford University Press, London.
- Joshi, V. and I.M.D. Little (1998), India's Economic Reforms, 1999-2000, Oxford University Press, New Delhi.
- Patel, S.J. (1995), Indian Economy Towards the 21st Century, University Press Ltd., India.
- Satyanarayan, B. (1986), India's Trade with Asia and the Far East Countries, B.R. Publishing Corp. New Delhi.
- Verma, M.L. (1995), International Trade, Vikas Publishing House Pvt. Ltd. Delhi.

DCC - 12: DEMOGRAPHY I

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Introduction to Population Study: Its Nature and Scope; Relationship with other disciplines; Sources of Demographic Data: Census of India; Vital Registration System, Sample Surveys; Dual report system; Population registers; International Publications. Population growth in India. Recent census findings on demographic characteristics. Population theories: Malthus; Optimum population theory; Theory of Demographic Transition.

UNIT II

Fertility: Basic Terms; sources of Data; Basic Measures: Crude Birth Rate, General Fertility Rate, Age specific fertility rate, Total Fertility Rate; Measures of Reproduction: Gross Reproduction Rate, Net Reproduction Rate; Bongaarts Proximate Determinants of Fertility; Social theories of fertility: Social Capillarity; Theory of diffusion, Theory of change and response, Liebenstein theory; Becker's theory, Caldwell wealth flows theory, UN Threshold hypothesis.

UNIT III

Mortality: Basic Concepts and terms; Measures: Crude Death rate, Age specific death rate, Infant mortality rate; Maternal mortality; Causes of death; Reasons for mortality decline in developing countries. Mosley and Chen's Framework for Child Survival. Morbidity: Concept and need; Measures: Incidence rate, Attack rate, Secondary Attack rate, Prevalence rate, Case fatality rate. Comparison of Demographic and epidemiological transition; Epidemiology triad and web causation models in epidemiology.

BASIC READING LIST:

- Bhende, Asha A. and Tara Kanitkar (2004) Principles of Population Studies, Mumbai: Himalaya Publishing House, Chapter 8, Pp. 241-288.
- Jacob S. Siegel and David A. Swanson (2004): The Methods and Materials of Demography, Second Edition, Chapters 1, 2, 3, 7, 9, 10, Elsevier Science, USA.
- John Weeks (2005): Population: An Introduction to Concepts and Issues, Wordsworth Learning. Singapore 9 edition.
- Pathak, K.B. and F. Ram (1998) Techniques of Demographic Analysis, Mumbai: Himalaya Publishing House
- Srinivasan K. (1998) Basic Demographic Techniques and Applications. New Delhi: Sage Publications. Chapter IV, Pp. 59-85
- United Nations, (1973): The Determinants and Consequences of Population Trends, Vol. I, Population Studies, No. 50, Chapter VII, New York.
- United Nations, World Population Ageing, 1950-20

DSE – 02A: MATHEMATICAL ECONOMICS I

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Theory of Consumer Behavior - Nature of a Utility Function; Properties of an Indifference Curve; Maximization of Utility; Demand Functions: Ordinary and Compensated, Price and Income Elasticity. Elasticity Relations in Demand Analysis and Restrictions on Demand Functions; Slutsky Equation - n-commodity case, Elasticity Form and Important Results: income and leisure: Derivation of Labour Supply Function and its properties; Linear Expenditure System - Properties and Derivation of Linear Demand function: Homogenous and Homothetic Utility Functions; Indirect Utility Functions- Properties, Derivation, Roy's Identity and Derivation of Direct and Inverse Demand Functions: Consumer's Surplus.

UNIT II

Theory of Firm- Production Function, Properties of a Well Behaved and Homogenous Production function: Cobb-Douglas and CES Production Functions, Product Curves. Output Elasticity of Factor Input. Isoquant. Elasticity of Substitution of Homogenous Production Function- linearly Homogenous. Cobb- Douglas, CES production Function and Special Cases of CES production Function. Expansion path; Optimization Behavior of a Firm- Constrained Cost Minimization, Constrained Output Maximization and Profit Maximization.

UNIT III

Input Demand Functions- Properties and Derivation of Producers Input Demand Functions (through profit maximization); Cost Functions- Properties and Derivation of Short run and long run Cost Functions (through

profit maximization); determination of optimum Plant Size; Perfect Competition-Market Demand, Producer Demand, Supply Functions (Short Run and Long Run) External Economies and Diseconomies. Commodity Market Equilibrium Under Perfect Competition (Short Run and Long Run), Differential Cost Conditions and Rent, Effects of Taxes on optimum output Level, Supply Function and Price Level.

Note: Use of non-programmable calculator is permitted.

BASIC READING LIST

- J.M. Henderson and R.L. Quant: Micro Economic Theory: Approach, McGraw- Hill London.
- RGD Allen, Mathematical Economics, Macmillan
- B.C. Mehta: Mathematical Economics: Micro Economic Models, Sultan Chand & Sons
- Alpha C Chiang: Fundamental Methods of Mathematical Economics, MacGraw-Hill, Kagakusha, Tokyo

DSE – 02B: INDUSTRIAL ECONOMICS I

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Industrialization and Development, Interdependence of Industrial Sectors; Backward and Forward Linkages. Location of Industries. Theories and Measures of Industrial Localization (Sargent F. & A. Weber). Localization of Industries in India. Industrial Project Selection Criteria.

UNIT II

Modern Corporation Enterprise. Size and Ownership. Structure of Industrial Enterprise. Dominant Position of Corporate and its Characteristics. Issue of Separation of Ownership from Management and Control Models Alternative to Profit Maximization. Baumol, Williamson, Marris, Cyert, and March. Monopoly Power and Oligopolistic Market Structure. Measures of Sellers Concentration. Determination of Sellers Concentration: Economies of Scale. Barriers to Entry. Mergers, Size, and Growth of Markets.

UNIT III

Market Conduct under Oligopoly: Rivalry and Collusive Conduct. Dominant Firm Behavior and Potential Competition. Limit Price and Contestable Markets. Non-Price Competition with reference to Advertising. Market Performance: Allocative Efficiency. Market Structure and Profitability. Productive Efficiency and Sub-optimal Capacity. Allocative versus Productive Efficiency.

BASIC READING LIST:

- Ahluwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
- Barthwal, R.R. (1985), Industrial Economics, Wiley Eastern Ltd., New Delhi.
- Cherunilam, F. (1994), Industrial Economics: Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
- Desai, B. (1999), Industrial Economy in India (3rd Edition), Himalaya Publishing House, Mumbai.
- Kuchhal, S.C. (1980), Industrial Economy of India (5th Edition), Chaitanya Publishing House, Allahabad.
- Singh, A. and A.N. Sandhu (1988), Industrial Economics, Himalaya Publishing House, Bombay.

DSE – 02C: AGRICULTURAL ECONOMICS I

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Introduction: Nature and Scope of Economics of Agriculture: Specificities of Farm Organization and Agricultural Production and Markets: Inter-sector Linkages of Agriculture (Backward and Forward Linkages and Feedback Effects). Role of Agriculture in Economic Development: Contribution of Agriculture to Economic Development; Historical Perspective [Experience of England, United States, Australia, Latin America, Soviet Russia, Japan and India]; Declining Role of Agriculture and Dilemmas of Development.

UNIT II

Agricultural Production: Uniqueness of Agricultural Production: Various Types of Factor Product, Factor- Factor and Product- Product Relations: Cobb- Douglas and CES production Functions Role of Farm Size and Structure in Equilibrium, Productivity, and Return to scale, Sources and Barriers to Agricultural Development.

UNIT III

Agricultural Transformation: Schultz Theory of Transformation of Traditional Agriculture, Agricultural Transformation: India Experience; Risk and Uncertainty in Agriculture: Nature and Types of Risks and Uncertainties in Agriculture, Public Policies and Farm Level Measures to Reduce Risk and Uncertainties. Demand for and Supply of Farm products. Characteristics of Demand for Farm Products; Quantity and Quality Components of Demand for food, Forecasting of Demand for Food; Products, Characteristics of Supply of farm Products, Supply Response of Farm Products; Role of Price and Non- Price Factors in inducing Aggregate Supply, Empirical Supply Response Functions and Evidence.

BASIC READING LIST:

- Bruce L. Gardener and Gordon C. Rausser (Eds.): Handbook of Agricultural. Economics Vol. IA Agricultural Production, Amersterdam, Elsevier Sciences B.V., 2002.
- Bruce L. Gardener and Gordon C. Rausser (Eds): Handbook of Agricultural Economics vol.-IB Marketing, Distribution and Consumption, Amersterdam, Elsevier Science B.V., 2002.
- Bruce L Gardener and Gordon C. Rausser (Ed.): Handbook of Agricultural Economics Vol., 2A Agricultural and Its External Linkages, Amersterdam. Elsevier Science B.V., 2002.
- Bruce L. Gardener and Gordon C. Rausser (Ed.): Handbook of Agricultural Economics Vol., 2B Agricultural and Policy. Amersterdam, Elsevier Science B.V., 2002.
- Eicher Karland Lawrence Witt (Eds.): Agriculture and Economic Development, New York, McGraw Hill Co., 1964.
- Ghatak Subrata and Ken ingersent: Agriculture and Economic Development, Harvester Press Ltd. London, 1984.
- Southworth Herman and Bruce Johnston (eds): Agricultural Development and Economic Growth, Cornell University Press. New York, 2011.
- Tsakok, Isabelle (2011): Success in Agricultural Transformation: What it means and what makes it Happen, Cambridge University Press. New York, 2011.

DSE – 02D: ECONOMICS OF INFRASTRUCTURE I

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Infrastructure and Economic Development. Infrastructure as a public good. Social and Physical Infrastructure. Special Characteristics of Infrastructural Facilities; Green Infrastructures. Economics of scale of Joint Supply, Marginal Cost Pricing vs Other Methods of Pricing in Public Utilities. Cross Subsidization-Free Prices, Equity and Efficiency.

UNIT II

Modal Cost of Transportation. Principle of Pricing. Public Transportation for Sustainable Development. Transport Management in India. Future Development in Transport Sector. Six Modern Transport System- Metro, Air Connectivity, Green Buses, Railways. Marine and River and Delivery by Drones. Problems of Different Modes of Transport. Infrastructure Development and Reforms in Transport Sector in India.

UNIT III

Structure of Telecommunication Sector. Price Determination. Infrastructure Development and Reforms in Communication. Characteristics and Problems of Postal Services. Fixation of Postal Rates in India. Significance of Telephone and Postal Services in India. Growth of Digital Communication Networks.

BASIC READING LIST:

- Dash L.N., Infrastructure Development and the Indian Economy, Atlantic Publisher, New Delhi.
- Samanta P.K., Mohanty A.K., Ports Infrastructure and Economic Development.
- India Infrastructure Report 2015, OUP India Co. (Oxford)
- Report of Ministry of Human Resources and Development

DSE – 03A: LABOR ECONOMICS I

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Framework and Problems of Industrial Economics: Concept and organization of a firm - ownership, control and objectives of the firm; Passive and active behaviour of the firm; Market Structure: Sellers' concentration; product differentiation; Entry conditions; Economies of scale, Market structure and profitability;

UNIT II

Market structure and innovation; Theories of Industrial location - Weber and Sargent Florence; Factors affecting location; Market Conduct: Product pricing - Theories and evidence; Investment expenditure - Methods of evaluating investment expenditure; Theories and empirical evidence on Mergers and acquisitions (M & As) and diversification.

UNIT III

Market Performance: Growth of the firm - Size and growth of a firm ; Growth and profitability of the firm; Constraints on growth; Productivity, efficiency and capacity utilization - Concept and measurement, Indian situation; Indian Industrial Growth and Pattern: Classification of industries; Industrial policy in India - Role of Public and private sectors; Recent trends in Indian industrial growth; MNCs and transfer of technology

BASIC READING LIST

- Ahluwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
- Barthwal, R.R. (1985), Industrial Economics, Wiley Eastern Ltd., New Delhi.
- Cherunilam, F. (1994), Industrial Economics : Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
- Desai, B. (1999), Industrial Economy in India (3rd Edition), Himalaya Publishing House, Mumbai.
- Kuchhal, S.C. (1980), Industrial Economy of India (5th Edition), Chaitanya Publishing House, Allahabad.
- Singh, A. and A.N. Sandhu (1988), Industrial Economics, Himalaya Publishing House, Bombay

DSE – 03B: ENVIRONMENTAL ECONOMICS I

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Classification of resources: Renewable and Non- renewable. Biotic and Abiotic, Exhaustible and Non-exhaustible Resources. Environmental Economics: Meaning, Scope, Positive versus Nonnative Perspective. Relation of Environmental Economics with Economics, Ecological Economics and Resource Economics. Sustainable Development: Concept, Objectives, Indicators, Strong and Weak sustainability Development and Environment: Environmental Kuznets Curve, Trade and Environment.

UNIT II

Air Pollution: Types of Pollutants and their Impact. Water Pollution: Concepts of BOD and COD, pH values, Fluoride; Fertilizer use. Land Degradation: Problem of Solid Waste Disposal and Contamination; Problem of Salinity and Water logging. Afforestation and Deforestation, Significance of Social Forestry. Deflection of Ozone Layer: Green House Effect, Global Warming and Climate Change, Acid Rain, Urban Pollution and Urban Health.

UNIT III

Economic Theory and Measurement of Environmental Benefits. Demand for Environmental Service-Willingness to Pay and Willingness to Accept. Alternative Approaches and Methods of Environmental Valuation-Revealed Preference and Stated Preference Method-Hedonic Pricing. Household Production Function, Travel Cost Method, Defensive Cost and Contingent Valuation Method. Green Accounting: Flaws in Conventional System of National Income Accounts, Requisite Modifications to National Income Account. Disaster Risk Management and Development: Risk Identification, Risk Reduction and Transfer. Adverse Event Management and Recovery.

BASIC READING LIST

- Bhattacharya. R.N (2001), Environmental Economics- An Indian Perspective, Oxford University Press, Delhi.
- Hanley. N., J.F Shogren, and B White (2006). Environmental Economics: In Theory and Practice, Oxford University Press.
- Kolstad, C. D. (2003) Environmental Economics, Oxford University Press
- Sengupta, Ramprasad (2003). Ecology and Economics: An Approach to Sustainable Development, Oxford University press
- Singh, K. and A. Shishodia (2007), Environmental Economics: Theory and Applications Sage Publications, New Delhi.
- Ramprasad Sengupta (2012), Ecological Limits and Economic Development, Oxford University Press

DSE – 03C: HEALTH ECONOMICS I

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Introduction to health economics: Concept; the four basic questions; relation between system structure and performance. Health and medical care: An economic perspective: Definition of health; Utility analysis; Medical care; production of good health. Efficiency in health sector and its elements; Pareto efficiency; Economic evaluation of efficiency; Cost and Benefit analysis: Cost identification analysis; Cost benefit analysis (Discounting, value of life, application of cost benefit analysis); Cost effectiveness and cost utility analysis; an application of cost- effectiveness analysis

UNIT II

Health care systems and Institutions: Elements of health care system; role and financing methods of third-party payers; risk management, reimbursement and consumer cost sharing; the production of medical services. Demand for medical care: Law of demand; relationship between health insurance and demand for medical care; Moral Hazard; elasticities. Medical care production and costs: short run production function and cost theory of representative medical firm; Long run costs of production; Neo-classical cost theory.

UNIT III

Demand for Medical Insurance: The conventional theory of demand for private health insurance; Nyman's access theory of demand for private health insurance; Traditional versus managed care insurance product. Structure, Conduct, performance and market analysis: Relevance of perfectly competitive market to medical care; Monopoly model of market behavior and performance; Monopolistic competition; Oligopoly; Measuring concentration and identifying market power.

BASIC READING LIST:

- Rexford E. Senterre and P. Neum, Health Economics: Theories, Insights and Industry Studies, Thompson South-Western, 3rd Edition (614 San/Hea, 073226)
- Zweifel and Breyer, 1997, Health Economics, Oxford University Press.
- Drummond MF, Sculpher MJ, Torrance GW, O'Brien B, Stoddart GL, eds. Methods for economic evaluation of health care programmes, Third Edition, Oxford University Press, 2005.
- Health Economics: 3rd Edition by Phelps.
- The economics of health and health care, 2nd edition by Folland, Goodman and Stono (FGS)
- Gold Marthe R, Joanna E Siegel, Lousie B Russel, and Milton C Weinstein, 1996, Cost effectiveness in

Health and medicine, new York: Oxford University Press.

- Handbook of Health Economics (Anthony J.Culyer and Joseph P Newhouse eds., Elsevier Science, 2000.

SEMESTER IV

The M.A. Economics Fourth Semester Examination shall consist of two compulsory Core Course (CCC) papers and three Elective Course (ECC) papers, each carrying 4 Credits. The candidates are required to select any three elective courses from the given courses. Each paper will be of three hours' duration and carry a total of Minimum Marks: 70 marks.

The question paper shall comprise two parts. Part I will consist of 10 compulsory short-answer questions of 2 marks each, to be answered in approximately 50 words, carrying a total of 20 marks.

Part II will carry 50 marks and shall be divided into three units. Each unit will contain three essay-type questions of 10 marks each, requiring answers of approximately 300 words. Candidates will be required to attempt a total of five questions from all the units, with at least one question compulsorily attempted from each unit. In addition, Internal Assessment shall carry 30 marks and will be based on Class Tests, Assignments/Projects, and Attendance.

DCC – 13: ECONOMICS OF GROWTH AND DEVELOPMENT II

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Development and underdevelopment - Perpetuation of underdevelopment; Poverty - Absolute and relative; Measuring development and development gap - Per capita income, inequality of income, Human development index and other indices of development and quality of life - Food security, education, health and nutrition; Human resource development; Population problem and growth pattern of population - Theory of demographic transition. Population as limits to growth and as ultimate source - Population, poverty and environment; Economic development and institutions - markets and market failure, state and state failure

UNIT II

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; Ranis and Fei model; Dixit and Margin model, Dependency theory of development; Structural view of development; International trade an engine of growth; Static and dynamic gains from trade; Prebisch, Singer and Myrdal thesis Vs. free trade; Export-led growth; Dual gap analysis; Developing Country's Balance of payments; Tariffs and effective rate of protection; Post-GATT, New International Economic Order(NIEO), WTO and India.

UNIT III

Role of monetary and fiscal policies in developing countries - Trade Vs. Aid, Burden of borrowing - IMF and World Bank viz. a viz. India; Investment criteria in developing countries -Alternative investment criteria; Social Cost-benefit analysis, Shadow pricing, Project appraisal and UNIDO guidelines; Need for planning - democratic, decentralized and indicative planning, micro-level planning; Review of Indian X, XI and XII Plan models.

BASIC READING LIST:

- Adelman, I. (1961). Theories of Economic Growth and Development, Stanford University Press, Stanford.
- 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.
- Higgins, B. (1959), Economic Development, W.W. Norton, New York.
- Meier, G.M. (1995), Leading Issues in Economic Development (6th Edition), Oxford University Press, New Delhi.
- Todaro, M.P. (1996), (6th Edition), Economic Development, Longman, London.

ADDITIONAL READING LIST:

- Sen, A.K. (Ed.) (1990), Growth Economics, Penguin, Harmondsworth.
- Taylor, L. (1979), Macro Models for Developing Countries, McGraw Hill, New York.
- Brahmananda, P.R. and C.N. Vakil (1956), Planning for an Expanding Economy, Vora and Co. Bombay.
- Jadhav, N. (1995), Monetary Economics for India, Macmillan, New Delhi.
- Little, I.M.D. (1982), Economic Development: Theory and International Relations, Basic Books, New York.
- Mehrotra, S. and J. Richard (1998), Development with a Human Face, Oxford University Press, New Delhi.
- World Bank (1994), Infrastructure and Development, World Bank, Washington D.C.
- UNITED Nations (1994), Human Development Report, UNITED Nations, New York.
- Mishan, E.J. (1975), Cost-Benefit Analysis, (2nd Edition), Allen and Unwin, London.
- Bhagwati, J. and P. Desai (1970), India: Planning for Industrialization, Oxford University Press, London.
- Thirlwal, A.P. (1974), Inflation, Saving and Growth in Developing Economics, Macmillan, London.
- Todaro, M.P. (1971), Development Planning: Models and Methods. Oxford University Press, Oxford.

DCC – 14: INTERNATIONAL TRADE AND FINANCE II

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Meaning and components of balance of payments; Equilibrium and disequilibrium in the balance of payments; The process of adjustment under systems of gold standard, fixed exchange rates and flexible exchange rates; Expenditure-reducing and expenditure-switching policies and direct controls for adjustment; A critical review of the monetary approach to the theory of balance of payments adjustment

UNIT II

Foreign trade multiplier with and without foreign repercussions and determination of national income and output; Relative merits and demerits of fixed and flexible exchange rates in the context of growth and development in developing countries; Forms of economic cooperation; Reforms for the emergence of trading blocks at the global level; Static and Dynamic effects of a customs union and free trade areas

UNIT III

Rationale and economic progress of SAARC/SAFTA and ASEAN regions. Problems and prospects of forming a customs union in the Asian region. Regionalism (EU, NAFTA); Multilateralism and WTO; Rise and fall of gold standard and Bretton-woods system International trade and financial institutions - Functions of WTO (TRIPS, TRIMS), UNCTAD, IMF, World Bank and Asian Development Bank - Their achievements and

failures; WTO and World Bank from the point of view of India; Problems of India's international debt; Working and regulations of MNCs in India; Instruments of export promotion and recent import and export policies and agenda for future.

BASIC READING LIST

- 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.
- Krugman, P.R. and M. Obstfeld (1994), International Economics : 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.

ADDITIONAL READING LIST

- Niehans, J. (1984), International Monetary Economics, John Hopkins University Press, Baltimore.
- Aggarwal, M.R. (1979), Regional Economic Cooperation in South Asia, S. Chand and Co., New Delhi.
- Mundell, R. (1968), International Economics, The Macmillan Company Ltd., New York.
- Nayyar, D. (1976), India's Exports and Export Policies in the 1960s, Cambridge University Press.
- Panchmukhi, V.R., K.M. Rajpuria and R. Tandon (1987), Money and Finance in World Economic Order (RIS), Indus Publishing Co., Delhi.
- Panchmukhi, V.R. (1978), Trade Policies of India - A Quantitative Analysis, Concept Publishing Company, New Delhi.
- Pomfret, R. (1996), International Trade : An Introduction to Theory and Policy, Basil Blackwell, Oxford.
- Soloman, R. (1982), The International Monetary System 1945-1981, Harper and Row Publishers, New York.
- Tew, B. (1985), The Evaluation of the International Monetary System : 1945-85, Hutchinson.
- Whalley, John (1985), Trade Liberalization Among Major Trading Areas, Cambridge University Press, Mass.
- Bhagwati, J. and P. Desai (1970), India : Planning for Industrialization, Oxford University Press, London.
- Joshi, V. and I.M.D. Little (1998), India's Economic Reforms, 1999-2000, Oxford University Press, New Delhi.
- Patel, S.J. (1995), Indian Economy Towards the 21st Century, University Press Ltd., India.
- Satyanarayan, B. (1986), India's Trade with Asia and the Far East Countries, B.R. Publishing Corp. New Delhi.
- Verma, M.L. (1995), International Trade, Vikas Publishing House Pvt. Ltd. Delhi.

DCC – 15: DEMOGRAPHY II

Course Category: CCC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Sex and Age structure: Factors affecting sex ratio and age structure of population, Age Pyramid; Population Ageing and its economic implications. Life table: Introduction, Types, columns, Method of Construction of Abridged Life Tables based on Conventional method; Model life table: Concept and four types of Model Life Tables (UNITed Nations Model Life Tables, Coale and Demeny's regional Model Life Tables, Brass Logit Life table, New UN Model Life Tables for developing countries)

UNIT II

Migration: Concept and Basic terms; Sources of data, Direct and Indirect methods of measuring internal migration. Differential migration. General theories of internal migration. Everett Lee's conceptual framework for migration analysis. Urbanization: Concept, Degree and tempo of Urbanization. Standardization: Direct and Indirect Standardization of Crude Birth and Death Rates;

UNIT III

Gender: Understanding Gender, Feminist theory (Liberal Feminism, Marxist, Post Modern, Radical Feminism); Women Empowerment: Concept, Process and Approaches; Gender Development Index, Gender Empowerment Measure; Gender Differentials in Access to resources: Education, Employment, Female labor participation, Household headship and Political representation of women; Domestic violence. National Population Policy.

BASIC READING LIST:

- Caldwell, J, Sally Findley, Pat Caldwell and Gigi Santow (1990): What we know about health transition: The cultural, social and behavioural determinants of health. The proceedings of an international workshop, Vol. 1&2, ANU, Canberra, Health Transition Centre.
- F. Ram and K.B. Pathak (1998): Techniques of Demographic Analysis, Himalaya Publishinghouse, Bombay (Chapters 2 & 3).
- Preston, S. H., Patrick Heuveline and Michel Guillot (2001): Demography: Measuring and Modeling Population Process, Blackwell Publishers, Oxford, UK (Chapters 2, 3 &4).
- Shryock, Henry S. Jacob Siegel and Associates (1980): The Methods and Materials of Demography, Vol. 2, Fourth printing (revised), US Department of Commerce. WashingtonDC, pp. 389-393, Chapter 14
- Jacob S. Siegel and David a. Swanson (2004): The Methods and Materials of Demography, Second Edition, **C h a p t e r s** 1, 2, 3, 7, 9, 10, Elsevier Science, USA.

DSE – 04A: MATHEMATICAL ECONOMICS II

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

The Existence and Uniqueness of Equilibrium – The Stability of Equilibrium, Static Stability-Marshallian and Walrasian Stability Conditions and Dynamic Stability – Lagged Adjustment the Cobweb Model. Monopoly-Maximization of Profit and Sales Revenue. Price Discrimination: Market Discrimination and Perfect Discrimination, Multi-Plant Monopolist. Effect of Various Taxes on Output and Price of a Monopoly Firm. Bilateral Monopoly. Monopolistic Competition Equilibrium: Short Run and Long Run: Duopoly and Oligopoly Market Models: The Quasi – Competitive Solution, the Collusion Solution, the Cournot Solution. Stackelberg Solution, The Market Share Solution and the Kinked Demand Curve Solution Models.

UNIT II

Macroeconomic Models Keynesian Theory of Income Determination and Derivation of Different Multipliers, Employment and Output Determination with Fixed and Flexible Prices: IS-LM and AD-AS Models.

Fleming- Mundell Open Economy Model, Trade Cycles: Multiplier-Accelerator Interaction Models; Samuelson and Hicks: Growth Models Harrod-Domar Model, Neo classical Models of Solow and Meade and Kaldor's Model.

UNIT III

Linear Programming- Simplex Method: Problem of Degeneracy and Mixed Constraints Duality Theorems, Complimentary Slackness Conditions. Application of Linear Programming in Economics; Input Output Analysis- Concepts of Static, Dynamic, Closed and Open Input Output Models, Hawkins-Simon Conditions of Viability. Determination of Gross output, Price and Value Added in Open input -output Model, Determination of Gross Output in Close input -output Model: Theory of Games: Two Person, Constant Sum Games, Zero Sum Games, Maximin and Minimax. Dominant Strategies, Pure and Mixed Strategies, Saddle Point Solution, Linear Programming Formulation of a Matrix Game and Conversion of Game Theory into Linear Programming.

Note: Use of Non – programmable calculator is permitted.

BASIC READING LIST:

- J.M. Henderson and R.L. Quantt: Micro Economic Theory: Approach, McGraw- Hill London.
- RGD Allen, Mathematical Economics, Macmillan
- Alpha C chiang: Fundamental Methods of Mathematical Economics, MacGraw- Hill, Kagakusha, Tokyo.
- R.G.D. Allen, Macroeconomics Theory: A Mathematical Treatment, McGraw- Hill, London.
- Michael K. Evans: Macroeconomic Activity: Theory, Forecasting and Control.
- David Romer: Advanced Macroeconomics, McGraw- Hill, Singapore.

DSE – 04B: INDUSTRIAL ECONOMICS II

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Policy Goal of Industrialization in India. Nature of Industrial Data for Organized Industry. Major Classification of the Organized Industry: Employment Size and Ownership Structure.

UNIT II

Pattern of Industrial Growth and Changes in Industrial Structure in India since 1951. Factors affecting Industrial Location. Regional Imbalances in Industrial Development in India and Government Policy for Balanced Regional Development of Industry. Market Structure and R&D. Allocative Efficiency and Capacity Utilization in Indian Industry. Productivity Growth, FDI, and Acquisition of Technology in India.

UNIT III

MRTP and Nature of Concentration of Indian Industry. Liberalization and Privatization in Indian Industry. Mergers and Takeovers. Competition Policy and Consumer Protection in India. Industrial Development in Rajasthan.

BASIC READING LIST:

- Barthwal R.R.: Industrial Economics An Introductory Textbook, Wiley Easton Limited, New Delhi.
- Cohen K.L. & Cyert R.M.: Theory of the Firm. Prentice Hall
- Scherer F.M. & Ross David: Industrial Market Structure and Economic Performance, Boston: Houghton-Mifflin.
- Hay D.A. and Morris D.J.: Industrial Economics: Theory and Evidence, Oxford University Press.
- Shepherd W.J.: The Economics of Industrial Organization, Princeton Hall, Englewood Cliffs, New Jersey.

DSE – 04C: AGRICULTURAL ECONOMICS II

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Agricultural Finance: Financial Characteristics of Agriculture, Imperfect information [Agency Relationship. Adverse Selection and Moral Hazard] and Enforcement Problems in Credit Markets: Segmented Rural Credit Markets. Resolving Information and Incentive Problems; Managing Borrower's credit Risks; Agribusiness and trade Financing and Rationale for Government Intervention in Rural Credit markets. Structure and Functioning of Rural Credit Market in India.

UNIT II

Agricultural Markets: Nature, Types and Problems of Agricultural Commodity Markets; Marketing Margins and Marketing margin. Determinants; and Evaluation of Marketing Efficiency. Horizontal Structure of Agricultural Marketing. Vertical Market Relationships, Institutional and Organizations in Agricultural Markets [Farmers Cooperatives, Marketing orders, Marketing Boards and Trading Enterprises]. Instability in Agricultural Markets. Price Stabilization and Social Benefits, Storage and Market Stabilization. Role of Commodity Futures and Options in Stabilization.

UNIT III

Food Security and International Trade: Concept, Threat, Indicators and Mechanism to Food Security: Food Assistance Programs [both Domestic and International]. Main Features of International Trade in Agricultural Commodities, Domestic Agricultural and Trade Policies of Developed Countries and Their impact on world Trade. Agriculture in GATT Negotiations and WTO. Recent Developments in Indian Agriculture: Indian Agricultural Development Strategy since Independence. Opportunities and Challenges [Expectations, performance, and Emerging Constraints and Potentials] for Indian Agriculture in the post Reform Period. National Agricultural Policy (Latest) and the Agricultural Development Strategy in the Latest Five-Year Plan.

BASIC READING LIST

- Besley. Timothy: "How Do market Failures Justify interventions in Rural Credit Markets?" "The World Bank Research Observer. Vol. 9 No 1
- Bruce L. Gardener and Gordon C. Rausser (Eds.) Handbook of Agricultural Economics Vol. I A: Agricultural Production. Amsterdam. Elsevier Science B. V. 2002.
- Bruce L., Gardener and Gordon C. Rausser (Eds.) Handbook of Agricultural Economics Vol. 1 B: Marketing. Distribution and Consumption. Amsterdam. Elsevier Science B.V., 2002.
- Bruce L. Gardener and Gordon C. Rausser (Eds.) Handbook of Agricultural Economics Vol. 2 A: Agricultural and its External Linkages, Amsterdam, Elsevier Science B. V., 2002.

- Bruce L. Gardener and Gordon C. Rausser (Eds): Handbook of Agricultural Economics vol.2 B: Agricultural Land Policy. Amsterdam, Elsevier Science B.V., 2002.
- Ghatak Subrata and Ken Ingersent: Agriculture and Economic Development, Harvester Press Ltd. London, 1984.
- Government of India: Five-year Plan (Latest), Planning Commission, Government of India New Delhi.
- Government of India. National Agricultural Policy, Ministry of Agriculture, Government of India, New Delhi (latest)
- Hoff Karia and Joseph E. Stieglitz: Introduction: Imperfect Information and Rural Credit Markets Puzzles and Policy Perspective." The World Bank Economic Review, Vol. 4, No.3 (1990)
- World Bank: Rejuvenating Indian Agriculture, Washington, World Bank.

DSE – 04D: ECONOMICS OF INFRASTRUCTURE II

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Primacy of Energy in the Process of Economic Development. Energy Conservation. Renewable and Non-Conventional Sources of Energy. Effect of Energy Shortage. Factor Determining Demand for Energy. Energy Supply and Pricing of Electricity. The Relative Economics of Thermal, Hydel and Nuclear Power Plant. Alternative Energy Sources-Wind Energy, Solar Energy and Bio Mass Energy. Energy Policy in India.

UNIT II

Features and Impediments of Infrastructure Financing. Sources of Financing Infrastructure Project-Debt Equity Including Public Private Partnership (PPP). Infrastructure Financing Institutions- Infrastructure Finance Company (IFC), Infrastructure Development Finance Company (IDFC), India Infrastructure Finance Company Limited (HPCL). Risk Management.

UNIT III

Education and Economic Growth. Approaches to Educational Planning -Social Demand, Rate of Return and Manpower Planning Approach. The Case for Universal, Free Elementary Education. Structure of Higher Education. Public and Private Financing of Education. Human Resources and Human Capital Development. Education Policy; Urban and Rural Water Supply. Development of Social Services; Health and Economic Development. Health Dimensions of Development. Determinants of Health-Poverty, Malnutrition, Illiteracy and lack of Information. Economics Dimensions of Health Care. Financing of Health Care. National Health Programmes.

BASIC READING LIST:

- Dash L.N., Infrastructure Development and The Indian Economy. Atalantic Publisher, New Delhi.
- Samanta P.K., Mohanty A.K., Ports Infrastructure and Economic Development.
- India Infrastructure Report 2015, OUP India Co. (Oxford)
- Report of Ministry of Human Resources and Development

DSE – 05A: LABOR ECONOMICS II

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Liberalization and privatization; Regional industrial growth in India; Industrial economic concentration and remedial measures; Issues in industrial proliferation and environmental preservation; Pollution control policies.; Industrial Finance: Owned, external and other components of funds;

UNIT II

Role, nature, volume and types of institutional finance - IDBI, IFCI, SFCs, SIDC, commercial banks, etc.; Financial statement - Balance sheet, Profit and loss account; assessment of financial soundness, ratio analysis; Project Appraisal: Cost-benefit analysis - Net Present Value (NPV) and internal rate of return (IRR) criteria - balancing private and social returns.

UNIT III

Industrial Labour: Structure of industrial labour; Employment dimensions of Indian industry; Industrial legislation; Industrial relations; Exit policy and social security; Wages and problem of bonus - labour market reforms; Current Problems of Selected Industries: Iron and Steel; Cotton textiles; Jute; Sugar; Coal; Cement and engineering goods; Development of small-scale and cottage industrial in India.

BASIC READING LIST

- Ahluwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
- Barthwal, R.R. (1985), Industrial Economics, Wiley Eastern Ltd., New Delhi.
- Cherunilam, F. (1994), Industrial Economics : Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
- Desai, B. (1999), Industrial Economy in India (3rd Edition), Himalaya Publishing House, Mumbai.
- Kuchhal, S.C. (1980), Industrial Economy of India (5th Edition), Chaitanya Publishing House, Allahabad.
- Singh, A. and A.N. Sandhu (1988), Industrial Economics, Himalaya Publishing House, Bombay.

DSE – 05B: ENVIRONMENTAL ECONOMICS II

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Social Choice of Optimum Environmental Protection: Individual preferences regarding Environment Protection- Biocentrism. Sustainability. Anthropocentrism; Social Choice from Individual Values. Welfare Economics: Efficiency and Competitive Markets. Problems of Market Failure: Public bads and Externalities- Optimal Provision of Public goods and bads. Pricing Public goods and Bads.

UNIT II

Theory of Environment Regulation: Rationale for regulation, Price Rationing, Pigovian taxes- single and multiple Polluters, Subsidies for Abatement of pollution in short and long run, Property Rights: Coase

Theorem, Problems of Public goods and Bargaining, Policy significance of Coase Theorem, Common Property Resources and Tragedy of Commons. Command and Control, Economic Incentives; Tradable Pollution Permits.

UNIT III

Regulation with unknown Control Cost: Unknown Polluter Characteristics (Adverse Selection problem), Unobserved Control Cost- emission fees or quantity regulation, Hybrid price Quantity regulation, Obtaining Private Control Cost Information, Enforcement, Dynamics and Commitment and Moral hazard. Environmental Risk and uncertainty: Regulating Risk with Liability. Liability versus Direct Regulation and Environmental Risk and Insurance.

BASIC READING LIST:

- Hanely, N, Jason F. Shorsten, and Ben White (1999). Environmental Economics: In Theory and Practice, Macmillan.
- Kadekodi, Gopal K. (2004). Environmental Economics in Practice, Oxford University Press.
- Kolstad, C.D. (2003) Intermediate Environmental Economics, Oxford University Press.

DSE – 05C: HEALTH ECONOMICS II

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Health financing: Concept; National Health Accounting Sources and uses of funds Health Budgeting. Health Care Financing system, Sources of Health care spending. Three principles; Relationship of Health spending with health transition, demographic change and epidemiological transition; its indicators; Out of pocket and catastrophic health care expenditure. Health inequalities and its measurement; Determinants of Health. Risk pooling: concept; ways to pool revenues; level of risk pooling; general revenue-based systems; Social health insurance; community health insurance; Re-insurance; Private health insurance

UNIT II

Resource allocation: Concept; Dimensions; Organization; Provider payment methods: Fees, Capitation, Salary; and, Salary plus bonus; Hospital payment method: Per admission; Diagnostic related grouping; Per-diem; Line-item Budget; Global budget; Contracting: Effect of payment systems on patients Quality adjusted life years and Disability Adjusted life years: Concept, Computation, Limitation and problems, relationship between the two.

UNIT III

Instrumental activities of Daily Living and Activities of Daily Living: Concept and scale; Government, health and medical care: Economic reasons and type of government intervention; Market failure in health sector: Concept, Reason and role of Government; National rural health mission; National urban Health mission; Medical tourism in India; Performance of India and Rajasthan on Infant Mortality Rate, Under-five mortality rate, maternal mortality ratio, Life Expectancy.

BASIC READING LIST:

- Rexford E. Snterre and P. Neum, Health Economics: Theories, Insights and Industry Studies, Thompson South-Western, 3rd Edition (614 San/Hea, 073226)
- Zweifel and Breyer, 1997, Health Economics, Oxford University Press.
- Drummond MF, Sculpher MJ, Torrance GW, O'Brien B, Stoddart GL, eds. Methods for economic evaluation of health care programmes, Third Edition, Oxford University Press, 2005.
- Health Economics: 3rd Edition by Phelps.
- The economics of health and health care, 2nd edition by Folland, Goodman and Stono (FGS)
- Gold Marthe R, Joanna E Siegel, Lousie B Russel, and Milton C Weinstein, 1996, Cost effectiveness in Health and medicine, New York: Oxford University Press.
- Policy document of National Health Mission.

DSE – 05D: ECONOMETRICS

Course Category: ECC Duration: 3 Hrs. Minimum Marks: 70 marks Credits: 4

UNIT I

Basic Economics: Nature, Meaning and scope of econometrics; Simple and General linear Regression Model Assumptions, Estimation (OLS approach) and Properties of Estimators; Derivation of Least square Parameters; Goodness of Fit and Econometric inference, Function of Regression Models Log-Log, Semi-log, Reciprocal Transformation.

UNIT II

Violation of Assumptions: Heteroscedasticity; Multicollinearity and Auto-correlation Speciation Problems. Regressions with Qualitative Independent Variables: Dummy Variable Technique; Regression with Binary Dependent Variables Logit, Probit and Tobit Models.

UNIT III

Dynamic Econometric Model: Auto-regressive and Distributed Lag Models - Koyck Model, Partial Adjustment Model, Adaptive Expectations, Almon Approach to Distributed Lag models. Methods of Instrumental Variables. Introduction to SPSS Software.

BASIC READING LIST:

- JKmenta: Elements of Economics, University of Michigan Press.
- Damodar Gujarati: Basic Econometrics, McGraw-Hill Higher Education
- J. Johnston: Econometrics Methods, McGraw-Hill College.
- R.S. Pindyck and D.Z. Rubinfeld: Econometrics Methods and Econometrics Forecasts, McGraw-Hill Publishing Co.
- G.S. Maddala: Econometrics, John Wiley & Sons.
- Rao and Millar: Applied Econometrics, Wadsworth Publishing Company.