

KANNUR UNIVERSITY

(ACADEMIC BRANCH)

Regulation, Scheme and Syllabus of M.A Applied Economics Course

List of Core and Optional Papers:

Given below is the list of Core and Optional Papers proposed by the Board of Studies for the P.G. Course in Applied Economics.

Serial numbers:

1. Microeconomic Theory
2. Macroeconomic Theory
3. Quantitative Techniques for Economic Analysis
4. Development Issues of Indian Economy (With special reference to Kerala)
5. Operations Research for Economic Analysis
6. International economics
7. Financial Markets
8. Econometrics
9. Mathematical Economics

Optional Papers:

1. Computer Application in Economic Analysis
2. Energy Economics
3. Development Economics
4. Security Analysis and Portfolio Management
5. Environmental Economics
6. Applied welfare Economics
7. Population Studies
8. Public Economics
9. Agricultural Economics
10. Industrial Economics
11. Health Economics
12. Development of Economic Ideas
13. Transport Economics
14. Business Economics
15. Project formulation and Evaluation

Question Pattern:

The Question Pattern is summarized in the following table:

Nature of Question	No. of Questions	Maximum Marks	Pages	Time (in minutes)	Remarks
Objective type (Multiple Choice)	10(10)	$10 \times 1 = 10$	1	$10 \times 1 = 10$	
Very Short Answer type	8(11)	$8 \times 3 = 24$	$8 \times 1\frac{1}{2} = 12$	$8 \times 7\frac{1}{2} = 60$	5 minutes for one page
Short answer type	4(6)	$4 \times 5 = 20$	$4 \times 2\frac{1}{2} = 10$	$4 \times 12\frac{1}{2} = 50$	
Essay type	2(4)	$2 \times 13 = 26$	$2 \times 6 = 12$	$2 \times 30 = 60$	
Total	24(31)	80	35	180	

Semesterwise distribution of papers with marks ,break up of hours per week and scheme of examination

Semester	Nature of Paper	Sl.no	Name of paper	Distribution of mark			Hours of work allotted per week
				Theory	Internal assessment	Total marks	
I Semester	Core Core Core	I	Microeconomic Theory	80	20	100	10
		II	Macroeconomic Theory	80	20	100	9
		III	Quantitative Techniques for Economic Analysis	80	20	100	6
			Total	240	60	300	25
II Semester	Core Core Core Core	IV	Development issues of Indian economy (With special reference to Kerala)	80	20	100	7
		V	Operations Research for Economic Analysis	80	20	100	6
		VI	International Economics	80	20	100	6
			VII Total	80 320	20 80	100 400	6 25
III Semester	Core Optional Optional Optional	VIII	Econometrics	80	20	100	7
		IX	-----	80	20	100	6
		X	-----	80	20	100	6
			XI Total	80 320	20 80	100 400	6 25
IV Semester	Core Optional Compulsory Compulsory	XII	Mathematical Economics	80	20	100	7
		XIII	-----	80	20	100	6
		XIV	Dissertation	80	20.	100	12
			XV Total	--- 240	--- 60	100 400	-- 25
Grand Total				1500			

- Note: 1. Paper with si. Nos. IX, X, XI and XIII are optional papers to be chosen by the concerned department from the list of optional appended
2. Internal assessment marks of 20 with respect to paper XIV dissertation / project work is to be awarded on the basis of viva-voce examination conducted by the concerned department in the college based purely on the dissertation / project work done by the candidate. The viva-voce examination is to be conducted by the Department with head of the Department as the chairman and all the supervising teachers of the Department who supervised the dissertation as the members.
3. For semester examination, each paper shall be of three hours duration carrying 80 marks for theory and 20 marks for internal assessment.
4. The weightage of marks and guidelines for the paper XIV Dissertation is fixed as follows:
- a) Methodology : 20 marks
 - b) Content : 30 marks
 - c) Novelty : 10 marks
 - d) Presentation : 20 marks

Total : 80 marks

- i) Primary data composed is desirable
 - ii) Methodology part of the dissertation should contain
 - a) data source
 - b) sample frame
 - c) tools used for analysis
 - iii) Dissertation should not exceed 80 papers.
5. Internal assessment marks with respect to theory papers is fixed as follows:
- a) Attendance : 4 (Less than 75% zero mark, 75% 1 mark, 76 to 80% 2 marks, 81-85% 3 marks, 86 and above 4 marks.)
 - b) Test papers : 8 (At least 2 papers of 4 marks each)
 - c) Assignment : 4 (Two assignment of 2 marks each)
 - d) Seminar : 4 (One seminar_ script 2 marks and performance 2 marks)

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Core Paper - 1)

MICROECONOMIC THEORY

Module -1

Theory of consumer choice : Individual behavior in the face of risk and uncertainty — choice between insurance and gambling — expected utility, risk aversion and risk preference — Neumann-Morgenstern method of constructing utility index — Friedman-Savage hypothesis — household portfolio decisions under conditions of uncertainty (risk reduction through diversification of portfolio) — the mean-variance analysis — the state preference theory.

Recent developments in the theory of market demand : Hick's logical ordering theory of demand — constant elasticity demand function — distributed lag models of demand (general form only) — linear expenditure systems.

Module - II

Theory of production : Production function — homogeneous production function — Cobb-Douglas production function — CES production function — surrogate production function — fixed coefficient production function — technical progress and production function — equilibrium of the multi product firm in terms of production-possibility curve and isorevenue curve — linear programming — input-output analysis.

Module - III

Duopoly and Oligopoly : Characteristics of duopoly and oligopoly — interdependence and indeterminateness of demand curve under oligopoly — collusive and non-collusive models — Cournot's model — Edgeworth's model— Bertrand's model — Chamberlin's model — Stackelberg's model — Sweezy's kinked-demand model — price leadership models of low-cost price leader, dominant firm price leader and barometric price leadership — cartels aiming at joint profit maximization and market sharing cartels — theory of games — Baumol's theory of sales revenue maximization — Marris's model of managerial enterprises — Williamson's model of managerial discretion.

Module - IV

Theory of product pricing and income distribution : Basic assumptions underlying the traditional theory of pricing — Hall and Hitch report and the full cost' pricing principle — attack on marginalist price determination — average cost pricing : the mark-up rule — Bain's limit-pricing theory — models of Sylos-Labini and Franco Modigliani.

Ricardian and Marxian theories of income distribution — degree of monopoly' theory of Kalecki — neo-Keynesian model of Kaldor — modified model of Pasinetti — technical progress and factor shares — product-exhaustion theorem : Euler's product-exhaustion theorem — Clark-Wicksteed-Walras product- exhaustion theorem.

Module - V

General equilibrium and welfare economics — partial and general equilibrium — Walrasian general equilibrium - existence, uniqueness and stability of general equilibrium.

Criteria of social welfare — Pareto optimality criterion — perfect competition and Pareto optimality — Kaldor-Hicks compensation criterion — Scitovsky criterion — theory of second best.

REFERENCES

- 1) H.A. John Green, *Consumer Theory*, Mac Millan, 1976, Chapters -13,14 and 15
- 2) Hicks, *A revision of Demand Theory*, Oxford University Press, 1956
- 3) David Laidler, *Introduction to Microeconomics*, Heritage Publishers, New Delhi, 1981, Chapter-7
- 4) Robert. H. Frank, *Microeconomics and Behaviour*, Irwin Me Graw - Hill, 2000, Chapter - 6
- 5) Robert Y Awh, *Microeconomics : Theory and Applications*, John Wiley and Sons, 1976, Chapter - 3
- 6) David Begg, Stanley Fisher and Rudiger Dornbusch, *Economics*, Me Graw - Hill Publishing Company, 1994, Chapter - 14.
- 7) Richard G. Lipsey and K. Alec Chrystal, *Principles of Economics*, Oxford University Press, 1999, Chapter- 12
- 8) William J. Baumol, *Economic Theory and Operations Analysis*, Prentice Hall of India Pvt. Ltd., 1982, Chapter- 22.
- 9) Koutsoyiannis, *Modern Microeconomics*, Mac Millan, 1983, Chapter-2.
- 10) C. da Costa, *Value and Distribution in Neoclassical and Classical Systems*, Himalaya Publishing House, Second Edition, 1992, Chapters 2,11
- 11) Kalman J. Cohen and Richard M. Cyert, *Theory of the Firm : Resource Allocation in a Market Economy*, Prentice Hall of India Pvt. Ltd., New Delhi, 1981, Chapter 16.
- 12) Henderson and Quant, *Microeconomic Theory : A Mathematical Approach*, Me Graw-Hill, 1971, Chapters 3,5,9.
- 13) Peter Calvo and Geoffrey Waugh, *Microeconomics : An Introductory Text*, Tata Me Graw-Hill, 1979, Chapter-12
- 14) Asimakopulus, *An Introduction to Economic Theory, Microeconomics*, Oxford University Press, Delhi, 1978, Chapter- 15
- 15) Luigi L Pasinetti, *Growth and Income Distribution, Essays in Economic Theory*, Cambridge University Press, 1974, Chapter- 4.

Supplementary reading :

Hal R. Varian, *Intermediate Microeconomics*, Third Edition, W.W. Norton, New York.

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Core Paper - II)
MACROECONOMIC THEORY

Module -1

The Development of Macroeconomics - Micro-foundations of Macroeconomics - Models of closed economy - One sector Neoclassical and Keynesian models - the ISLM model - Keynesian and Neoclassical versions.

Fiscal and monetary policy analysis in an ISLM model - the labour market - Neoclassical and Keynesian labour market equilibrium - Three sector macro model - Neo classical and Keynesian versions - Policy implications

Module - II

Open economy model — Balance of payments and Keynesian analysis - Absorption and BOP - Keynesian approach to BOP - effect of devaluation on BOP, Marshall - Lerner condition - Mundel- Fleming model.

Module - III

Demand for money ; Monetarist counter developments - Friedman's Restatement of the Quantity Theory - Keynes' Theory - Patinkin Theory

Supply of Money : Financial inter-mediation and the supply of money - behavioural model of money supply determination - inside money and outside money - Gurley and Shaw thesis.

Module - IV

Dynamics of the real sector - consumption - theories of consumption - absolute income hypothesis - permanent income hypothesis - life cycle hypothesis - wealth and consumption function - the consumption function in macro models.

Investment : Capital investment and rate of interest - the term structure of interest rates - Tobin's q-ratio, accelerator theory of investment -policy measures which affect investment

Module - V

Controversies in macroeconomics : a) Walrasian general equilibrium models b) Keynesian counter revolution - dual decision hypothesis c) Neo-Keynesian quantity constrained models d) out put and inflation - the natural rate theory - the Phillip's curve, e) the Neo-classical macroeconomics f) supply side economics, g) some Indian themes in Macroeconomics -Macroeconomic character of the Indian economy.

REFERENCES

1. C. Harcourt (ed.), *The Micro Economic Foundations of Macroeconomics* -Macmillan 1997.
2. Brian Snowdon and Howard R. Vane, *A Macroeconomic Reader* Routledge, New York, 1997.
3. Karl Brunner and Allan H. Meltzer, *Money and Economy*, Issues on Monetary Analysis - University of Cambridge, New York, 1993.
4. Steven E. Lands Burg and Lauren J. Feinstone, *Macroeconomics*, Me. Graw Hill Pub. New York, 1997.
- 5) R. Levasic and A. Rebmann, *Macroeconomics*, Macmillan Pub. 1982.
- 6) Me J Surrey (ed),. *Macroeconomic Themes*, Oxford University Press, 1997.
- 7) Edward Shapiro, *Macroeconomic Analysis*, 1978.
- 8) Richard T. Froyen, *Macroeconomics*, Maxwell Macmillan
- 9) Harry G. Johnson, *Selected Essays in Monetary Economics*, George Alien and Unwin.
- 10) Juankar P.N., *Investment, Theories and Evidence*, Macmillan, 1972
- 11) Fred R. Glahe, *Macroeconomics Theory and Policy*, Harcourt Publishers, New Delhi, 1985.
- 12) L. Harris, *Monetary Theory*, Me. Graw Hill, 1985
- 13) Muller M.G. (ed), *Readings in Macroeconomics*, 1971
- 14) Bennett T. Me. Callum, *Monetary Economics, Theory and Policy* Macmillan, 1989
- 15) William H. Branson, *Macroeconomics Theory and Policy*, Princeton University.
- 16) Dornbusch R. and Fischer, *Macroeconomics*
- 17) Prabhat Patnaik (ed), *Macroeconomics*, Oxford University Press, Delhi, 1999.
- 18) Veneries and Sebold, *Macroeconomics*, Models and Policies.

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Core Paper - III)
QUANTITATIVE TECHNIQUES FOR ECONOMIC ANALYSIS

Module -1

Matrix Algebra : Matrices and Vectors - Rank of a Matrix - Matrix and Vector Operations - Laws of operations - Identity and Null Matrices -Transpose and Inverse - Non-singularity of Matrix - Determinants and their properties - Computation of Inverse using determinants - Solution of simultaneous equations using Cramer's Rule.

Module - II

Standard Distribution : Probability Theory - Addition and Multiplication Theorem - (Conditional Probability] - Mathematical Expectations - Standard Distribution - Binomial - Poisson - Normal -Lognormal - Pareto Distribution - Properties and applications.

Module - III

Population and Sample : Random Sampling - Parameter and Statistic - Sampling from Normal Population - Sampling Distribution and Standard Error - Distribution of x, t, C^2 and F- Central limit theorem - Statement and application.

Module – IV

Theory of estimation : Point estimation - Basic concepts -Unbiasedness, consistency, efficiency and sufficiency - Interval estimation -Basic concepts - Confidence interval for mean, difference of means based on large and small samples.

Module - V

Tests of hypothesis : Basic concepts - Null and alternative hypothesis -Simple and Composite hypothesis - Two types of errors - Tests concerning means of large and small samples - Tests for difference between means based on large and small samples - Tests concerning proportion and tests of variance using F and one way Anova - Tests of Goodness of fit and independence of attributes.

Module – VI

Research methodology: Meaning of research - Objectives - Types of research - Research methods Vs. methodology - Research and scientific methods - Research process - Defining research problems - Selection of research problem - Research design - Need for and feature of a good research design.

Note : Sixth Module is not for written examination, but for equipping the students for dissertation work.

REFERENCES

1. Taro Yamane, *Mathematics for Economists*, Printice Hall of India, New Delhi
2. Murray S. Spiegel, *Statistics*, Schaum Series
3. Murray S. Spiegel, *Probability Schaum Series*
4. C.R. Kothari, *Research Methodology- Methods and Techniques*, Wiley Eastern Limited
5. Alpha C. Chiang, *Fundamental Methods of Mathematical Economics*, Me. GrawHill, 1984.

M. A. DEGREE IN APPLIED ECONOMICS SEMESTER

COURSE CORE PAPER- IV

DEVELOPMENT ISSUES OF INDIAN ECONOMY (WITH SPECIAL REFERENCE TO KERALA)

MODULE-I.

Growth Vs Change: Structural changes in agriculture, industry and tertiary sectors of Indian Economy -Structural transformation from Nehruvian socialism to market friendly economy.

MODULE-II:

Demography, Poverty and unemployment -Population statistics- sex ratio-gender discrimination-HDI, HPI -Demographic changes - Problem of ageing and health. Concept of poverty - Approaches to poverty by Bardan, B.S.Minhas, Dandekar and Rath Planning Commission, Amartya Sen - Entitlement and standard of living approach -Environment, gender & poverty - Capability of poverty- Changing trends & magnitude of unemployment.

MODULE-III:

Agriculture & Industry -Inter-relationship between Industry & Agriculture. New agricultural policies - Agreement on Agriculture with reference to India - Intellectual Property Rights - Patenting - trademarks - Impact of WTO on Indian Agriculture viz.-food crops, commercial crops - Issues of self sufficiency -Household food security. Industrial policy of 1991-Impact of Liberalization, Privatization and Globalization on Indian industry including small scale and traditional industries.

MODULE-IV:

India & World Economy-Economic crisis - Economic reforms - Fiscal reforms (Raja Chelliah report, Kelkar report) - Financial reforms - Narasimham report (1991, 98) -Public sector reforms - BOP reforms - second generation reforms-India in a global economy - WTO - Capital flows - TRIMs - TRIPs - Boxes.

MODULE-V:

Kerala Economy Traditional issues -A profile of Kerala Economy since its formation -Kerala Model of Development - Structural changes in Kerala economy- Demographic changes - Issues of sex - ratio - gender discrimination - ageing - health - migration -immigration - labour culture- Emerging issues- Kerala and WTO - Impact on crop pattern - food crops - cash crops - issue of food self sufficiency - household food security - Education - Social sector -Fiscal crisis in Kerala - Nature and conditionality of development loans to Kerala - rural infrastructural development in Kerala - Micro credit units - Peoples' plan - role of Panchayat Raj - Impact of cultural and ayurvedic tourism - mass media.

REFERENCES

1. Pranab Bardhan: The Political Economy of Development in India; Oxford University Press. New Delhi, 1994.
2. C.T.Kurian: Poverty Planning and Social Transformations-An Alternative in Development Planning; Allied Publishers, New Delhi, 1978
3. V.M. Dandekar: The Indian Economy 1947-97; transforming traditional Agriculture Vol.1

4. Bimal Jalan: Indian Economic Crisis: The Way Ahead; Oxford University Press, New Delhi 1992.
5. India's Economic Policy Preparing for the 21st Century; Penguin, New Delhi, 1996.
6. A.P.Thirwall: Growth and Development, 6th Edition Macmillan Press Ltd., 1999
7. Vijay Joshi: IMD Little; India's Economy Reforms; Oxford University Press, New Delhi, 1991-2001
8. M.A Oommen: Essays on Kerala Economy.
9. B.A.Prakash: Kerala Economy-Problems and Prospects; Sage Publications, New Delhi. 1994.
10. P.Surendran: The Kerala Economy; Vrinda publications Delhi, 1999 & 2002,
11. Uma Kapila Indian Economy Since Independence; Vol.1, H,&III, Academic foundation. New Delhi.
12. Recent Developments in Indian Economy, Part 3&4 Academic Foundation, New Delhi. 1994&95.
13. R.K. Sinha: Economic Development Planning and Policy in India, Deep&Deep, 1998
14. Robert.E.B.Lucas and Gustar.F. Papanek; Indian Economy-Recent Development and Future Prospects. Oxford University Press, New Delhi, 1989
15. P.P.Pillai: Kerala Economy-Four Decades of Development. 1994
16. Terry Byres, Major Debates on Indian Economy.
17. Amartya Sen, Poverty and Famine-An Essay on Entitlement and Deprivation. Oxford University Press. New Delhi, 1982.
18. ———: The Standard of Living: Tanner Lectures - Cambridge University Press, 1987.
19. ———: Development as Freedom. Oxford Uni. Press, 1999.
20. ———: India Development and participation, Oxford University Press, 2002.
21. Brahmananda and Pancharuki: Development Process of Indian Economy; Himalaya Publishers, 1987.
22. S.S.Tarapore . Issues in Financial Sector Reforms, UBS Publishers' Distributors Ltd. New Delhi :2000.
23. C.Ranga Rajan. Indian Economy; UBS Publishers Distributors Ltd; New Delhi , 1998.
24. Ruddar Dutt & KPM Sundaran: Indian Economy, S.Chand & Company Lid, New Delhi, 2004.
25. A.D.N. Bajpai, S.K. Chaubey, N.G.Pendse, S.K. Shrivastava; .Emerging Trends in Indian Economy. Atlantic Publishers & Distributors, New Delhi, 1995.
26. A.C.K. Nambiar: Socio-Economic Conditions of Gulf Migrants, Commonwealth Publishers New Delhi
27. Ruddar Dutt; Second Generation Economic reforms in India; Indian Economic Association
28. A.Banerjee & S.K. Singh: Banking and Financial sector reforms in India; Indian Economic Association
28. M.R.Aggarwal International Intuitions and Economic Development of Underdeveloped Countries; Indian Economic Association.
29. Alluwalla , Isher Judge & Willinson, John (ed):The South Asian Experience with Growth.
30. Various Issues of FPW. Economic Survey. Kerala Calling , Development Review. Yojana.
31. South Indian Development Report, Oxford University Press, 2001.

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Core Paper V)
OPERATIONS RESEARCH FOR ECONOMIC ANALYSIS

Module -1

Operations Research : Meaning and scope - Linear Programming problem : Mathematical formulation - solution by graphical and simplex method - duality - dual problem - economic interpretation of dual problem -solution of dual problem.

Module – II

Transportation problem : General structure of the problem transportation tables - solution of transportation problem - assignment problems - method for solving assignment problems.

Module – III

Non linear programming - algebraic forms - constrained maxima and minima - Kuhn-Tucker analysis - Kuhn-Tucker conditions - its interpretation and theoretical applications - quadratic programming - methods of solving quadratic programming.

Module – IV

Decision theory : Basic concepts - decision rule - decision making under certainty, under risk, under uncertainty - Harwicz α criterion, expected opportunity loss - expected value of perfect information (EVPI) Bayecian Decision Theory - decision tree - game theory : meaning - the zero -sum games - two person zero sum games - pay-off matrix - maximin and minimax principle - saddle points - mixed strategies - optimal mixed strategies and the saddle point theorem - graphical solution of $2 \times n$ and $M \times 2$ games - dominance property - reducing the game problem to L.P.P., n-person games (concept only).

Module – V

PERT and CPM : Basic concepts - construction of net works - critical path - event times, float and slack, time cost - trade off, resource allocation and scheduling - resource leveling - resource smoothing, project control, updating - difference between PERT and CPM

REFERENCE

1. William J. Baumol, *Economic Theory and Operations Analysis* - Prentice Hall of India, New Delhi, 1999
2. Rao S.S., *Optimisation Theory and Applications*, New Age International.
3. Taha. H.A, *Operations Research - An Introduction*, Me. Millan.
4. Kanthi Swarup,. Gupta and Man Mohan, *Operations Research*, Sultan Chand & Sons
5. Philips Ravindran and Solberg, *Operations Research, Principles and Practice*, John Wiley.
6. Gross and Harris, *Fundamentals of Queing Theory*, Jon Wiley.

M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE

CORE PAPER-VI

INTERNATIONAL ECONOMICS

MODULE-I

Determinants of Trade - Classical theories of trade - Absolute differences in costs- Comparative costs - Opportunity costs - Reciprocal demand- Heckscher-Ohlin theory - Leontief paradox - Factor price equalization theorem - Stolper - Samuelson theorem - Rebezynski theorem- The terms of trade- Factors effecting the terms of trade- Offer curve- box diagram.

MODULE - II

New theories of International Trade- Economic growth and international trade-production effects- consumption effects- combined production and consumption effects of growth — Theory of Immiserising growth - Prebish- singer model -Application to developing countries.

MODULE-III

Commercial policies of trade - Tariffs - Effects of tariffs under partial and general equilibrium perspective - optimum tariffs - Tariffs retaliation - Tariff and welfare -Quotas - Dumping -Tariffs and non-tariff constrains- Free trade and protection -Economic integration - Customs union - Trade creation and trade diversion.

MODULE-IV

Balance of payment - Accounting method - Adjustment theory-Exchange depreciation and devaluation - Internal and external balance - Theories of Balance of payment- The Elasticity approach- The Marshall- Lerner Mechanism- The Absorption approach- The Monetary approach— Foreign trade multiplier — Foreign Exchange rate policy- Fixed Exchanges- Flexible Exchanges- Exchange rate regimes.

MODULE-V

International trade and World Trade Organization - Multinationals-IMF --World Bank-ADB and developing countries - India's foreign trade and balance of payments- Foreign trade policies-FERA and FEMA -Associations of regional co-operation- SAARC-Significance of regional trade organizations.

REFERENCES

1. Chacoliades: International trade, Theory and Policy, Mc.Graw Mills, 1978.
2. Kindeberger C.B'.International Economics, Taraporewala and Sons, Bombay.
3. Sodersten.B.O: International Economics, Macmillan, London, 1980.

4. Deepak Nayyar: Trade and Industrialisation, Oxford University Press, 1997.
5. Jagadish Bhagavathi: Writings on International Economics (ed) Balasubramanyam, Oxford University Press.
..... Theory and Practice of Commercial Policy, 1968
6. Meier G.M: International Economics of Development, Harper and Row, New York, 1968
- 7 problems of a World Monetary Policy: Brettonwood and After; Macmillan, London.
8. Bardhan P.K: Economic Growth Development and Foreign Trade Wilet New York, 1970.
9. Jagadish Bhagavathi and Ronald W.Jones: Trade Balance of Payments and Growth, North Halland Nayyar, ;
10. A Stream of Windows: Unsetting Reflections on Trade, Immigration and Democracy; OUP.
11. Mundell.R.A: The Appropriate Use of Fiscal and Monetary Policy for International External Stability, IMF. Staff Papers; 1962.
12. Scammel W: International Policy,; Brettonwoods and Vfter; Macmillan, London. 1975.
13. Machlup,F: International Monetary Economics, George Alien and Unwin , London; 1970.
14. Evan Luard: The Management of the World Economy,. Macmillan, London; 1983.
15. M.R. Aggarval: International Institutions and Economic Development of Underdeveloped Countries; Indian Economic Association,
16. Nagesh Kumar: Foreign Direct Investment and the WTO; OUP.

**M. A. APPLIED ECONOMICS - SEMESTER COURSE
CORE PAPER VII - FINANCIAL MARKETS**

Module I. Financial System

The Financial system - an overview , Financial Markets, Financial Institutions and Instruments - Structure of Indian Financial System - Indian Money Market, features, submarkets, money market instruments - Discount and Finance House of India- Money market reforms

Module II. Capital Market

Investment setting, spectrum of investment, features of investment avenues, guidelines for investment. Risk-return relationships - Capital Market Structure, Primary and Secondary Markets, Players in the primary and secondary markets - Stock Exchanges - Capital Market Reforms in India.

Module III. Regulatory and Promotional Institutions

Role of RBI in promotion and regulations - Monetary and credit policies - Narasimham Committee Report and further developments -- SEBI - highlights of SEBI's performance --Internationalization of Financial Services in India - Domestic financial deregulation and capital account liberalization — Innovations in banking scenario

Module IV. Commercial Banks and NBFIs

Evolving role of commercial banks - functions and role of NBFIs - Insurance Companies, UTI, Small Savings and Provident Funds, Mutual Funds - Miscellaneous NBFIs -Merchant Banking, Venture Capital, Lease Finance, Factoring, Hire-Purchase Finance, Housing Finance, Depository Services - Micro Finance in India.

Module V. Technical analysis of Finance.

Time value money, discounted cash flows, NPV - Futures. Options, Derivatives and Swaps - Portfolio Theory - Markowitz model and Capital Asset Pricing Model - Portfolio Management.

References

1. L. M. Bhole, 'Financial Institutions and Markets. Structure, Growth and Innovations, Tata Mc **Graw** Hill
2. Michael Baye and Dennis W Jansen, "Money Banking and Financial Markets, An Economic Approach', Texas and A M University.
3. Prasanna Chandra, "Managing Investments", Tata McGraw Hill.
4. Y. Venugopai Reddy.' Economic Policy in India - Managing Change' VBSPD Pvt. Ltd.
5. James A Hanson, Sanjay Kathuria, "India. A Financial Sector for the 21st Century' Oxford University press.
6. Meir Kohn, "Financial Institutions and Markets" Tata McGraw Hill.
7. V. A. Avadhani, "Financial Economics - Theory and Practice^{1'} - Millennium Ed. Himalaya Pub.
8. Tannan M. L. "Banking Law and Practice in India^{1'}, India Law House
9. Anthony Saunders. Marcia Millon Cornett. "Financial Markets and Institutions, A modern Perspectives , Tata Me Graw Hill.
10. M Y Khan , 'Indian Financial system'. Tata McGraw Hill

Reading of the Journal of Indian Institute of Banking and Finance, RBI Bulletins, EPW and other periodicals is essential for updating information on the topic.

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Core Paper - VIII)
ECONOMETRICS

Module -1

Definition and scope of Econometrics — methodology of econometrics — nature and sources of data for econometric analysis — contribution of econometric methods to the development of Economics — limitations of econometric methods.

Module - II

Two - variable regression analysis : Method of 'ordinary least-squares' — properties of OLS estimators — the Gauss-Markov theorem — estimation and testing — multiple regression analysis : estimation and testing -problems of multicollinearity, heteroscedasticity and autocorrelation ; sources, detection, consequences and remedial measures.

Module – III

Dummy variables : Regression on dummy variables - dummy variable trap - the LPM, Logit, Probit and Tobit models - estimation - application.

Module – IV

Simultaneous equation models: Simultaneous equation bias and inconsistency of OLS estimators — structural and reduced form equations — the identification problem: order condition and rank condition for identification — simultaneous equation methods : method of 'indirect least squares' and method of 'two-stage least squares' — maximum likelihood method — estimation.

Module – V

Application : Demand - production - cost - supply functions - simple econometric models.

REFERENCES

- 1) Damodar N. Gujarati, *Basic Econometrics*, McGraw - Hill, 1995,
- 2) Michael D. Intriligator, *Econometric Models, Techniques and Applications*, Prentice Hall of India, New Delhi, 1980.
- 3) A. Koutsoyiannis, *Theory of Econometrics, An Introductory Exposition of Econometric Methods* (Second edition), Me Millan.
- 4) Johnston . J. *Econometric Methods*, McGraw Hill Book Company, New York, 1972.
- 5) Klien L.R. *A Text Book of Econometrics*, Prentice Hall Inc., Englewood Cliffs. New Jersey, 1974
- 6) Maddalla G.S. *Econometrics*, McGraw Hill, New York, 1977.
- 7) Desai, Meghand, *Applied Econometrics* McGraw Hill Book Co., New York 1976.
- 8) K.L. Krishna, *Econometrics*, Oxford University Press, 1998
- 9) Klien L.R., *Introduction to Econometrics*, Prentice Hall Inc., Englewood Cliffs. New Jersey.
- 10) Damodar N. Gujarati, *Essentials of Econometrics*, McGraw - Hill, 1992.

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS -SEMESTER COURSE
Core Paper- 12
MATHEMATICAL ECONOMICS

Module - 1 (Theory of Consumer Demand)

Maximization of utility - demand functions - Elasticity - Properties of demand functions - Slutsky equation - Direct and cross effects - Separable and additive utility functions - Homogeneous and homothetic utility functions - Indirect utility function - Duality in consumption - Roy's identity- Linear expenditure systems, addilog demand system - Constant elasticity models - The problem of choice involving risk - Expected utility - Risk and insurance.

Module - II (Theory of Production)

Production function - Cob-Douglas production function - CES production function - VES production function - Translog production - Cost function : Derivation of cost as a function of output -.Input demand function- generalised Leontief cost function - shepherd's lemma - Technological progress - Embodied and disembodied technology- Neutrality.

Module - III (Monopoly and Imperfect Competition)

Monopoly and profit maximisation - Price discrimination - Taxation and monopoly - Multiple plant and multiple product monopoly - Revenue maximisation monopoly - monopoly in the input market - Cournot- Nash model - Stackelberg model - Sweezy model.

Module - IV (Optimisation over time)

Basic concept - Multi period consumption - Investment theory of firm -interest rate determination - Investment theory and role of time - Retirement and role of durable equipment.

Module - V (Linear Models)

Theory of games: Two person zero-sum game - Pure and mixed strategy - Saddle point theorem.

Linear programming: Primal and dual problem - General linear programme - Complementary slackness theorem.,- Simplex solution.

Input output analysis : Open and closed Leontief system - Hawkins -Simons condition.

REFERENCES

1. Allen R.G.D, *Mathematical Economics*, Macmillan Co. Ltd., 1956
2. Allen R.G.D, *Macroeconomic Theory*, Macmillan Co., Ltd., 1967.
3. Amitabh Kundu, et. Al, *Input Output framework and Economic Analysis*, Centre for the study of Regional Development, New Delhi, 1976.
4. Birchenhall. C. and Grout. P. *Mathematics for Modern Economics* Philip Alien. Harness and Noble Books, Oxford, 1984.
5. David. F. Heithfield and Soren Wibe, *Introduction to Cost and Production Functions*, Macmillan Education Ltd., 1987.
6. Eugene Silberberg, *The Structure of Economics a Mathematical Analysis* (Second Edition), Me, Graw Hill International (ed). 1990.
7. J.M. Henderson and R.E.Quandt, *Microeconomic Theory a Mathematical Approach*, Me. Graw Hill International Ltd, 1980.
8. Leontief. W.W., *The Structure of American Economy 1919-1939*, Vora and Co. Publishers (Pvt.) Ltd., Bombay., 1971.
9. Krishna K.L. (ed.) *Econometric Applications in India*, Oxford University Press, New Delhi, 1997.

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Optional Paper - I)
COMPUTER APPLICATION IN ECONOMIC ANALYSIS

Module – I

Introduction to computers - Generations and classifications of computers - computer organization - hardware-- software and firmware -data base management system - [basic concepts of DBMS - kinds of data base - conventional filing system - data models] data base file - record fields- basic concepts of data processing - introduction to networks - types of networks - internet - intranet - e-mail - e-commerce, multimedia - impact of computers on modern society.

Module – II

Introduction to operating system - functions of operating systems -types of OS - multi-programming - time sharing and real time operating systems - application of software packages - word processor and spread sheets - introduction to excel - data entry - building formulae and functions -formatting and calculation - graphs and charts.

Module – III

Economic Data : Classification - frequency distribution - relative frequency distribution, cumulative frequency distribution, relative cumulative frequency distribution, frequency tables, Lorenz Curve - pictorial presentation of data - histograms, pie charts, graphs and time series plots, [practice with Excel or SPSS).

Module – IV

Descriptive Measures: Measures of central location : Mean, mode, median - comparison - geometric mean, harmonic mean; measures of spread : range, variance, standard deviation; Bivariate data - measures of association : scatter plots, correlation, simple linear regression, (practice with Excel or SPSS)

Module – V

Analysis of time series; Trend analysis, smoothing, seasonal variation - ratio to trend - link relatives, cyclical fluctuations; Index Numbers ; methods of construction - simple, chain, weighted - deflating time series, shifting and splicing, test of adequacy (Practice with Excel or SPSS).

Modules – VI

Further Topics : Optimization - linear optimization - (linear programming); financial mathematics - simple interest, compound interest; growth rates calculation; discounting techniques - present value, net present value (NPV), internal rate of return (IRR) [Practice with Excel or SPSS].

REFERENCES

1. Leon Alex and Mathews Leon, *Fundamentals of Information Technology*, Leos Press and Vikas Publishing House Pvt. Ltd., New Delhi.
2. Guy Hart Davis, *Word 2000*, BPB Publications, New Delhi (ABC series can also be used)
3. Gene, MS *Excel 2000*, BPB Publications, New Delhi (ABC series can also be used)
4. *Office 2000 - Made easy, CD ROM, SSI, Software Solution International.*
5. David Whigam, *Quantitative Business Methods using Excel*, Oxford University Press, 1998.
6. Chandan. S. Jit, *Statistics for Business and Economics*, Vikas Publishing House Pvt. Ltd.. 1998
7. Prem S. Mann, *Statistics for Business and Economics*, Wiley 86 Sons, New York.
8. R.J. Wonnacott and T.H. Wonnacott, *Introductory Statistics for Business and Economics*, Wiley, New York.

Books for Additional Reading

1. Saxena S. MS. *Office 2000*. Vikas Publication, New Delhi.
2. Hutchinson S & Coulthard. G. (1997), *Microsoft Office 97 Professional*, Me Graw Hill (available latest version can be used)
3. Gupta. S.P. *Statistical Method*, Sultan Chand & Sons.
4. Barrow. M. (1996), *Statistics for Economics, Accounting and Business Studies*, 2nd edition, Longman.
5. Chakravarti et. al. *Handbook of Methods of Applied Statistics : Techniques of Computation, Descriptive Methods and Statistical Inference*, Vol. 1, John Wiley & Sons, New York.

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Optional Paper- 2)

ENERGY ECONOMICS

Module – I

Introduction : Concepts and techniques of energy sector analysis -origin and development of energy and energy sources at the global and national level - energy parameters - energy and economic growth : historical perspective - energy constraints.

Module – II

Supply : Sources, uses and substitution possibilities - Demand : technology of use and demand - energy conservation and efficiency - market and institutional barriers - demand side management : concepts and case studies.

Module III : Integrated framework for energy pricing and investment - cost analysis - energy tariff - electricity pricing - fixed charges, capacity charges -administered prices - marginal pricing - cost-plus pricing - energy price modeling.

Module-IV

Energy and the environment : Models of energy-environmental interaction : bottom up and top down - models of integrated assessment of climate change - regional and global models - environmental issues of energy development - policy alternatives.

Module – V

Energy strategies for developing countries: Alternative perspective -India's energy sector: markets and institutions - international environmental constraints and National Energy Policy - role of SEBs in India - recent policy changes in the context of globalization, liberalization and privatization.

Projects : [Project work in the form of case studies may be carried out compulsorily]

- * Energy audit at the firm level or households level
- * Energy demand estimation at the micro level.
- * Inter-industry analysis in terms of energy parameters — Efficiency and Productivity.

REFERENCES

1. Robert Hill, Keefe O Phil and Snap Colin, *Future of Energy Use*, Earth Scan Publication, London, 1993.
2. J.M. Griffin, *Energy Economics and Policy*, Academic Press, 1986.
3. L. Schipper and S. Meyers, *Energy Efficiency and Human Activity : Past Trends, Future Prospects*, Cambridge University Press, 1982.
4. J. Goldemberg et.al., *Energy for a Sustainable World*, Wiley Eastern Ltd., New Delhi, 1988.
5. M. Munasinghe and G. Schramm, *Energy Economics, Demand Management and Conservation Policy*, Van Nostrand Reinhold Co., 1983.
6. R. Sengupta, *Perspective Planning and Policy for Commercial Energy*, Planning Commission, Government of India, 1989.
7. D.W. Jorgenson, P. Wilcoxon, 'Energy, the Environment and Economic Growth', in A.V. Kneese and J.L. Sweeny (Eds) *Hand Book of Natural Resources and Energy Economics*, Vol. III Elsevier Science Publishers, 1983.
8. Government of India : Ministry of Finance, Infrastructure Report, 1997, New Delhi, 1998.
9. Tata Energy Research Institute (TERI), *TEDDY - Tata Energy Development Directory*, Annual Publications.
10. M. Munasinghe, *Pricing of Electricity in India*
11. P.R. Sukla and U.A. Pandya, *Long Term Energy and Environment Forecasts for India, Modelling and Policy Analysis*, 1992.

Journals :

1. *Energy Policy*, Butterworth and Heinemann U.K.
2. *Economic and Political Weekly - Bombay*
3. *Energy Sources*, Elsevier Science Publishers.
4. *Energy Economics*, Journal of the Association of International Energy Economists.
5. *Urja*, Central Electricity Authority
6. *TIDE*, TERI publication
7. *Energy ~ Environment Monitor* - TERI Publication
8. *Power line* ~ New Delhi

M. A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE

(Optional paper-3)

DEVELOPMENT ECONOMICS

MODULE-I

Development and Underdevelopment - An overview: Economic growth and development- The Historical records ; Kuznet's characteristics-Sources and Measurement of economic development - National Income- Per capita Income - PQLI and HDI as indices of development - Alternative measures of development — Sen's Capabilities approach- Three core values of development-Factors of economic development- Growth crisis and cost of development - Trade off between economic development and environmental quality - Problems of development.

MODULE-II

Approaches to the theory of development- Grand theories: Adam Smith, David Ricardo, Karl Marx. Joseph Schumpeter.

MODULE - III

I

Partial Theories - Stages of growth- Rostow-Big push- Balanced growth Vs. Unbalanced growth- Low level equilibrium trap-Critical minimum effort-Backwash effects of International Trade- Dualistic theories- Labour surplus - Nurkse, Lewis and Fei and Ranis.

MODULE -IV

Modern Theories: The Harrod - Domar, The Neo-classical Models- Meade, Kaldor, Robinson, Solow, Swan - Kaldor as a critic of Neo-classicals. New Theories - Theory of Technical change by Arrow, The role of Lenier Technology by Rebelo, and Technical Progress and Formation of Human Capital by Lucas, Rebelo and Uzawa.

MODULE- V

I

Development planning for economic development - Plan models - Export Led growth strategy - Global integration - Development experiences of East Asian countries - Taiwan -South Korea - Malaysia.

REFERENCES

1. A.P. Thirwal: Growth and Development, macmillan, 1994.
2. Michale Todaro: Economic Development in the Third World, Orient Longman, 1993.
3. Hollis.D. Chenery: Redistribution with growth Oxford university press.

4. Ian M.d. Little,: Economic Development, Theory Policy and International Relations, 1982.
5. H.B. Chenery & T.N Srenivasan: Hand book of Development Economics.
6. Meir & Baldwin: Development Policy.
7. Andre Weintrales: Growth Controversy, Macmillnn, 1974.
8. Robert Barrow&Xavicr Sala - I Martin: Economic Growth. McGraw Hill International Editions. 1995.
9. Debraj Ray: Development Economics, Oxford University Press, New Delhi, 1998.
10. Michael .P.Todaro: Stephen C. Smith, Economic Development - Persian Education Asia, 2003.
11. Timothy.M.Shaw: Economic Restructuring in East Asia aiv! India, Macmillan, India Ltd, 1996.
12. Sen,Amartya: Commodities and Capabilities,OIP,Delhi,2002.
13.Employment, Technology and Development,OIP, Delhi,2002
- 14..... Development as freedom,OIP,Delhi, 2002.
15. A.M Sheikh: Human Resources Development and Management , S.Chand,New Delhi

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Optional Paper 4)

SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

Module – I

Nature and scope of Investment Management - Investment setting - risk and return - investment avenues - outline of Indian capital market - investment management - functions of investment management - managed portfolio - portfolio management in India.

Module – II

Portfolio analysis -- total risk and its components - risk in finance theory - source of risk - classification - diversification of risk - portfolio risk and return - security analysis - macro, industry and company analysis.

Module – III

Technical analysis : fundamental Vs technical analysis - tools - Dows theory - price, volume and other indicators of market - price indicators of individual stock - price volume analysis of individual stock.

Module – IV

Efficient market theory - concept of efficient security - Cootner's price value interaction model - Samuelson's continuous equilibrium model - random walk theory - efficient market hypothesis.

Module – IV

Risk and required rates of return on equities - ex-post and ex-ante rates of return on equities - standard deviation as a measure of risk - measurement of rate of return and risk for a portfolio - the capital asset pricing model - issues behind capital asset pricing model.

REFERENCE

1. Avandhani V,A., *Investment and Securities Market in India*, Himalaya Publishing House 1992.
2. Prassanna Chandra, *The investment Game How to Win* T.M.H. 1992.
3. Brigham E.F. and Gapinski L.C., *Financial Management llieory and Practice*, The Drydress Press, New York 1991.
4. Fischer D.E. and Jordhan R.J., *Security Analysis and Portfolio Management .*, Prentice Hall of India, 1992
5. Jack Clark Francis, *Investment Analysis and Management*, McGraw Hill Book Company, New York 1937
6. Donald E Fischer and Ronald J Jordan, *Security Analysis and Portfolio Management*, Prentice Hall of India, 1995
7. N.J. Ysaswy, *Equity Investment Strategy*, TMH 1986.

KANNUR UNIVERSITY
M.A. DEGREE IN ECONOMICS - SEMESTER COURSE
(Optional Paper - 5)
ENVIRONMENTAL ECONOMICS

MODULE-I

Economy and the environment - Inter linkages - Biotic and a biotic component of environment - Material Balance approach - Laws of Thermodynamics - Environmental Ethics.

MODULE-II

Economics of natural resources and conservation of resources resource taxonomy - Renewable and non-renewable resources -Forest resources - Managing renewable and non-renewable resources - optimum resources extraction.

MODULE-III

Economics of -sustainable development - Indicators of sustainability - designing a new material economy -Market failure and public policy - Incomplete markets - Externalities - Non exclusion and commons - Non rivalry and public goods - Cost benefit analysis - accounting for the environment - Environment Impact Assessment (EIA).

MODULE-IV

Environmental degradation - pollution - types - Plastic pollution - Disposal of reactive wastes and dangers of radiation - Water conflicts - Forest conflicts - Ganga Action Tran boundary pollution problems and international externalities - Global warming and green houses gases - Ozone depletion T Acid rain - Deforestation and desertification - Decline of bio diversity - International Environment Agreements: Montreal Protocol - Global Environmental Facility - 1991 - Kyoto Protocol, Earth Summit, Doha Summit.

MODULE-V

Economic Incentives for environmental Protection - Price rationing: Charges and subsidies - pollution taxes and control of pollution - Liability rules: non compliance fees - bonds and deposit refunds - quantity rationing - marketable permits - Property rights - Evaluative criteria -Environmental management.

REFERENCES

1. Nick Hanley, Jagonf, Shogern and Benwhite, Environmental Economics; Macmilian 1997.
2. Lester R. Brown - Eco-economy, Orient .Longman private Limited, 2002.
3. Ravindra N. Battacharya, Environmental Economics; Oxford University Press, 2001,
4. Vandana Shiva, Ecology and the Politics of Survival, United Nations University press, 1991.
5. V.S. Mahajan, Environmental Planning, Machinery and management; Deep. & Deep publications, 1991,
6. R.P. Misra, Environmental Ethics, Concept Publishing House
7. Dore and Mount. Global Environmental Economics
9. Perman, Roger, Yue Ma, James, M.C. Gilvrary and Michael Common, Natural Resource and Environmental Economics, Longman 1999.
10. Buchholz, .Rogene. Principles of Environmental Management, prentice hall 1998.
11. World Bank, World Development reports; Washington, 1992.
14. Mishan E,J., Elements of cost - benefit analysis; UNWIN, University Books, 1972.
15. Nordhans, Managing the Global commons: The economics of Climate Change; Cambridge MIT Press, 1994.
16. Pearce D.W.. and Turner, R.K, Economics of Natural Resources and the Environment; Johns Hopkins University Press, 1990.

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Optional Paper - 6)
APPLIED WELFARE ECONOMICS

Module -1

Scope and purpose of Welfare Economics

Module - II

The welfare of the household : Measurement of welfare change for an individual

Module - III

Welfare in a many household economy: Measurement of welfare changes in a many consumer economy.

Module – IV

Measurement of inequality and poverty : Gini coefficient - Lorenz Curve - Atkinson's measure of inequality - Sen's measure of inequality and poverty.

Module - V

Standard of living and quality of life : Output and resource-based approaches - the notion of functioning and capabilities - use of these concepts to measure standard of living and quality of life.

REFERENCES

1. A.B. Atkinson, *The Economics of Inequality*, Oxford University Press, 1983.
2. A.K. Sen, *On Economic Inequality*, Oxford University Press, 1972.
3. A.K. Sen, *Standard of Living*, Cambridge University Press, 1987.
4. A.K. Sen, *Inequality Re-examined*, Clarendon Press, 1992
5. A.K. Sen and M.Nussbaum, *The Quality of Life*, Clarendon Press, 1993.
6. R. Broadway and N. Bruce, *Welfare Economics*, Blackwell, 1984.

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Optional Paper - 7)

POPULATION STUDIES

Module -I

Population studies - Nature and scope - Sources of population data -World population, growth and distribution - Population growth in Kerala and India - Important theories of population - Malthusian, Optimum and Demographic transition theories of population.

Module – II

Demographic transition since independence - concepts of mortality and fertility - Can poverty determine fertility - Fertility and age at marriage -Education and fertility - Population aging in Kerala.

Module – III

Basic formal demography - Data collection - Age and sex structure Period and cohort fertility - Migration, marriage and reproductivity Economic consequences of out migration - Urbanization and trends.

Module – IV

Population trends in modern Economic growth - Mass education and fertility decline - Co-operation, Inequality and the family (Amartyasen -Population projection and estimation.

Module – V

India's population policies - Population growth and socio-economic development, environment and health - Conceptual issues and linkages with environment and health –

REFERENCES

1. K.C. Sacaria and S. Irudiyarajan, *Kerala's Demographic transition - Determinants and consequences*, Sage Publications, 1991.
2. Asha A. Bhande and Tara Kanikkar, *Population studies*, Himalaya Publishing House, 1988.
3. Prasad P.K., *Population Planning, Policy and Programme*, 1990 Deep and Deep Publications, New Delhi.
4. Colin Neuwell, *Methods and Models in Demography*, Belhaven Press, London, 1998.
5. Manar Chaffers, Mohan Munasingha and Rabin Ganguly, *Environment and Health in Developing Countries*, A.P.H. Publishing Corporations, 1998.
6. Peter R. Cox, *Demography*, Universal Book Stall, New Delhi, 1989.
7. P.G.K. Panikar and C.R. Soman, *Health Status of Kerala*, Centre for Development studies, Trivandrum, 1985.
8. Demeny and Geoffrey Menicoll, *Population and Development*, Earth Scan Publications, 1998.
9. K.D. Gaur, *Management of Poverty Alleviation in India*, Manak Publications, 1998.

OPTIONAL PAPER- 8 PUBLIC ECONOMICS

MODULE. 1: The Case for a Public Sector.

Unit. I The case for a public sector- The dynamics of the role of government in a (I) capitalist economy (2) Mixed economy.

Unit.2 Market failures due to market imperfections, decreasing cost, externalities, uncertainty - Multiple Theory of Public Household : Multiple functions of the government- Allocation, Distribution and Stabilization Functions- Provision of Public Goods: characteristics of public goods, the optimal provision of pure public goods, impure public goods(congested public goods) theory of Clubs, Local public goods (Tiebout Model), Public intermediate goods, Mixed goods/ quasi public goods, Merit wants and merit goods- Theories of Public Goods Allocation: Marginal Utility theory, Voluntary Exchange Theory, Samuelsons Model of Public goods allocation.

Unit.3 Public Choice Theory: Private and public mechanism for allocating resources - The problem of preference revelation- Voting Models- Revealing social preference through Majority Voting : The Bowen - Black Majority Voting Model, Arrow's Impossibility Theorem, The Buchanan - Tullock Model - The Wicksell Approach (Absolute and Relative Unanimity) -Revealing social preference through Point Voting, Coleman Approach to revealing social preference-Down's model of Democracy
Incentive Mechanism for preference revelation (Groves and Loeb, Tideman, Tulloch) - Bureaucracy, Special interest Groups - rent seeking Cost and Political process -Directly Unproductive Profit Seeking Activity.

Reference:

1. Dalton.H: Principles of Public Finance, Allied Publishers (1991),Part I chapter 1-3
2. Pigou.A.C. : A Study in Public Finance, Macmillan, Chapters . 1-4
3. Prest.A.R & Barr.N.A.: Public Finance in Theory and Practice, ELBS, London, chapter-I
4. Joseph.E. Stiglitz : Economics of the Public Sector, WAV, Notton & Company, New York, chapters 1-9.
5. Buchanan J.M. & Flowers M.R: Public Finance - An Introductory Text Book, Irving Publishers-Illinois, chapters 1-5.
6. Bernard. P. Herber: Modern Public Finance, A Study of Public Sector Economics. Irving Publishers Illinois, chapters 1-5.
7. John.C. VVinfrey : Public Finance, Public Choice and The Public Economy -Harper & Row publishers New York, Part-1, chapters 1-5.
8. R.A. & P.B. Musgrave: Public Finance in Theory and Practice, Me Grew Hill, chapters 1-5.
9. Robin.W. Boadway :Public Sector Economics, Winthrop Publishers, chapters 1-6.

10. John Cullis and Philip Jones, Public Finance and Public Choice, Oxford University Press, chapter 1-5.
11. Browning, J.M. & Browning E.K.- Public Finance & the Price System, Macmillan, New York. Chapters 1-5

MODULE.II: Public Expenditure & Public Enterprise.

Theories of Public Expenditure : Criteria for Public Investment (Social Benefit Cost Analysis)- Structure & Growth of Public Expenditure in India- changing attitude towards public enterprise in India, Privatization and Disinvestment of public Sector units in India- Administered Price Mechanism.

Reference.

1. Dalton,H. Chapter. 3
2. Musgrave and Musgrave: Chapters 7-9.
3. Boadway : Chapters 4-8
4. Browning : Chpts. 2-4
5. Mishan.E.J. : Cost Benefit Analysis Alien & Unwin, London 1982.
6. Peacock.A.t & WisemanJ. : The Growth of Public Expenditure in thwe U.K George Alien & Unwin Ltd. 1967
7. Reddy.K.N. : Growth of Public Expenditure in India, 1872-1966, Sterling Publishers, Delhi.1972.
8. Sudipto Mundle & Goviud Rao : Public Expenditure in India : Trends & Issues in Public Finance-Policy Issues for India (ed.) Sudipto Mundle , OUP, Calcutta, 1997.
9. Goyal.S.K.(ed)Public Enterprises, UPA, New Delhi, 1985.

MODULE.III: Public Revenue.

Theory of Optimal Taxation- Tax incidence under various market structure-Partial equilibrium Analysis, General equilibrium analysis- Measuring incidence-Musgrave's Approach- Allocative & Equity aspect of Personal Income Tax, Excise Duty, Sales tax- Tax Reforms in India: Chelliah Committee report, Long term Reforms in India's Indirect Tax Structure (Indirect Taxation Committee Reports)

References:

1. Dalton.H. : Part.3
2. Browning : Chapter. 10
3. Boadway : Chapters 9-11
4. Dwivedi.D.N: Reading in Indian Public Finance, Wiley Eastern Ltd, New Delhi, 1994.
5. Musgrave & Musgrave: Public Finance in Theory & practice, chpts.12-17
6. Musgrave : The Theory of Public Finance, Me Grew Hill, 1959.

MODULE. IV: Public Debt

Theories of Public Debt: Classical, Keynesian & Musgrave - Inter-generation Equity aspect of Public debt- Buchanan's Thesis, Domer's views on Fiscal Deficit concept of public Debt- Growth & Structure of Central & State debt in India - Principles of Public Debt Management.

References.

1. Musgrave & Musgrave.
2. Buchanan. J.M. Public Principles of Public Debt, Irwin, 1958.
3. Sudipto Mundle; Public Finance policy issues for India, OUP,1997.
4. Chelliah. R.J.: Growth of Public Debt in the Indian economy (ed) by Bimal Jalan, Penguin Books, 1992.

MODULE.V: Fiscal Policy

Reforms in Budgeting - Programme, performance budgeting system, Zero based Budget-Budgetary Deficit and its measurement.

References.

1. David Novick : Programme budgeting, programme analysis and the federal Government, (Hardware) University press.
2. Phyre.P.: Zero Base Budgeting , A Practical Tool for evaluating Expenses,, John Wiely.
3. Standford. C.T.: The Economics of Public Finance , Pergamon Press, Oxford, chapters. 11-12.
4. Dwivedi. D.N. : Readings in Indian Public Finance, Chpts 2-3.
5. Thripathy. R.N.; Public Finance in Under Developed Countries, Sterling Publishers, 1985
6. Sudipto Mundle and Govind Rao.M. Issues in Fiscal Policy in the Indian Economy (ed) by Bimal Jalan.
7. Sudipto Mundle.: Public Finance, Policy issues for India.
8. Rangarajan, Basu, Jadhve : Dynamics of Interrelationship between Government deficit and domestic debt in India, R.B.I. Occasional Paper, Vol.10,No.3.1989.

MODULE.VI: Fiscal Federalism.

Theory of Multilevel Government Finance - Centre — state Financial Relations in India- Vertical & Horizontal imbalance in intergovernmental transfers in India-An Evaluation of Working of Finance Commission in India- Criteria of devolution - Planning Commission and Finance Commission - Modified Gadgil Formula - Role of Local self government in the light of 73rd constitutional amendment - Emerging issues in local financial relations in India.

References:

1. Musgrave & Musgrave, Chapter, 24
2. Chelliah. RJ. And Associates (NIPFP) Trends & Issues in Indian Federal Finance, chapter, 2-4.
3. Dwivedi. D.N Readings in Indian Public finance, chapter 13-14.

4. Govind Rao.: Indian Fiscal federalism, major issues in Public Finance (ed) by Sudipto Mundle, 1997.
5. GuIathi.I.S. and George. K.K. : Essays in federal Financial Relations, Oxford 1BH,198S.
6. Lakdwala . : I UNJOIN State Financial relations, Lalvanim Pubs.

M.A.DEGREE IN APPLIED ECONOMICS-SEMESTER COURSE

Optional Paper .9

AGRICULTURAL ECONOMICS

Module 1

Role of agriculture in economic development - Theories of agricultural development – Shultz Mellor, Lewis and Boserup - inter relationship between agriculture and industry

Module II

Agricultural Development in India. - Agricultural policy since independence - institutional and technological changes - impact of agricultural development on environment-Organic farming-agricultural biotechnology -problems of agricultural development -New Economic Policy and agriculture - Agricultural Policy 2000 -National Commission on Farmers -WTO Agreements on Agriculture - Trade liberalization and agricultural exports - challenges and prospects.

Module III

Agricultural Production Economics - Production relationships - systems and types of farming -agricultural subsidies - rationale for input subsidies in Indian agriculture - risk and uncertainty in farming -crop insurance - futures trading - Agricultural credit and marketing - structure and problems of credit in India - present system agricultural marketing in India

Module IV

Demand and supply of agricultural products - Characteristics of demand and supply - supply response - perverse supply response in traditional agriculture - cobweb theorem. Agricultural prices - behavior of agricultural prices - stabilization of agricultural prices - agricultural price policy and food security in India

Module V

Agricultural performance of Kerala-trends in agricultural growth — land reforms -current problem of the agricultural sector - emerging constraints and prospects of agricultural development in the liberalized globalised era -Group farming - prospects of lease land farming.

References:

1. T.W.Shultz - "Transforming traditional Agriculture" New Haven, London Yale University Press 1965
2. J.W.Mellor - "The Economics of Agricultural Development. Vora & Co Bombay S.Ghatak. & K.Ingersent - Agriculture and Economic Development New Delhi. Select Book Service Syndicate
3. W.A.Lewis - "Economic Development with unlimited supplies of labour"
4. Karl Eicher & Lawrence Witt - Agriculture in Economic Development Vora & Co Publishers Pvt.Limited
5. C.E.Bishop & W.D.Toussiant - Introduction to Agricultural Economic Analysis
6. O.S.Srivastava - "Theoretical Issues in Agricultural Economics Allied Publishers Pvt,Ltd.

7. R.N.Soni - Leading Issues in Agricultural Economics. Vishal Publishing Co.
8. R.K.Lekhi, Joginder Singh. - Agricultural Economics.Kalyani Publishers
9. R.Desai - Agricultural Economics.Himalaya Publishing House
10. S.A. R.Bilgrami - An Introduction to Agricultural Economics. Himalaya Publishing House
11. Sadhu&Singh - Fundamentals of Agricultural Economics. Himalaya Publishing House
12. B.P,Tyagi Agricultural Economics and Rural Development. Jai Prakash & Co.Meerut 19.
13. C.A.Robertson -An Introduction to Agricultural Production Economics and Farm Management
14. E.O. Heady. - Economics of Agricultural Production and Resource use. Prencide Hall 1961
15. C.H.Hanumantha Rao - Agricultural Production Function Costs and returns in India. Tata McGraw Hill 1965
16. P.C.Joshi.- Land Reforms in India ,Trends and Prospects. Allied Publishers
17. S.S Acharya &D.S.Agarwal -Agricultural Price Analysis and Policy .Oxford & IBH Publishing Co.Ltd
18. A.S. Kalthon. & D.S Tyagi - Agncultural Pnce Policy in India, .Allied Pubishers New Delhi
19. P.C.Malhotra - Stabilisation of Agricultural Prices in India
20. Uma Kapila - Understanding the Problems of Indian Economy .Academic Foundation
21. Uma Kapila - Indian Economy Since Independence Academic Foundation
22. M.A.Oommen - Kerala Economy Since Independence. Oxford & IBH Publishing Co.
23. BAPrakash (edited) - Kerala Economy Problems and Prospects Sage Publications New Delhi
24. M.A.Oommen(edited) - Kerala's Development Experience II Institute of Social Science, Concept Publishing Co.
25. B.A.Prakash. (edited) - Kerala's Economic Development, Performance and Problems in the Post Liberalization Period .Sage Publications New Delhi
26. G.S Bhalla - "Globalisation & Agricultural Policy in India" Indian Journal of Agricultural Economies' Vol. 50.No.1 January March 1995.
27. C.H.Hanumantha Rao -" Liberalization of Agriculture in India" Indian Journal of AgriculturalEconomics, Vol.50.No,3 July September 1995
28. D.Rudrappan.- " Economic Reforms and Agriculture" Yojana Vol. 47 .No. 11. November 2003
29. Dr.P.Bhattacharya & Dr. Krishna Bihan - " Scope of Organic Farming in India" Yojana,Vol.47,No.11 November 2003
30. C. H. Hanumantha Rao - "WTO and Viability of Indian Agriculture" Economic & Political Weekly,September 8-14,2001,Vol.XXXVL No 36
31. Dr.P.K.Singh -"Reforms in the Agricultural Sector" Yojana Vol.47,No.11 ,November ,2003.
32. Dr.Swami Prakash Srivastava- "Biotechnology industry- and its future role in Indian Economy" Yojana, Vol.47,No.1 1,November2003.

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Optional Paper- 10)

INDUSTRIAL ECONOMICS

Module -1

Theoretical foundations of Industrial Economics - determinants of market structure - the organizational form - growth of the firms and merger, integration and acquisitions (Marrio, Morsen and Downs, Williamson and Galbraith) Industrial Location and Analysis - determinants - Industrial Organization and Development Economics - role of state in industrial development - empirical studies on Industrial Structure.

Module - II

Industrial development through plans - stagnation - performance of public enterprises in India - Industrial Policy resolutions.

Module - III

Issues in industrialization - pricing policies - short run behavior of prices and quantities of industry - competitiveness of Indian industry -policies regarding sick firms - small Firms in India - cottage and small industry.

Module - IV

The concepts of labour productivity - determinants - total factor productivity debate in Indian Industry - labour policy: Industrial finance -institutions and functions - IDBI, ICICI - changing role - stock market, industrial development and the finance of corporate growth in India.

Module - V

Industrialization in Kerala - trends and explanations.

REFERENCES

1. Stephen Martin, *Advanced Industrial Economics*, Basic Blackwell, 1993 (Module I)
2. Dilip Mookherjee, *Indian Industry Policies and Performances*, Oxford University (Module - I: Chapter 1, Remaining Chapters for Module III)
3. R.R. Barthwal, *Industrial Economics*, Wiley Eastern Ltd., New Delhi, 1985. (Module I : Chapter 3,8,16, Module IV : Chapter 18)
4. Deepak Nayyar, *Trade and Industrialization*, Oxford University Press, New Delhi, 1977 (Module I : Chapter 2, Module III : Chapter 4, Module IV : Chapter 5)
5. Isher Judge Ahulwalia, *Industrial Growth in India*, Oxford University Press (Module II)
6. Deepak Nayyar, *Industrial GrouAh and Stagnation*, Oxford University Press, 1994 (Module II).

M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Optional Paper - 11)
HEALTH ECONOMICS

- I. Health and Health Economics-Health and development-Economics of health in developing countries-Actors and factors affecting health status.
- II. Government, Health and Medical Care - Reasons for Government Interventions -Public goods-externalities-demand side externalities-supply side externalities - taxes and subsidies as corrective instruments - market solutions for externalities-redistribution function of government-demand side and supply side subsidies-macro health economics.
- III. Urban health-urban health care in India - impact of urbanization on health - emerging issues in the urban health care-Environment and health- Environmental health programs -Ageing of population - issues in India and Kerala-Morbidity transition in India and Kerala-Issues in Kerala's health status.
- IV, Malnutrition -its measurement and consequences -economic reforms and Health sector in India-NGO's in health care in India- Health as an investment in Human development in India.
- V. Govt. as health insurer – Why does the govt. produce health insurance? Relation ship between health insurance and the demand for medical service-co-insurance, indemnity insurance-Non economic determinants of demand for medical services-Impact of insurance and non- economic factors on the, demand for medical services. Health insurance as a social security -Historical evolution-health insurance in India-delivery of medical care under insurance-its merits and demerits.

References

1. Urban health system,P.K.Umashankar, Girish Misra, Reliance publishing house, New Delhi.
2. Urbanization and implication for child health, potential for action WHO,Geneva 1988.
3. Economic and social aspects of population ageing in Kerala, United Nations, New York1992.
4. Public health and poverty of reforms.Ed. by Imrana quadder etc.Sage publications
5. Health Insurance in developing countries.Ed by Aviva Row, Brain Abel Smith etc. Oxford and IBH publishing company Ltd. New Delhi 1990.
6. Cities of Hunger, Urban malnutrition in developing countries, Jane Pryer and Nigel crook, Published by Oxfam, Oxford 1988.
7. Health and Development Ed. By David R Phillip and Yola Verhasset. Routledge, London 1994.

8. Health Economics, Theories, Insights and Industry Studies by Rexford E Santerre and Stephen P Neun. The Dryden press, Dryden 2000
9. The Economics of Health in developing countries. EC. by Kenneth Lee & Anne Mills, Oxford University press 1985.
10. Health Sector Reform in Developing countries. Peter Herman Ed. 1995 Harvard school of public health, Boston.
11. Environmental pollution and health hazards in India. Ed. by R. Kumar. Ashish publishing house, New Delhi. 1987.
12. The urban health crisis. strategies for health for all in the face of rapid urbanization. WHO, Geneva 1993.
13. Health Transition in Kerala, PGK Panicker, KRPLD, Discussion paper No. 10 1999.
14. Utilization of health services in Urban Kerala, A socio Economic study, K. Gangadharan, Serials Publications, New Delhi, 2005.
15. Health Strategies and population Regulation Vol .1 and Vol II. Ed. by Yu Jing Yuan etc. B.R. Publishing Corporation, Delhi. 2001.
16. NGO's The New Lexicon of health Ashoko Kumar Sarkar, Concept Publishing Company, Delhi. 2005.
17. Health Economics. fundamentals and flow of funds. Thomas E Getzen. John Wiley & sons. Inc. 1997.

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Optional Paper- 12)
DEVELOPMENT OF ECONOMIC IDEAS

Module - I

Introduction : What is Economic thought - Definitions - Mercantilism -Major ideas of Mercantilists : Population, Interest, Wages, Production, Taxation. Physiocracy : Physiocratic doctrines : Natural Order, The Net Product, The circulation of wealth.

Module - II

The Classical School : Adam Smith : Division of labour - Naturalism and optimism - Economic Liberty - Theory of Value - Theory of Distribution -on wages, on profit, on rent - Canons of taxation - Productive and unproductive labour - Theory of capital, economic development.

David Ricardo : Theories of Value, Distribution, Wages, Profit, Foreign Trade, Money, Theory of Economic Development. T.R. Malthus : Theory of population, Malthusian Controversy of Market Glut. J.B. Say : Scope of Political Economy - Law of Market. Jeremy Bentham : The Systems J.S. Mill: Mill's Socialist Programme. VonThunen : Price, Distribution.

Module - III

Critics of Classicals : The Nationalist critics : Muller, Frederich List, Historical Critics : William Roscher, Gustav Schmoller. The British School : Walter Bagehot - Socialist Critics : St. Simon, Sismondi, Robert Owen, Charles Fourier, Louis Blanc, Joseph Proudhon, State Socialists : Karl Robertus. Ferdinand Lassals, Scientific Socialists : Karl Marx - Materialistic Interpretation of History, Dialectical Materialism - Theory of Surplus Value. Theory of Economic Development. Frederich Engels Karl Kautsky and Rosa Luxenberg, Rudolf Hilferding, V.I. Lenin.

Module IV

Neo-Classicals : Subjective School : Karl Menger, Von Wieser and Bohn Bawerk, Marginalists/Mathematical School, Heimann Gossen, Jevons, Walras, Gustav Cassel, Vilfredo Pareto, J.B. Clark, Knut Wicksell, Wicksteed, Alfred Marshall, A.C. Pigou, Irving Fisher, Institutionalism Thorstein Veblen, J.R. Commons, W.C. Mitchell. Modern Economists; J.M. Keynes, Post Keynesians, Milton Friedman.

Module - V

Indian Economic Thought : Ancient Economic Thought : Koutilya, Modern Economic Thought - Dadabai Naoroji, M.G. Ranade, Mahatma Gandhi, Ambedkar.

REFERENCES :

1. Eric Roll, *A History of Economic Thought*
2. L.H. Haney, *History of Economic Thought*
3. J.P. Bell, *A History of Economic Thought*
4. V.A. Schumpeter, *A History of Economic Analysis.*
5. O.H. Taylor, *A History of Economic Thought.*
6. Robert Lekachman, *A History of Economic Ideas.*
7. P.C. Newman - *History of Economic Doctrines*
8. Gide & Rist, *A History of Economic Thought*
9. Alexander Gray, *Development of Economic Doctrines*
10. E. Whittaker - *Schools and Streams of Economic Thought*
11. M.K. Gandhi, *Collected Works* (3 Volumes)
12. Karl Marx, *Theory of Surplus Value* (3 volumes)

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
(Optional Paper - 13)
TRANSPORT ECONOMICS

Module - I

Role of transport in Economic Development - environmental and sociological aspects of transportation - Transport and tourism.

Module - II

The demand for transport - The problem of the peak - Seasonal variation - Factors affecting demand for transport - The elasticity of demand- Demand measurement and market research - The supply of transport -The economics of market structures - Economies of scale - the interaction of supply and demand.

Module - III

Principles of transport pricing - Pricing and market structure - Cost of service principle - Value of service - Subsidies in transport - Problems and justification for subsidies.

Module - IV

Investment criteria in transport - Cost Benefit Analysis of transport projects - Appraisal Methodology - Economic cost - Forecasting traffic -Economic Benefits.

Module - V

Performance of transport in India - Road, Railways, Air and Water -. Urban transport - Pattern of growth - Issues associated with urban transport - Issues related to private sector participation - Financing legal and regular aspects.

REFERENCES

1. S.K. Srivasthva, *The Economics of Transport*, Sulthan Chand and Company (Module -1)
2. P.C. Stubbs, W.J. Tyson and M.Q. Dalvi, *Transport Economics*, George Alien and Unwin, Boston, 1986. (Module - II)
3. G.J. Bell, D.A. Blackledge, P.J. Bowen, *The Economics and Planning of Transport*, Henemann, London, 1983. (Module 11,111,1V)
4. Kirth Parik, *India Development Report, 1997 and 2000* (Two reports), Oxford University Press, New Delhi.

BUSINESS ECONOMICS

MODULE I Firm in Theory and Practice

Alternative motives of the firm - Marginal theories Baumol's model, Williamsons, Marris model - Behavioral theories (Simon's model, Cohen and Cyret model, Cyret and March model)

Reference

1. Koutsoyannis A, Modern Microeconomics, Macmillan, London
2. W J Baumol, Economic Theory and Operation Analysis, Prentice Hall
3. G C Anshilad (Ed.). Theory of Firm, Penguin

MODULE II. Demand Analysis and Demand Forecasting

Types of elasticity of demand, interrelationship between elasticity, income elasticity and cross, elasticity Demand forecasting; types, factors involved, determinants, steps in the forecasting process, criteria of good forecasting method -Methods of forecasting

Reference

1. Jae K Shim, Joel G Siegel and C J Liew , Strategic Business Forecasting, Jaico Publishing Bombay
2. Makridakis S and C Steron, Forecasting Methods and Applications, John Wiley and Sons New York
3. P Katler, Marketing Management Analysis - Planning and Control, -Prentice Hall of India, New Delhi

MODULE III Cost Analysis and Profit Planning

Short run cost functions, long run cost functions - Economics of. scale - Cost elasticity and out elasticity, forms of cost functions, cost estimation methods - Techniques of cost control – Application cost analysis (Optimum output, inventory level, breakeven output).

Reference

1. R R Barthwal, Industrial Economics, New Age International (P) Ltd,
2. Peters and Lewis, Managerial Economics , Prentice Hall of India , New Delhi
3. Dominik Salvatore Managerial Economics in a Global Economy, McGraw Hill

MODULE IV Investment Decisions

Need for capital budgeting, capital budgeting process"- Investment criteria and investment appraisal investment decision under risk, degrees of risk, risk return trade off, adjusting the valuation model for - Certainty equivalent, adjustment, risk adjusted discount rate, decision tree analysis, simulation sensitivity analysis - Decision making under uncertainty - Wald decision criterion, Hurwicz decision criterion, Laplace decision criterion.

Reference

1. Prasanna Chandra. Financial Management Theory and Practice, Tata McGraw Hill Publications Company Ltd.
2. Van Home mid James C, Financial Management and Policy
3. Baumol WJ, Economic Theory and Operation Analysis, Prentice Hal
4. Brigham and Pappal Managerial Economics.Dryden Press Illinoy
5. Seo K K, Managerial Economics Surjeeth Publication , Now Delhi.

MODULE V Pricing Strategy

Factors involved in the formulation of pricing policy - Pricing policies and pricing practices - problems -Price discounts and price differentials

Reference

1. Evans J Douglas, Managerial Economics --Theory, Practice and Problem
2. Peterson and Lewis, Managerial -Economics, Prentice Hal of India, New Delhi
3. DorfmanR. The Price System, Prentice Hall of India
4. Thompson Arther, Economics of the Firms - Theory and Practice, Prentice Hall

KANNUR UNIVERSITY
M.A. DEGREE IN APPLIED ECONOMICS - SEMESTER COURSE
OPTIONAL PAPER - 15
PROJECT FORMULATION AND EVALUATION

Module - 1

Project formulation and analysis - nature and scope - project analysis, an overview - capital expenditures - phases of capital budgeting - levels of decision making - facets of project analysis - key issues in project analysis - objectives of capital budgeting - resource allocation, criteria, tools, approaches and issues - generation and screening of project ideas - scouting for project ideas.

Module - II

Project analysis and evaluation - market and demand analysis - methods of demand forecasting - qualitative, time series, and casual methods - technical analysis materials and inputs - product mix - plant capacity - project charts and layouts - work schedule - financial analysis - project cost - sources of finance - estimates - cost of production - break-even point - cash flow statements - balance sheets.

Module - III

Measuring project cash flows - components - biases in cash flow C estimation - time value of money - cost of capital - basic concepts, premises and rationale - cost of capital in practice - appraisal criteria, net present value, benefit cost ratio - internal rate of return - pay back period - accounting rate of return - assessment of various methods - risk analysis - types and measures of project risk - sensitivity analysis - Monte Carlo simulation - decision tree analysis - risk analysis and selection of a project.

Module -IV

Special decision situations - choice between mutually exclusive projects - determination of economic life- inflation and capital budgeting - firm risk and market risk - social cost benefit analysis - multiple projects and constraints - options and flexibility - cumulative factors.

Module - V

Project Management - network techniques of project management - PERT model and CPM model - network cost system - project review -performance evaluation.

Problems wherever required in each module from 2nd to 5th shall be worked out. Students will be required to workout problems compulsorily. Question from each module will be set accordingly.

REFERENCE

1. Prasanna Chandra, *Projects, Planning, Analysis, Selection Implementation and Review*, Tata McGraw Hill Publishing Co., New Delhi 1995.
2. Ajith K. Dasgupta & D.W. Pearce, *Cost Benefit Analysis*, Macmillan ELBS London 1978.
3. Bussey L.E., *The Economic Analysis of Industrial Projects*, Prentice Hall, Englewood, 1978.
4. William J. Baumol, *Economic Theory and Operations Analysis*, Prentice Hall Englewood, 1978.
5. Brealey, R. & S. Myers, *Principles of Corporate Finance*, McGraw Hill, New York, 1991.
6. Prasanna Chandra, *Financial Management - Theory and Practice*, Tata McGraw Hill, New Delhi, 1993.
7. Charnes. A & W.W. Cooper, *Management Models and Industrial Applications of Linear Programming*, John Wiley & Sons, New York, 1961.
8. Gass, S.I. *Linear Programming: Methods and Applications*, McGraw Hill, New York, 1969.
9. Haley, C.W. and L.D. Schall, *The Theory of Financial Decisions*, McGraw Hill, New York.
10. Little I.M.D. and J.A Mirrlees, *Project Appraisal and Planning for Developing Countries*, Hienemann Educational Books, London, 1974.
11. Lutz, F. & Lutz, *The Theory of Investment of the firm*, Princeton University Press, 1951.
12. Masse, P. *Optimal Investment Decisions : Rules of Action and Criteria for Choice*, Prentice Hall, Englewood, 1962.
13. Miller R.W., *Schedule Cost and Profit Control with PERT*, McGraw Hill, New York, 1963.
14. Mize J.H. & J.G. Cox, *Essentials of Simulation*, Prentice-Hall, England.
15. Moder, J.J. and C.R. Philips, *Project Management with CPM and PERT*, Reinhold Publishing Corporation, New York, 1964.

Journals :

1. *Economic & Political Weekly*, Bombay
2. *Commerce*
3. *Financial Management*, Winter and Summer
4. *Business today*
5. *Journal of Finance*
6. *Indian Journal of Accounting*
7. *Chartered Accountant*, Journal of CA's Association

Sd/-

Dr.K.Gangadharan

Chaired the meeting of the Board of Studies in Economics(PG)
held on 29/03/2007