

31. C. H. Hanumantha Rao, "WTO and Viability of Indian Agriculture", *Economic & Political Weekly*, September 8-14, 2001, Vol. XXXVI, No. 36
32. Dr. P. K. Singh, "Reforms in the Agricultural Sector", *Yojana*, Vol. 47, No. 11, November, 2003.
33. Dr. Swami Prakash Srivastava, "Biotechnology industry and its future role in Indian Economy", *Yojana*, Vol. 47, No. 11, November 2003.
34. Karunakaran. N (2013), "Change in cropping pattern and food security – a challenge to poor population: a Kerala experience", *Social Action*, Vol. 63, No 1, PP: 48-58
35. Karunakaran. N (2012), "Crop Diversification and chemical pollution: A conflict in the sustainability of the agricultural sector of Kerala", *Indian Journal of Social Development*, Vol. 12, No. 2, PP: 357-368.
36. Karunakaran. N and Gangadharan. K (2013), "Growth of Output of Principal Crops in Kerala: A Decomposition Analysis", *Middle-East Journal of Scientific Research*, Vol. 17, No. 8, PP: 1087-1097.
37. Srikumar Chattopadhyay and Richard W Franke (2006), "Causes of concern: land use change", *Striving for sustainability, Environmental stress and Democratic initiatives in Kerala*, Concept Publishing Company, New Delhi.
38. Mohandas. M (2005), "Agricultural Development in Kerala", in *Kerala Economy-Trajectories, Challenges and Implications* (Ed), by Rajasenan D and Gerald de Groot
39. Mani. K. P (2009), "Cropping pattern in Kerala - spatial inter-temporal analysis", *Kerala Economy: Trends during the post-reform period* (Ed), by Rajan K, Serials Publications, New Delhi.
40. Websites of Agricultural Statistics, Agricultural Network Information Centre, State Planning Board, Planning Commission, etc.
41. Current articles related to various modules in EPW, *Indian Journal of Agricultural Economics*, *Agricultural Situations in India*, *Yojana* and other referred journals.

INDUSTRIAL ECONOMICS

ELECTIVE COURSE

COURSE CODE – AEE011

Module-1

Theoretical foundations of Industrial Economics determinants of market structure – the organizational form growth of the firms and merger, integration and acquisitions (Marrio, Mursen and Downs, Williamson and Galbraith)

Industrial Location and Analysis - Theories of industrial location – Weber ,August Losch and Sargent Florence- determinants Industrial Organisation and Development - role of state in industrial development empirical studies on Industrial Structure.

Module-2

Industrial growth in India: Trends and prospects- Public sector enterprises in India: efficiency, productivity and performance constraints.

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

Module-3

Role of Industrialization in Economic Development - Factors for and against industrial development- role of state in industrial development.

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

Module-4

The concepts of labour productivity determinants– total factor productivity debate in Indian Industry labour policy: Industrial Finance -Sources of Industrial Finance - Private, Public and Co-operative Sector - Shares, Debentures, Bonds, Deposits, Loans ,Foreign Direct Investment and Foreign Institutional Investment- Industrial finance institutions and functions 1DBI, ICICI changing role stock market, industrial development and the finance of corporate growth in India.

Module-5

Industrialization in Kerala trends and strategies.

References:

1. Stephen Martin, Advanced Industrial Economics, Basic Blackwell, 1993 (Module I)
2. DilipMookherjee, Indian Industry Policies and Performances, OxfordUniversity (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 Industrialisation, OxfordUniversity Press, New Delhi, 1977 (Module I : Chapter 2, Module III: Chapter 4, Module IV: Chapter 5)
5. Isher Judge Ahulwalia. Industrial Growth in India, OxfordUniversity Press
6. Deepak Nayyar, Industrial Growth and Stagnation.OxfordUniversity Press, 1994 (Module I)

ENERGY ECONOMICS

ELECTIVE COURSE

COURSE CODE – AEE012

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-Shadow price, demand and supply analysis.

Module-IV

Energy for development: Demand for energy-conventional approach-paradigm shift-demand side management(capital and DSM)-policies of DSM –Energy audit theory and practice.

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

TRANSPORT ECONOMICS

ELECTIVE COURSE

COURSE CODE – AEE013

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 - Characteristics of demand and supply- Models of Freight and Passenger Demand. -Special Problems of Individuals Modes of Transport- Intermodal condition in the Indian Situation-Location of Economic Activities-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-Regulations-safety-Contemporary Urban Transportation Problems

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.

SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

ELECTIVE COURSE

COURSE CODE – AEE014

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. Yasaswy, *Equity Investment Strategy*, TMH 1986.

PROJECT FORMULATION AND EVALUATION

ELECTIVE COURSE

COURSE CODE – AEE015

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 - qualitative factors.

Module - V

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

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*

RESEARCH METHODOLOGY

ELECTIVE COURSE

COURSE CODE – AEE016

Module I

Meaning of Research-Types of research-research methods and research methodology- The relation between theory and research – Scientific and Social Science research – Types of research (descriptive vs. analytical, fundamental vs. applied, qualitative vs. quantitative, conceptual vs. empirical, empirical vs. simulation based, conclusion oriented vs. decision-oriented, historical vs. a-historical) – research in Social science – Approaches in social research-process of research-statement of objectives-Selection and formulation of research problem-Research design-Criteria of good research and problems encountered by researchers in India.

Module II

Approach to research problems - inductive and deductive methods- historical and dialectical methods. Scientific method-sampling design- error minimization-evaluation of time and cost-collection of information

Module III

Methods of Data collection, sources of data- primary and secondary – Time series and cross section data – Sample survey – Methods - interview methods-questionnaire methods –case study method-Construction of questionnaire

Module IV

Data Analysis- Estimation of mean, median and mode – Standard deviation and coefficient of variation – Presentation of charts – Line, sub divided, multiple, pie charts–Estimation of growth rates and trend equations – Estimation of single and multiple regression equations -Scaling: Problems and Techniques- Hypothesis and testing (Using EXCEL/SPSS for computation and estimation-Gretel)

Module V

Research report writing- references and bibliography

References

1. William J Goode & Paul K Hatt, Methods in Social Research, McGraw Hill Book Company, 1985.
2. Pauline V. Young, Scientific Social Surveys and Research, Printice Hall India, New Delhi, 1984.
3. C.R. Kothari, Research Methodology Methods and Techniques, Wiley Eastern Limited, New Delhi 2000.
4. William. M.K. Traochim, Research Methods, 2nd Edn., Biztantra, 2003.
5. Ellen.R. Griden, Evaluating Research Articles, SAGE, 2001.
6. Bridget Somekth & Cathy Liwin (Ed) Research Methods in Social Sciences, Vistar, 2005.
7. John Adams, Research Methods for Graduate Business & Social Science Students, Response, 2007

ECONOMICS OF ENVIRONMENT AND SOCIAL SECTOR

ELECTIVE COURSE

COURSE CODE : AEE017

Module 1: Basic Environmental Issues

Environment and Ecology-Linkages between Ecology-Environment and Economic system-Material Balance Approach-Environment Development Tradeoffs-Sustainable Development-Concepts and Indicators-Environmental Accountings-Environmental Problems- Environmental pollution:-Air and Water- Land use- Deforestation, Urbanization and their impact on Environment-Environmental Costs of Economic Growth.

Module 2: Economics of Education

Education and Economic growth-Education and Human Development-Components of Human Capital-Human capital Vs. Physical capital- The Demand for Education-Private Vs Social Demand- The Cost Benefit Analysis of Education- Private and Social Costs-The State and Social Expenditure on Education-Benefits of Education-Direct and Indirect Benefits- Private and Social benefits of education.

Module 3: Economics of Health

Health Economics-Nature and Scope-Health and Development-Determinant of Health- Health system organization models- Free market model- Social Insurance Model-Natural Health Service model- Socialist model-Current Issues in Health-Economic Dimensions of Health Care-Demand and Supply of Health Care-Health inequalities - Health financing -Health planning-Types, stages and challenges in planning.

References

1. Fisher A C (1981): Resource and Developmental Economics, Cambridge University Press
Cambridge Dorfman and Dorfman (1994) Environmental Economics 2nd Edition W W Norton
2. Tietenbery. T (1994): Environmental Economics and policy, Haper Collins, NEW York
3. Hanley.N J F Shogem and B White (1997): Environmental economics in theory and practice, Macmillan
4. Jeroon, C J M VamdenBersh (1997): Handbook of Environmental and Resource Economics, Edward Elgar publishing Ltd. U K
5. Dasguptha and Maler(ed) (1997): Environment and emerging developmental issues, Cambridge university press, Cambridge
6. Baumol. W.J.and W E Oats(1988): The theory of Environmental Policy(2nd edition),Cambridge University press, Cambridge
7. Kolstad. C D (1999) Environmental Economics, UP. New Delhi
8. Kelly.D. L (1997): On Kuznet's Curves Arising from Stock Externalities, Department of Economics Working paper, university of California, Santa Barbara Oct
9. Sankar. U (Edu) (2001): Environmental Economics OUP, New Delhi
10. Blaug. M (1972): Introduction to Economics of Education Penguin London
11. Cohen E and Gask (1989) Economics of Education, Pergamoun Press, London
12. MC Mohan (1999) Education and Development, Measuring the social Benefis.OUP, Oxford.
13. Tilak J b G (1994) Education for Development in Asia, Sage Publications, New Delhi.
14. Vaizey (1962) Economics of Education, Fabor and Fabor, London
15. Woodhall. M (1992) Cost Benefit Analysis in Education and planning, UNESCO, Paris
16. Schutz. T W. (1971): Investment in human capital. Free press New York
17. David R Phillips and YalaVerhasset (1994) Health and Development Routledge, London
18. Guy C Arrin (2008): Health System , Policy, and Finance and Organizations.

19. James. W. Henderson (2001) Health Economics and Policy, South Western Educational publishing.
20. Berman, P. M.E Khan(1993) Paying for India's Health Care, sage publications new Delhi.
LIPS(2006) national family health survey 2005-06, Bombay
21. World Bank (1993) world Development Report: Investing in Health, OUP, New York.
22. Berman, P. (Ed.) (1995), Health Sector Reforms in Developing Countries :Making Health Development Sustainable, Boston: Harvard Series on Population and International Health.
23. Becker, G. S. (1974), Human Capital (2nd Edition), National Bureau of Economic Research, New York.
24. Baru, R. V. (1998), Private Health care in India : Social Characteristics and Trends, Sage Publications, New Delhi.
25. Panchamukhi, P. R. (1980), Economics of Health : A Trend Report in ICSSR, A Survey of Research in economics, Vol. VI, Infrastructure, Allied, Delhi.

ECONOMICS OF GENDER

ELECTIVE COURSE

COURSE CODE: AEE018

Module-1

Gender studies:-Concepts-Importance- Population distribution- Demography of female population- Causes of declining sex ratios and fertility rates in India- Gender gap in education- Gender conflict- Gender inequality- Gender justice in India.

Module- 2

Women empowerment:- women and their access to nutrition, health, education and community resources- women knowledge and awareness on legal rights- custom, law and violence against women in India. Factors affecting decision making by women: property rights, access to and control over economic resources, assets, power of decision making at household, class, community level, economic status of women and its effect in income level, health and education in developing countries. Child Trafficking- Globalization and its impact in Indian working women-Role of NGO's in empowering women-Gender and community economic development (CED)-self-employed women's association(SEWA) kudumbasree in Kerala.

Module- 3

Social security for women entitlements, economic independence and risk coverage, access to credit and insurance markets- impact of technological development and modernization on women's work participation, female activities and ecological and environmental, concerns- role of new technologies for helping women- Review of legislation for women's entitlements in India -Importance of 73rd

Amendment of constitution in gender empowerment-Protection of property rights- schemes for safety net for women – Effectiveness of collective bargaining-Public and Private programmes to improve women’s health-National Commission for Women(NCW)-The National Credit Fund for Women –Mahila Samridhi Yojana(MSY) –National policy for empowering women- International measures to protect womens’ rights-U.N Decade for women -UN convention on CEDAW and DEVAW.

References:

1. Amsden, A.H(ed) (1980): The economics of women and work, Penguin, Harmondsworth.
2. Borerup.E (1970): Women’s role in economic development, George Allen and Unwin, London.
3. Engels. F(1985): The origin of the family, private property and the state, progress publication, Moscow.
4. Kabeer. N (1994): Reversed Realities: Gender hierarchies in Development Thought, Kali for women, ND.
5. Krishnaraj.M, R.M.Sudarshan and A.Shariff (1999): Gender, population and development, OUP, ND.
6. Kuhn.A and A.N.Wolpe(eds) (1978): Feminism and materialism, Routledge and Kegan Paul, London.
7. Mies.M (1998): Patriarchy and accumulation on a world scale: women in the international division of labour, Zed books, London.
8. Mitra.A (1979): Implications of declining sex ratio in India’s population, Allied, ND.
9. Murthy, K.R (ed) (2001): Building women’s capacities.
10. Sen.h. and K.Brown (1987): Development, crises and alternative visions, monthly review press, NY.
11. Seth.M (2000): Women and development: The Indian Experience, Sage, ND.
12. Dr.D.K.Bansal (2006): Gender violence, Mahaveer and sons. New Delhi-110002.
13. Subhash Chandra Singh (2009): Gender justice, serials publications, New Delhi.
14. Kedilezo Kikhi, Narola Dangti Kikhi (2009): Changing Gender equations with special reference to Nagaland.

ECONOMICS OF TOURISM

ELECTIVE COURSE

COURSE CODE: AEE019

Unit-1

Economics of tourism- concepts- types of tourism- cost and benefits of tourism- impacts of tourism- sociological,economical and environmental, tourism industry- components, the multiplier effect- displacement effect globalisation- general equilibrium approach- tourism and international trade-BOP effects-exchange rate effects.

Unit-2

Demand and supply analysis- Tourism demand- theoretical background- factors determining tourism demand- elasticity of demand- measurement of tourism demand- national and international tourism demand- Tourism supply- components- elasticity of supply.

Unit-3

Cost and price- concepts- cost analysis in tourism- return to factors- economies of scale- concept of break-even-point-Pricing in tourism- determinants of price- Pricing tourism products- Approaches to pricing- Public and private sectors in Tourism- Government's role in Tourism.

Reference books

1. ShashiPrabhaSharma(2004) 'Tourism Education: Principles, Theories and Practices'- Krishka Publications, New Delhi.
2. SipraMukhoPadhy(2008) 'Tourism Economics' Ane books.
3. Donald G Reid(2003) 'Tourism, Globalisation and Development, Responsible Tourism' Pluto books.
4. M.T.Sinclair& Mike Stabler(1997), 'Economics of tourism &Devpt', Routledge, New York.
5. Lundberg, Stavenca and Krishnamoorthy(1995). Tourism economics. John Wiley and sons.
6. Sharma K.K(2005) 'Tourism and Development' Saup and Sons, New Delhi.
7. A.K.Raian and NeeluJain(2004) 'Dynamics of Tourism- concepts, philosophy and strategies' Krishka Publications.
8. AbhilashMallya(2006) 'Wildlife Tourism and Conservations' Gnosis.
9. DwivediDN(2001) 'Managerial Economics',Vikas, New Delhi.
10. Maddala(2004), 'Micro economics', TMH, New Delhi.
11. SenAnindya(1999), 'Micro economics Theory and application' Oxford University Press.
12. R.K.Goswami(2007) 'Tourism and Environment' Cybertech Publication, New Delhi.
13. N.GregoryMankiw(2007) 'Principles of Micro economics' South-Western Cengage Learning USA.

RESEARCH METHODOLOGY AND COMPUTER APPLICATION

ELECTIVE COURSE

COURSE CODE – AEE020

Module: 1

Meaning of Research-type of research- applied and fundamental-analytical and descriptive- qualitative and quantitative-conceptual and empirical-research methods and research methodology- Scientific and social science research- -approaches in social research- inductive and deductive methods- case research-interpretive research –characteristic and design-qualitative and content analysis-ethnography and phenomenology-interdisciplinary research- objectivity and ethics in social science research.

Module: 2

Selection and formulation of research problem- survey of literature-research design- meaning and contents- types of research design –exploratory and formulative, descriptive and diagnostic, evaluation and experimental, historical and survey design-Models- steps in the research process.

Module: 3

Methods of data collection-sources of data – primary and secondary –time series and cross section – sample survey- methods –interview methods –questionnaire method – Constructing of questionnaire /interview schedule-case study method- sampling methods-random, stratified,

multistage, systematic, cluster, quota, judgement, convenient, purposive samples- data analysis and techniques-drawing inferences from analysis-writing of report, references and bibliography.

Module: 4

Computer application – estimation of mean, median and mode – standard deviation and co-efficient of variation- presentation of charts-line, subdivided, multiple, pie charts- estimation of growth rates and trend equation- estimation of simple and multiple regression equation –using Excel/SPSS for computation and estimation-Gretel-R

Note: ***Module 4 has to be handled with practical orientation by ensuring computer accessibility for providing application knowledge and questions for the university examination will be of theoretical nature only without any practical's or lab based skill testing.***

References:

Modules 1,2, &3

1. Goode, W. J and P.F Hatt (1952): "Methods in Social Research", McGraw Hill Book Company, New York.
2. Kothari C. R (1990): "Research Methodology, Methods and Techniques", Wiley Eastern Ltd. New Delhi.
3. Wisonsky and Bhadarkar (1992): "Methodology and Techniques of Social Research", Himalaya Publishing House, Bombay
4. Young, Pauline (1988): "Scientific Social Surveys and Research", Prentice Hall India Pvt. Ltd , New Delhi
5. Estelle M. Phillips and D. S Pugh (1993): "How to get a Ph. D", UBS Publishers and Distributors Ltd., New Delhi.
6. One-On-One Interviews: A Qualitative Assessment Approach•
www.liberalarts.wabash.edu
7. Constantinos N. Phellas, Alice Bloch and Clive Seale, Structured Methods, interviews, Questionnaires and Observation, Chapter 11 http://www.sagepub.in/upm-data/47370_Seale_Chapter_11.pdf.

Module 4

1. Sarma KVS (2001): "Statistics Made Simple – Do it yourself on PC" Prentice Hall India Pvt. Ltd , New Delhi.
2. Walkenbach, John (2005):"Favorite Excel Tips & Tricks", Wiley Publishing Inc.

MODEL QUESTION PAPERS

FIRST SEMESTER M.A.DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AE1C001- MICRO ECONOMIC THEORY I

Time: 3 Hours

Max. Marks: 60

PART A

*Answer **all** questions.*

*Each question carries **1 mark**.*

1. Slack variable refers to.....
2. In Cobb Douglas production function elasticity of substitution is equal to.....
3. Walras law states that.....
4. Market signaling refers to
5. A group of firm that have joined together to make agreements on pricing and market strategy is called.....

(5×1=5marks)

PART B

*Answer **any five** questions.*

*Each question carries **2 marks**.*

No answer should exceed one page

6. Explain production possibility curve.
7. Explain the risk lover.
8. Explain 'stock adjustment principle'.
9. Explain the Hicksian approach to technical progress.
10. 'Economic Interpretation of dual' Explain.
11. Discuss the market for lemons.
12. Explain Stackelberg duopoly model.

(5×2=10marks)

PART C

Answer **any five** questions.

Each question carries **5 marks**.

No answer should exceed two and a half pages

13. Explain how the N-M utility index is constructed?
14. Explain the properties of Cobb Douglas production function.
15. Explain Efficiency Wage Theory.
16. Explain the maximizing satisfaction from attributes.
17. Discuss the types of price leadership.
18. Explain household portfolio decision under uncertainty.
19. Solve the following linear programming problem by using graphical method.

$$\text{Maximize } Z=80X_1+120X_2$$

$$\begin{aligned} \text{S.T} \quad & X_1+X_2 \leq 9 \\ & X_1 \geq 2 \\ & X_2 \geq 3 \\ & 20X_1+50X_2 \leq 360 \\ & X_1, X_2 \geq 0 \end{aligned}$$

(5×5=25marks)

PART D

Answer **any two** questions.

Each question carries **10 marks**.

No answer should exceed six pages.

20. Discuss the non collusive models of oligopoly.
21. Briefly examine the recent developments in the theory of market demand.
22. Discuss Linear Expenditure System.
23. Solve the following linear programming problem by using simplex method.

$$\text{Maximize } Z=3X_1+5X_2+4X_3$$

$$\begin{aligned} \text{S.T} \quad & 2X_1+3X_2 \leq 8 \\ & 2X_2+5X_3 \leq 10 \\ & 3X_1+2X_2+4X_3 \leq 15 \end{aligned}$$

$$X_1, X_2, X_3 \geq 0$$

(2×10=20marks)

FIRST SEMESTER M.A. DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AE1C002- MACROECONOMIC THEORY-I

Time: 3 Hours

Max. Marks: 60

PART A

*Answer **all** questions.*

*Each question carries **1 mark**.*

1. The process of increase in demand for consumption goods leads to increase in investment on capital good is called
2. 'Money, interest and price' is written by.....
3. M3 definition of money is the sum of
4. If income increases according to Keynes, the APC
5. User cost of capital is.....

(5×1=5 Marks)

PART B

*Answer any **five** questions.*

*Each question carries **2 marks**.*

No answer should exceed one page.

6. What do you mean by classical dichotomy?
7. What is menu cost?
8. Differentiate between static and dynamic multiplier.
9. What do you mean by liquidity trap?
10. Explain marginal efficiency of capital.
11. Write a note on crowding out effect.
12. What do you mean by rational expectation?

(5×2=10 Marks)

PART C

*Answer any **five** questions.*

Each question carries 5 marks.

No answer should exceed two and a half page.

13. Even though money does not yield any return, why do people continue to hold it? Explain with the help of transaction theories of demand.
14. Explain accelerator theory of investment.
15. Discuss relative income hypothesis.
16. Distinguish between Keynes consumption function and Kuznets consumption function. How these two consumption function been reconciled?.
17. Discuss various measures of money supply in India.
18. Explain Baumol's inventory approach to demand for money.
19. Using simple Keynesian model, discuss the effect of following.
 - 1) Increase in government expenditure.
 - 2) Decrease in lumpsum taxes.

In this context compare the government expenditure multiplier and tax multiplier.

(5x5=25 Marks)

PART D

Answer any two questions.

Each question carries 10 marks.

No answer should exceed six pages.

20. Define consumption function. Discuss how do the permanent income and life cycle hypothesis resolve contradictory aspects of consumption behaviour.
21. Discuss effectiveness of monetary and fiscal policy in IS-LM framework with the help of appropriate diagrams
22. Explain how labour market attains equilibrium in both Keynesian and Neo-classical theory.
23. Critically examine Keynesian theory of demand for money. **(2x10=20 Marks)**

FIRST SEMESTER M. A DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AE1C003- QUANTITATIVE TECHNIQUES FOR ECONOMIC ANALYSIS

Time: 3 Hours

Max. Marks: 60

PART A

Answer *all* questions

Each question carries **1 mark**.

1. The number of trials in a Poisson distribution is.....
2. An Idempotent Matrix means.....
3. Type II error explains.....
4. Test statistic applied in the case of large population is.....
5. Iso-quant of Input Output Analysis is.....shaped **(5 x 1 = 5 Marks)**

PART B

Answer *any five* questions

Each question carries 2 marks - No answer should exceed one page.

6. Distinguish between Minors and Co-factors
7. Write a short note on Pareto distribution
8. What do you meant by Sample Space?
9. Explain Conditional Probability
10. Distinguish between Null and Alternative hypothesis
11. What do you mean by Rejection region

12. Given $A + B = \begin{vmatrix} 2 & -1 \\ 3 & 0 \end{vmatrix}$ and $A - B = \begin{vmatrix} 3 & 1 \\ 2 & 4 \end{vmatrix}$ find A, B **(5 x 2 = 10 Marks)**

PART C

Answer *any five* questions

Each question carries **5 marks**, No answer should exceed two and half pages.

13. Explain the meaning and significance of the concept of standard error in sampling analysis

14. The probability that a batsman scores a century in a cricket match is $\frac{1}{3}$. What is the probability that in 4 innings he will score centuries in at least 3 innings

15. Find the Rank of A

$$A = \begin{vmatrix} 1 & -1 & 2 \\ 1 & 0 & 2 \\ 4 & 0 & 8 \end{vmatrix}$$

16. Give five examples which will conform to Poisson distribution

17. Briefly describe the major Parametric and Non parametric tests used in Economics

18. Following table gives the number of units produced by two workers A and B for a number of days. Test the variance by using F test at 5 % level of significance.

A	40	30	38	41	38	35		
B	39	38	41	33	32	49	49	34

19. An experiment was conducted to test the efficacy of Chloromycetin in checking Typhoid. Apply Chi-Square and test the effectiveness of Chloromycetin in checking Typhoid at 5% significance level

Typhoid/	Typhoid	No Typhoid
Chloromycetin	35	250
No Chloromycetin	15	57

(5 x 5 =25 Marks)

PART D

Answer **any two** questions

Each question carries **10 marks**, No answer should exceed six pages.

20. Describe briefly the commonly used sampling distribution

21. Construct an ANOVA table and state your conclusion using the following data and also Check is there any significant difference in items A, B and C

A	B	C
14	14	18
16	13	16
18	15	16

22. Solve the Linear Equation by using Inverse of a Matrix

$$X_1 - X_2 = 3$$

$$X_2 + X_3 = 2$$

$$X_3 - X_1 = 1$$

23. Write an essay on Statistical Estimation

(2 x 10 = 20 Marks)

SECOND SEMESTER M.A.DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AE2C005-MICRO ECONOMIC THEORY II

Time: 3 Hours

Max. Marks: 60

PART A

Answer all questions.

Each question carries 1 mark.

1. Tattonment means.....
2. Zero sum game refers to.....
3. The concept of 'social optimum' was introduced in welfare economics by.....
4. Euler's theorem states that if each factor is paid according to the.....the total product will exhaust.
5. Sales revenue maximization model is developed by.....

(5×1=5marks)

PART B

Answer any five questions.

Each question carries 2 marks.

No answer should exceed one page

6. Examine the relevance of game theory in economic analysis.

7. What are the assumptions of $2 \times 2 \times 2$ model?
8. Explain the methods of decision under risk.
9. Explain the concept of mark up pricing.
10. Prove Clark-Wicksteed-Walras product exhaustion theorem.
11. Explain the terms a) Point of constrained bliss b) Theory of second best
12. Find the saddle point and value of the game.

		Player B		
Player A		B1	B2	B3
A1	}	10	20	30
A2		15	25	10
A3		20	30	40

(5×2=10marks)

PART C

Answer any five questions.

Each question carries 5 marks. No answer should exceed two and a half pages

13. Briefly explain Marris model of balanced growth.
14. Explain the basic approaches of decision making under uncertainty.
15. Briefly explain the limit pricing model of Bains.
16. Explain Ricardian theory of distribution.
17. Define welfare economics and explain Pareto conditions to maximize social welfare.
18. What are the basic assumptions of traditional theory of pricing?
19. Explain Kaldor-Hicks compensation criteria.

(5×5=25marks)

PART D

Answer any two questions.

Each question carries 10 marks.

No answer should exceed six pages.

20. Give the features of Cobb-Douglas production function.
21. Critically evaluate managerial discretion theory.
22. Compare and contrast Kaldor and Pasinetti model of distribution.
23. Distinguish between partial and general equilibrium analysis. Discuss in detail Walrasian general equilibrium model.

(2×10=20marks)

SECOND SEMESTER M. A DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AE2C006 - MACRO ECONOMIC THEORY II

Time: 3 Hours

Max. Marks:60

PART A

Answer all questions

Each question carries 1 mark

1. A monetary policy which central bank announces a specific target is called..... ..
2. Dual decision hypothesis is associated with
3. The law which states negative relationship between unemployment and real GDP IS
4. The idea of how expectation formed is called
5. 'Second thoughts on Keynesian economics' is a work done by -----
(5×1=5)

PART B

Answer any five questions

Each question carries 2 marks -No answer should exceed one page.

6. State Marshall-Lerner condition.
7. What is Phillips curve?
8. Write a note on law of one price.
9. What do you mean by sterilization?
10. Write a note on crowding out effect.
11. Differentiate between depreciation and devaluation.
12. What is NAIRU?
(5×2=10)

PART C

Answer any five questions

Each question carries 5 marks - No answer should exceed two and half page.

13. Explain dual decision hypothesis.

14. Compare the real business cycle theorist's view of the causes of fluctuations of output and employment with the view of new classical economists.
15. Discuss natural rate of unemployment hypothesis.
16. Explain how the labour market attains equilibrium in Neo-classical theory.
17. Explain various methods to correct balance of payment disequilibrium.
18. Briefly discuss macroeconomic character of Indian economy.
19. Explain monetary approach to balance of payment.

(5×5=25)

PART D

Answer any two questions

Each question carries 10 marks

No answer should exceed six pages.

20. Critically examine Walrasian general equilibrium analysis.
21. Explain Mundell-Fleming model of open economy.
22. Briefly discuss controversies in macroeconomics.
23. Analyse trends in inflation in India.

(2×10=20)

SECOND SEMESTER M. A. DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AE2C007- MATHEMATICAL ECONOMICS

Time : 3 Hours

Max. Marks: 60

PART A

*Answer **all** questions*

*Each question carries **1 mark**.*

1. Price effect of Giffen good is.....
2. Functional form of an indirect utility function is.....
3. MRTS is the ratio of.....

4. In a price discriminating monopoly prices are equal when demand elasticities are.....

5. Shape of an Iso-W curve is..... (5 x 1 = 5 Marks)

PART B

Answer any five questions

Each question carries 2 marks - No answer should exceed one page.

6. Distinguish between direct and indirect utility function

7. State the important properties of Indifference Curve

8. Write a note on VES Production function

9. Given the demand function $Q = 100 - 2p - 2p^2$. Calculate price elasticity of demand, when $P=10$

10. Distinguish between short run and long run cost function

11. Explain Technological Neutrality

12. Distinguish between primal and dual LPP

(5 x 2 = 10 Marks)

PART C

Answer any five questions

Each question carries 5 marks

No answer should exceed two and half pages.

13. Briefly describe Stackelberg solution

14. Explain the theory of price rigidity in oligopoly market

15. Write a short essay on Linear Expenditure System

16. Write about Expected Utility and Absolute risk aversion measure

17. Prove that elasticity substitution of CES production function is a constant

18. Distinguish between zero-sum and non zero-sum game with suitable examples

19. Briefly describe Hawkin-Simon condition and check the technological viability of A

$$A = \begin{pmatrix} 0.1 & 0.5 \\ 0.4 & 0.2 \end{pmatrix}$$

(5 x 5 = 25 Marks)

PART D

Answer any two questions

Each question carries 10 marks

No answer should exceed six pages.

20. Derive Slutsky Equation

21. Determine the total output for the following input-output matrix, A and the final demand

vector, D

$$A = \begin{pmatrix} 0.5 & 0.1 & 0.1 \\ 0.2 & 0.6 & 0.2 \\ 0.1 & 0.2 & 0.6 \end{pmatrix} \quad D = \begin{pmatrix} 20 \\ 30 \\ 50 \end{pmatrix}$$

22. State the important features of Cobb-Douglas Production function

23. Solve the LPP graphically

$$\text{Min } Z = 2x + 3y$$

$$\text{Subject to } x + 3y \geq 90$$

$$5x + y \geq 100$$

$$3x + 2y \geq 120$$

$$x \geq 0, y \geq 0$$

(2 x 10 = 20 Marks)

SECOND SEMESTER M.A DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AE2C008 - FINANCIAL INSTITUTIONS AND MARKETS

Time: 3 Hours

Max. Marks: 60

PART A

Answer *all* Questions

Each Question carries **1 mark**.

1. The market regulator of Indian Capital Market is.....
2. The device adopted to make profit out of the differences in prices of a security in to different market is called.....
3. The small investors gateway to enter in to big company is called.....
4. Financial Institutions are also known as
5. The first bank in India to start factoring business is.....

(5×1=5 Marks)

PART B

Answer *any five* Questions

Each Question carries **2 marks** -No answer should exceed **one page**

6. Define Insider Trading.
7. Explain Finance Ratio.
8. What is mean by Price Rigging.
9. Differentiate between Call Option and Put Option.
10. Explain Venture Capital.
11. Define Money Market Mutual Funds.
12. Explain Securitization.

(5×2=10 Marks)

PART C

Answer *any five* Questions

Each Question carries **5 Marks**

No answer should exceed **two and half pages**.

13. Discuss the functions of financial system.
14. Examine developments of stock exchanges in India.
15. Explain equilibrium in Financial Markets.
16. Evaluate the performance of Insurance Companies in India.
17. What are the basic requirements of listing of securities?
18. Explain the role of venture capital in the Indian Financial System.
19. Explain the features of global financial instruments.

(5×5=25 Marks)

PART D

Answer **any two** Questions

Each Question carries **10 Marks**

No answer should exceed **six pages**

20. State the features of Money Market Instruments.
21. What are the basic problems of portfolio management?
22. Examine the performance of Derivative Markets in India.
23. Evaluate the performance of Non Banking financial Institutions (NBFIs) in India.

(2×10=20 Marks)

THIRD SEMESTER M. A DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AE3C009 - ECONOMETRICS

Time : 3 Hours

Max. Marks: 60

PART A

Answer **all** questions

Each question carries 1 mark.

1. Degrees of freedom for a simple bivariate linear regression model is.....
2.theorem explains the theoretical justification for normality assumption.
3.is a test of significance for large samples.

4. Weighted least square method is used to solve.....problem.
5. Multi-collinearity is associated with.....models. (5 x 1 = 5 Marks)

PART B

Answer any five questions

Each question carries 2 marks -No answer should exceed one page.

Write Short notes on the following:

6. Restricted Least Square.
7. Student t test.
8. Interval Estimation.
9. Relationship between R^2 and F ratio.
10. Park test.
11. Orthogonal Variable.
12. Types of Econometric data. (5 x 2 = 10 Marks)

PART C

Answer any five questions

Each question carries 5 marks

No answer should exceed two and half pages.

13. Explain the uses of dummy variable in Econometrics.
14. Distinguish between Mathematical and Econometric Model.
15. Explain the nature and consequences of Autocorrelation.
16. Explain the major assumptions of CLRM.
17. Write a short essay on Simultaneous Equation Methods.

18. Explain the types of Econometrics and various approaches to deal with Classical tradition.

19. Briefly describe the procedure for solving Multicollinearity.

(5 x 5 =25 Marks)

PART D

Answer any two questions

Each question carries 10 marks -No answer should exceed six pages.

20. Prove that OLS estimates are BLUE.

21. Explain the Method of Maximum Likely Hood and find the estimates of a two Variable Model.

22. Discuss the method of estimating Simultaneous Equation Models.

23. Write an essay on Hetroscedasticity.

(2 x 10 = 20 Marks)

THIRD SEMESTER M.A.DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AE3C010 - ENVIRONMENTAL ECONOMICS

Time: 3 Hours

Max. Marks: 60

PART A

Answer all questions.

Each question carries 1 mark.

1. Product life extension is recommended as a measure of
2. The Stockholm conference on human environment was held in the year.....
3. The study of habitation of organisms and their habitats is known as.....
4. The cost of reducing the quantity of residuals being emitted into the environment is called.....
5. Entropy refers to.....

(5×1=5marks)

PART B

Answer *any five* questions.

Each question carries **2 marks**.

No answer should exceed one page

6. What is ozone depletion?
7. Explain the causes of deforestation.
8. Explain the components of sustainable development.
9. Explain tragedy of commons.
10. Explain resource taxonomy.
11. Explain the values of biodiversity.
12. Explain the linkage between economy and environment.

(5×2=10marks)

PART C

Answer *any five* questions.

Each question carries **5 marks**.

No answer should exceed two and a half pages

13. Why the environmental problem created as an economic problem?
14. Discuss environmental ethics.
15. Discuss the rules of sustainable development.
16. Discuss the methods for controlling pollution to the environment.
17. What do you meant by environmental degradation? Explain thermal pollution.
18. Discuss the relationship between environment and health.
19. Explain the importance of Environmental Planning and Management.

(5×5=25marks)

PART D

Answer *any two* questions.

Each question carries **10 marks**.

No answer should exceed six pages.

20. Discuss the application of Cost Benefit Analysis in environmental economics.
21. Discuss accounting for environment.
22. What are the basic tenets of Environmental Impact Assessment and explain the general EIA procedure followed in the assessment of development projects.
23. Discuss water conservation and watershed management.

(2×10=20marks)

THIRD SEMESTER M.A. DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AEE001 - PUBLIC ECONOMICS

Time: 3 Hours

Max. Marks: 60

PART A

Answer all questions.

Each question carries 1 mark.

1. The spillover cost is.....
2. The theory of club goods is introduced by.....
3. In Musgrave view, the incidence of tax depends on
4. The Net Primary Deficit is measured as.....
5. The Tax Reform Committee is also called as.....

(5x1=5 Marks)

PART B

Answer any five questions.

Each question carries 2 marks.

No answer should exceed one page

6. Define Federal Finance.
7. Explain Gadgil Formula.
8. State Optimal Taxation.
9. Give a note on congested public goods.
10. Explain Administered Price Mechanism.
11. Discuss the role of Special Interest Groups in revealing social preference.

12. Explain performance budgeting system.

(5x2=10 Marks)

PART C

Answer any five questions.

Each question carries 5 marks.

No answer should exceed two and a half page.

13. Discuss the market failure and allocative efficiency of public goods.
14. Examine the structure and growth of public expenditure in India.
15. Discuss the trends of disinvestment of public sector units in India.
16. Evaluate the functions of Planning and Finance Commissions.
17. Describe the Samuelson model of public good allocation.
18. Mention the basic principles of public debt management.
19. What are the emerging issues in local financial relations in India?

(5x5=25 Marks)

PART D

Answer any two questions.

Each question carries 10 marks.

No answer should exceed six pages.

20. Discuss the criteria for investment in public enterprises.
21. Explain the budgetary deficits in India and its measurement.
22. Examine the problems in intergovernmental financial transfers in India.
23. Describe the allocative and equity aspects of taxation.

(2x10=20 Marks)

THIRD SEMESTER M.A. DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AEE002 - ECONOMICS OF GROWTH AND DEVELOPMENT

Time: 3 Hours

Max. Marks: 60

PART A

Answer all questions

Each question carries 1 mark

1. Back wash and spread effects have been introduced by.....
2. The concept 'missing women' is associated with
3. Golden rule of capital was formulated by.....
4. 'The rise of south human progress in a diverse world' is a slogan of
5. 'Asian Drama' was written by..... (5x1=5)

PART B

Answer any five questions

Each question carries 2 marks -No answer should exceed one page

6. Define economic planning.
7. Explain vicious circle of poverty.
8. Write a note on entitlement and capability.
9. Distinguish between embodied and disembodied technology.
10. Write a note on multidimensional poverty index.
11. Explain ICOR.
12. Write a note on low level equilibrium trap. (5×2=10)

PART C

Answer any five questions

Each question carries 5 marks -No answer should exceed two and half page

13. State unbalanced growth strategy.
14. Explain the Physical Quality of life Index.
15. Discuss the women empowerment measures with special reference to Self Help Groups in Kerala.
16. Explain Kuznet's inverted U hypothesis.
17. Discuss Rostow's stages of economic growth.
18. How does Adam Smith explain the process economic development?
19. Discuss the foreign debt problem faced by the Developing countries. (5×5=25)

PART D

Answer any two questions

Each question carries 10 marks-No answer should exceed six pages.

20. Explain Fei-Ranis model and demonstrate how it is an improvement over Lewis model.
21. Discuss complementary role of agriculture and industry in economic development.
22. Discuss the role of human capital in the development process.
23. Analyse important strategies of Indian planning. (2×10=20)

THIRD SEMESTER M.A.DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AEE003- POPULATION STUDIES

Time: 3 Hours

Max. Marks: 60

PART A

Answer **all** questions.

Each question carries **1 mark**.

1. Cohort fertility rate refers to
2. According to 2011 census, Kerala's sex ratio is.....
3. The National Commission on Population was constituted on
4. The Government of India adopted a National Programme of Family Planning in the year.....
5. As per the 2011 census, the state with highest population is.....

(5×1=5marks)

PART B

Answer **any five** questions.

Each question carries **2 marks**.

No answer should exceed one page

6. How fertility is measured?
7. Explain the concept of Demographic Transition.
8. Explain the measures of urban population.
9. What are the factors determining population growth?
10. Indicate the importance of census enumeration.
11. Distinguish between absolute and relative poverty.
12. Discuss the types of demography.

(5×2=10marks)

PART C

Answer **any five** questions.

Each question carries **5 marks**. No answer should exceed two and a half pages

13. Explain the factors affecting urbanization.
14. Discuss the problem associated with ageing.
15. Explain the types and methods of measurement of migration.
16. Explain the Malthusian Theory of Population.
17. How environment affect the health and life expectancy of an individual?
18. Explain the measures of mortality rate.
19. Explain the uses of life table.

(5×5=25marks)

PART D

Answer **any two** questions.

Each question carries **10 marks**. No answer should exceed six pages.

20. Explain the major objectives of National Population Policy 2000.
21. Explain the techniques used for measuring population projection.
22. Critically examine the Optimum Theory of Population.
23. Discuss population dynamics.

(2×10=20marks)

FOURTH SEMESTER M.A.DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AE4C011 –INTERNATIONAL ECONOMICS

Time: 3 Hours

Max. Marks: 60

PART A

Answer all questions

Each question carries 1 mark

1. Under flexible exchange rate system, the exchange rate is determined by
2. The availability theory of international trade was developed by..... .
3. The terms of trade indicate
4. The theory of customs union is formulated by
5. New protectionism in international trade stands for

(5×1=5)

PART B

Answer any five questions

Each question carries 2 marks- No answer should exceed one page.

6. What is optimum tariff?
7. What do you mean by Metzler paradox?
8. Write a note on trade creation and trade diversion.
9. Explain Leontief Paradox.
10. What do you mean by intra industry trade?
11. . Explain reciprocal demand theory.
12. What do you mean by Dutch disease?

(5×2=10)

PART C

Answer any five questions

Each question carries 5 marks- No answer should exceed two and half page

13. Explain immiserising growth.
14. What are the factors affecting terms of trade?
15. Critically examine absolute advantage theory of international trade.
16. Discuss India's foreign exchange policy.
17. Explain product cycle theory.
18. Briefly discuss Stolper-Samuelson theorem.
19. Explain elasticity approach to balance of payment. (5×5=25)

PART D

Answer any two questions

Each question carries 10 marks- No answer should exceed six pages.

20. Describe the effect of tariff under partial and general equilibrium.
21. Critically examine H-O theory.
22. How does trade function as an engine of growth? Explain based on past and present evidences of world nations.
23. Explain the theory of customs union.

(2×10=20)

FOURTH SEMESTER M.A.DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AE4C012 - OPERATIONS RESEARCH FOR ECONOMIC ANALYSIS

Time: 3 Hours

Max. Marks: 60

PART A

Answer *all* questions.

Each question carries **1 mark**.

1. Integer linear programming means.....
2. Goal programming refers to.....
3. Critical path is defined as.....
4. Assignment problem is a special case of.....
5. Quadratic programming is defined as.....

(5×1=5marks)

PART B

Answer *any five* questions.

Each question carries **2 marks**. No answer should exceed one page

6. Explain the essential ingredients of LPP.
7. Explain Monte Carlo simulation method.
8. State Kuhn-Tucker conditions.
9. Explain saddle point theorem.
10. What do you meant by time cost trade off?
11. Find the dual of the following primal

$$\text{Minimize } Z= 4X_1+2X_2+X_3$$

$$\text{Subject to } X_1+X_2\leq 7$$

$$3X_1+X_2+X_3\geq 30$$

$$6X_1-X_3=5$$

$$X_1, X_2, X_3\geq 0$$

12. Explain decision tree.

(5×2=10marks)

PART C

Answer **any five** questions.

Each question carries **5 marks**.

No answer should exceed two and a half pages

- 13. Discuss the methods for mixed strategy game problem.
- 14. Explain constraint maxima and minima.
- 15. Discuss the criteria of decision under risk.
- 16. Distinguish between PERT and CPM.
- 17. Solve the following LPP graphically

Maximize $Z = 60X_1 + 40X_2$

Subject to $2X_1 + X_2 \leq 60$

$X_1 \leq 25$

$X_2 \leq 35$

$X_1, X_2 \geq 0$

- 18. Find the initial feasible solution to the transportation problem by using North West Corner rule
W1 W2 W3 W4 SS

14	9	18	6	11	F1
10	11	7	16	13	
25	20	11	34	19	F2
6	10	12	15		F3

DD

- 19. Solve the following assignment problem

I II III IV

32	26	35	38	A
27	24	26	32	B
28	22	25	34	C
10	10	16	16	D

(5×5=25marks)

PART D

Answer **any two** questions.

Each question carries **10 marks**.

No answer should exceed six pages.

20. Solve the following LPP by using simplex method

Maximize $Z = 5X_1 + 3X_2$

Subject to $X_1 + X_2 \leq 2$

$5X_1 + 2X_2 \leq 10$

$3X_1 + 8X_2 \leq 12$

$X_1, X_2 \geq 0$

21. Apply maximax, minimax, maximin, Laplace and Hurwicz α criterion to the following problem

		Alternatives			
		A1	A2	A3	
State of nature		20	12	25	S1
		25	15	30	S2
		30	20	22	S3
$\alpha = 0.6$					

22. Solve the following transportation problem

W1 W2 W3 W4 SS

11	20	7	8	50	F1
21	16	10	12	40	F2
8	12	18	9	70	F3
30	25	35	40		DD

23. Estimate the critical path for the following network.

Activity	Time duration
1-2	2
1-3	7
2-4	8
3-5	5
4-5	3
4-6	5
5-6	3
6-7	1

(2×10=20marks)

FOURTH SEMESTER M.A.DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AEE015- PROJECT FORMULATION AND EVALUATION

Time: 3 Hours

Max. Marks: 60

PART A

*Answer **all** questions.*

*Each question carries **1 mark**.*

1. A qualitative method for demand forecasting is
2. Project Risk means.....
3. Critical path is defined as.....
4. Project Charts are used for.....
5. Project is accepted when Net Benefit Cost ratio is equal t..... **(5×1=5marks)**

PART B

*Answer **any five** questions.*

*Each question carries **2 marks**. No answer should exceed one page*

6. Explain project life.
7. Explain Product mix.
8. What is a work schedule?
9. Explain sensitivity analysis.
10. What do you meant by Break Even Point?
11. Explain decision tree.
12. Distinguish between Delphi method and executive opinion method **(5×2=10marks)**

PART C

*Answer **any five** questions.*

*Each question carries **5 marks**.*

No answer should exceed two and a half pages

13. Discuss the methods for demand forecasting
14. Explain the importance of balance sheets in financial analysis.
15. Discuss the steps in technical analysis
16. Distinguish between PERT and CPM.

17. Write a short essay on time value of money
 18. Discuss the various methods of assessing risks
 19. Explain the important portfolio planning tools used in recourse allocation
- (5×5=25marks)**

PART D

*Answer **any two** questions. Each question carries **10 marks**.*

No answer should exceed six pages.

20. Explain the network techniques used in project management
 21. Briefly describe the various project appraisal criteria
 22. Write an essay on Social Cost Benefit Analysis with suitable examples.
 23. Discuss the phases of Capital Budgeting.
- (2×10=20marks)**

FOURTH SEMESTER M. A. DEGREE EXAMINATION UNDER CCSS

APPLIED ECONOMICS

AEE020- RESEARCH METHODOLOGY AND COMPUTER APPLICATION

Time:3 Hours

Max.Marks:60

PART A

*Answer **all** questions-Each question carries **1mark**.*

- 1.....design deals with the techniques by which the procedures specified in the sampling, statistical and observational designs can be carried out.
2.is the *n*th root of the product of the values of n times in a given series.
3. Full form of ANOCOVA is.....
4. The difference between the values of the extreme items of a series is known as.....
- 5The purpose of survey of literature is to fill the **(5x1=5 Marks)**

PART B

*Answer **any five** questions.*

*Each question carries **2 marks**. No answer should exceed one page*

Write Short notes on the following:

6. Types of Research.

7. Questionnaire Method
8. Probability Sampling
9. Hypothesis
10. Steps in Research Process
11. ANOVA
12. Time Series Data

(5x2=10 Marks)

PART C

Answer **any five** questions

Each question carries **5 marks**.

No answer should exceed two and half pages.

13. Prepare a note on Interdisciplinary Research
14. Pick out the differences between Analytical and Descriptive methods of Research.
15. Write a short essay on Research Design.
16. Explain the role of Survey of Literature in Research.
17. Bring out the differences between Inductive and Deductive Methods
18. How are computers used as a tool in research. Explain giving examples.
19. Explain the importance of Bibliography in the context of Research Report.

(5x5=25 Marks)

PART D

Answer **any two** questions

Each question carries 10 marks- No answer should exceed six pages.

20. Explain the Significance of a Research report and narrate the various steps involved in writing a Research Report.
21. Briefly discuss the significance of Social Science Research and point out the problems faced by Social Science Researchers.
22. "Research is much concerned with proper fact finding, analysis and evaluation". Do you agree with this statement? Give reasons in support of your answer.
23. Distinguish between;

(a) Convenience and Purposive Sampling;

(b) Systematic and Stratified Sampling;

(c) Quota and Cluster Sampling;

(d) Random and Non Random Sampling

(2x10=20 Marks)