KANNUR UNIVERSITY

M.A. Economics/Development Economics/Applied Economics Programme under Credit Based Semester System in affiliated Colleges- Revised Scheme, Syllabi &Model Question Papers- Implemented with effect from 2014 admission- Orders issued.

ACADEMIC BRANCH

U.O.No.Acad/C1/3505 /2014   Dated, Civil Station. P.O. 1 - 7 - 2014

Read : 1. U.O.No.Acad C1/11460/2013 dated 12-03-2014.
2. Minutes of the meeting of the Board of Studies in Economics (PG) held on 06-12-2013
3. Minutes of the meeting of the Faculty of Humanities held on 27-03-2014
4. Letter dated 26-03-2014 from the Chairman, Board of Studies in Economics (PG)

O R D E R

1. As per the paper read (1) above, the Revised Regulation for P.G. Programmes under Credit Based Semester System (CBSS) have been implemented in this University w.e.f 2014 admission.

2. The Board of Studies in Economics PG vide paper read (2) above, finalized the Scheme Syllabi and Model Question Papers for MA Economics/Development Economics/Applied Economics under Credit Based Semester System with effect from 2014 admission.

3. As per the paper read (3) above the meeting of Faculty of Humanities approved the Scheme, Syllabi and Model question papers for M.A. Economics/Development Economics/Applied Economics Programmes w.e.f.2014 admission.

4. The Chairman , Board of Studies in Economics (PG) as per letter cited (4) has forwarded the Scheme, Syllabi and Model Question Papers for M.A Economics / Development Economics/ Applied Economics Programmes for implementation with effect from 2014 admission.

5. The Vice Chancellor after considering the matter in detail and in exercise of the powers of Academic Council conferred under section 11 (1) of Kannur University Act 1996 and all other enabling provisions read together with has accorded sanction to implement Scheme, Syllabi and Model Question Papers for M.A Economics/ Development Economics/ Applied Economics Programmes under Credit Based Semester System(CBSS) with effect from 2014 admission subject to report Academic Council.

6. Orders are, therefore, issued accordingly.

7. The Implemented Scheme, Syllabi and Model Question Papers are appended.

Sd/-
REGISTRAR

To

The Principals of Colleges offering M.A. Economics/ Dev. Economics/Applied Economics

(PTO)

Copy To:

1. The Examination Branch (through PA to CE)
2. PS to VC
3. PA to Registrar
4. PA to CE
5. PA to FO
6. DR (Acad)
7. AR I (Acad)
8. Chairman, BOS in Economics (PG)
9. SF/DF/FC

Approved for Issue

Section Officer

*For more details;log on www.kannur university.ac.in

KANNUR UNIVERSITY

M.A APPLIED ECONOMICS-2014

CONTENTS:

CREDIT AND MARK PATTERN

LIST OF CORE AND ELECTIVES

PATTERN OF QUESTION PAPER

SYLLABUS

MODEL QUESTION PAPER

Credit and Mark distribution for

M. A APPLIED ECONOMICS

Semester	Course Code	Title of Course	Marks			Credit	Contact hours
			Internal	External	Total		
I	ECO1C01	Micro Economic Theory-1	15	60	75	4	7
	ECO1C02	Macro Economic Theory-1	15	60	75	4	6
	ECO1C03	Quantitative Techniques for Economic Analysis	15	60	75	4	6
	ECO1C04	Development Issues of Indian Economy(with special reference to Kerala)-1	15	60	75	4	6
	Total				**300**	**16**	**25**
II	ECO2C05	Micro Economic Theory-II	15	60	75	4	5
	ECO2C06	Macro Economic Theory-II	15	60	75	4	5
	ECO2C07	Development Issues of Indian Economy(with special reference to Kerala)-II	15	60	75	4	4
	ECO2C08	Public Economics-I	15	60	75	4	5
	ECO2C09	Basic Econometrics	15	60	75	4	6
	Total				**375**	**20**	**25**
III	ECO3C10	Public Economics-II	15	60	75	4	5
	ECO3C11	International Economics-I	15	60	75	4	5
	ECO3C12	Environmental Economics	15	60	75	4	5
	ECO3C13	Mathematical Economics	15	60	75	4	5
	ECO3E01	Elective I	15	60	75	4	5
	Total				**375**	**20**	**25**
IV	ECO4C14	International Economics-II	15	60	75	4	5
	ECO4C15	Operations Research for Economic Analysis	15	60	75	4	5
	ECO4E02	Elective II	15	60	75	4	5
	ECO4E03	Elective III	15	60	75	4	5
	ECO4Pr	Project	20	80	100	6	5
	ECO4C16	Viva-voce	-	50	50	2	
	Total		**290**	**1210**	**450**	**24**	**25**
Grand Total					**1500**	**80**	**100**

CORE COURSES
ECO1C01

MICROECONOMIC THEORY -I

Module-1 (30 hours)

Theory of consumer choice-1: Individual behaviour in the face of risk and uncertainty: concepts of certainty, risk and uncertainty in consumer choices – utility functions, probability distribution and expected utility – risk aversion and risk preference – choice between insurance and gambling with different shapes of the utility function – risk spreading – Neumann-Morgenstern method of constructing utility index – Friedman-Savage hypothesis – household portfolio decisions under conditions of uncertainty – reducing risks and uncertainty – benefits of diversification – measuring risk – the mean-variance analysis – risk aversion and indifference curves – the state preference theory.

Reference:

1. Dominick Salvatore, *Microeconomics: Theory and Applications*, Oxford University Press, 2003, Chapter-6.
2. Robert S. Pindyck and Daniel L. Rubinfeld, *Microeconomics*, Prentice Hall of India, 2003, Chapter-5.
3. Hal R. Varian, *Intermediate Microeconomics: A Modern Approach*, Affiliated East West Press, Delhi, 2000, Chapter-12.
4. Jack Hirshleifer, Amihai Glazer and David Hirshleifer, *Price Theory and Applications: Decisions, Markets and Information*, Cambridge University Press, 2005, Chapter-11.
5. David M. Kreps, *Microeconomics for Managers*, W.W. Norton & Co., London, 2004, Chapter-15.
6. James M. Henderson and Richard E. Quandt, *Microeconomic Theory: A Mathematical Approach*, Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 2003, Chapter-3.
7. William J. Baumol, *Economic Theory and Operations Analysis*, Prentice Hall of India Pvt. Ltd., 2000, Chapter-17
8. Walter Nicholson, *Microeconomic Theory: Basic Principles and Extensions*, The Dryden Press, Orlando, 1992, Chapter-9.
9. H.A. John Green, *Consumer Theory*, Mac Millan, 1976, Chapters-13, 14 and 15.
10. David Laidler, *Introduction to Microeconomics*, Heritage Publishers, New Delhi, 1981, Chapter-7.
11. Robert Y. Awh, *Microeconomics: Theory and Applications,* John Wiley and Sons, 1976, Chapter-3.
12. David Begg, Stanley Fisher and Rudiger Dornbusch, *Economics*, Mc Graw-Hill Publishing Company, 1994, Chapter-14.
13. Richard G. Lipsey and K. Alec Chrystal, *Principles of Economics*, Oxford University Press, 1999, Chapter-12.

Module-2 (27 hours)

Theory of consumer choice-II: Recent developments in the theory of market demand: attribute theory of demand: maximizing satisfaction from attributes – attribute approach and the law of demand – intertemporal choice: the intertemporal budget constraint, indifference map and

optimal choice of consumption – Hick's logical ordering theory of demand – pragmatic approach to demand analysis – constant elasticity demand function – distributed lag models of demand – Nerlove's model – Houthakker's and Taylor's model – linear expenditure systems.

Reference:

1. Walter Nicholson, *Microeconomic Theory: Basic Principles and Extensions*, The Dryden Press, Orlando, 1992, Chapters-6, 7.
2. Jack Hirshleifer, Amihai Glazer and David Hirshleifer, *Price Theory and Applications: Decisions, Markets and Information*, Cambridge University Press, 2005, Chapter-5; Chapter 15 for supplementary reading.
3. Hicks, *A Revision of Demand Theory*, Oxford University Press, 1956.
4. Koutsoyiannis A, *Modern Microeconomics*, Mac Millan, 1979, Chapter-2.
5. James M. Henderson and Richard E. Quandt, *Microeconomic Theory: A Mathematical Approach*, Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 2003, Chapter-3 (Also, Chapter-12 for supplementary reading).
6. Robert H. Frank, *Microeconomics and Behaviour*, Irwin Mc. Graw Hill, 2000, Chapter-5.
7. Robert Y. Awh, *Microeconomics: Theory and Applications,* John Wiley and Sons, 1976, Chapter-21 (for supplementary reading).
8. David Laidler, *Introduction to Microeconomics*, Heritage Publishers, New Delhi, 1981, Chapter-8.

Module-3 (32 hours)

Theory of production: Production function – homogeneous production function – Cobb-Douglas production function – CES production function – technical progress and production function – equilibrium of the multiproduct firm in terms of the production-possibility curve and isorevenue curve – elasticity of substitution – linear programming maximization problem (both graphic and simplex methods) – dual problem: its formulation and economic interpretation – input-output analysis.

Reference:

1. James M. Henderson and Richard E. Quandt, *Microeconomic Theory: A Mathematical Approach*, Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 2003, Chapters-5, 10.
2. William J. Baumol, *Economic Theory and Operations Analysis*, Prentice Hall of India Pvt. Ltd., 2000, Chapters-5, 6, 22.
3. Walter Nicholson, *Microeconomic Theory: Basic Principles and Extensions*, The Dryden Press, Orlando, 1992, Chapters-11, 17.
4. Koutsoyiannis, *Modern Microeconomics*, Mac Millan, 1979, Chapters-3, 20
5. Donald Stevenson Watson and Malcolm Getz, *Price Theory and its Uses*, AITBS Publishers and Distributors, Delhi, 1996, Chapter-12.
6. Robert Y. Awh, *Microeconomics: Theory and Applications,* John Wiley and Sons, 1976, Chapters-8, 20.

Module-4 (22 hours)

Duopoly and Oligopoly: Characteristics of duopoly and oligopoly – collusive and non-collusive models – Cournot's model – Edgeworth's model – Chamberlin'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 – welfare effects of oligopoly.

Reference:

1. Edwin Mansfield & Gary Yohe, *Microeconomics*, W.W.Norton & Co., 2004, Chapter-13.
2. Dominick Salvatore, Microeconomics: Theory and Applications, Oxford University Press, 2003, Chapter-11.
3. A. Koutsoyiannis, *Modern Microeconomics*, Mac Millan, 1979, Chapters- 9, 10.
4. Hal R. Varian, *Intermediate Microeconomics: A Modern Approach*, Affiliated East West Press, 2000, Chapter-27.
5. James M. Henderson and Richard E. Quandt, *Microeconomic Theory: A Mathematical Approach*, Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 2003, Chapter-8.
6. John P. Gould, Edward P. Lazear, *Microeconomic Theory*, Richard D. Irwin Inc., 2003, Chapter-13.
7. Robert H. Frank, *Microeconomics and Behaviour*, Irwin Mc. Graw Hill, 2000, Chapters- 5, 13.
8. Robert Y. Awh, *Microeconomics: Theory and Applications,* John Wiley and Sons, 1976, Chapter-15.

Module-5 (15 hours)

Markets with asymmetric information: Quality uncertainty and the market for 'lemons' – market signaling to convey private information – screening to induce information revelation – hidden actions: principals and agents – incentives – asymmetric information in labour markets: efficiency wage theory – moral hazard – hidden characteristics: the problem of adverse selection – the winner's curse.

Reference:

1. N. Gregory Mankiw, *Economics: Principles and Applications*, South-Western Learning India Pvt. Ltd., 2007, Chapter-22.
2. Jack Hirshleifer, Amihai Glazer and David Hirshleifer, *Price Theory and Applications*: *Decisions, Markets and Information*, Cambridge University Press, 2005, Chapter-11.
3. Edwin Mansfield & Gary Yohe, *Microeconomics*, W.W.Norton & Co., 2004, Chapter-17.
4. Hal R. Varian, *Intermediate Microeconomics: A Modern Approach*, Affiliated East West Press, Delhi, 2000, Chapter-36
5. Robert S. Pindyck and Daniel L. Rubinfeld, *Microeconomics*, Prentice Hall of India, 2003, Chapter-17.
6. David M. Kreps, *Microeconomics for Managers*, W.W. Norton & Co., London, 2004, Chapter-18.
7. Walter Nicholson, *Microeconomic Theory: Basic Principles and Extensions*, The Dryden Press, Orlando, 1992, Chapter-10.
8. John P. Gould, Edward P. Lazear, *Microeconomic Theory*, Richard D. Irwin Inc., 2003, Chapter-19.
9. A Gravelle and R. Rees, *Microeconomics*, Pearson Education (Singapore) Pvt. Ltd., 2004 (Chapter-22 for supplementary reading).

ECO1C02
MACRO ECONOMIC THEORY- I

Module-1: Development of Macro Economics (15 Hours)

Classical, Neoclassical, Keynesian, Post Keynesian Economics – An Introduction to Neo-Keynesian, New Classical, New Keynesian Developments and New Macro Economics

Module-2: Process of Income Determination (20 Hours)

Investment Multiplier – Static, Comparative Static and Dynamic Multiplier – Keynesian Model of Income Determination in Two Sector, Three Sector and Four Sector Economies – Tax Multiplier, Balanced Budget Multiplier and Foreign Trade Multiplier

Module-3: Neo-classical and Keynesian Synthesis (30 Hours)

Hicks-Hansen ISLM Model – General Equilibrium – Relative Effectiveness of Monetary and Fiscal Policies – Keynesian and Classical Versions – Extension of ISLM Model with govt. sector –Extension of ISLM model with Labour market and flexible prices – Unemployment and labour market – Three sector macro model – Keynesian and Neo-classical versions.

Module-4: Behavioural Foundations of Macro Economics (30 Hours)

Sectoral Demand Functions – Consumption Demand – Kuznet's Consumption Puzzle – Absolute Income Hypothesis – Relative Income Hypothesis – Permanent Income Hypothesis – Life Cycle Hypothesis – Inter-temporal Choice in Consumption. Investment Demand – Keynesian Approach – MEC – Post Keynesian Approach – Tobin's Q-ratio – Accelerator Theory of Investment – Financial Theory of Investment.

Module-5: Theory of Demand and Supply of Money (31 Hours)

Classical and Keynesian Approach to demand for and supply of money – Post Keynesian Approach – Real Balance Effect – Pigou, Patinkin, Baumol, Friedman and Tobin – Monetarism and Fiscalism – Money supply in an open economy – High Powered Money – Money Multiplier – Control of Money supply – Behavioural Model of Money supply – Endogenous Money supply theory.

References:

1. Ackley G, Macro Economics; Theory and Policy, Macmillan, New York, 1978

2. Andrew B. Paul and Ben S Bernanke, Macro Economics, Pearson Education, New Delhi

3. Eugene Diulio, Theory and Problems of Macro Economics, Schaum's Outline Series, Mc Graw Hill Publishing Company, Singapore

4. Keynes, J. M, General Theory of Employment, Interest and Money, Macmillan, London, 1961

5. Mankiw N. G, Macro Economics

6. Richard T Froyen, Macro Economics; Theory and Policy, Macmillan Publishing Co., New York, 1990

7. Rosalind Levasic and Alexander Rebmann, Macro Economics: An Introduction to Keynesian-Neoclassical Controversies, The Macmillan Press Ltd, London

8. Rudiger Dornbusch, Stanley Fischer and Richard Startz, Macro Economics, Tata Mc Graw Hill Publishing Company Ltd, New Delhi New Delhi, 1998

9. Snowdown B, H.R Vane and F. Wynarczyk, A Modern Guide to Macro Economics: An introduction to competing schools of thought

10. Y. P. Venieries and F. D. Sebold, Macro Economic Models and Policy

ECO1C03

QUANTITATIVE TECHNIQUES FOR ECONOMIC ANALYSIS

Module 1   Definition, Types of matrices – Operations of matrices – Determinants – properties of determinants – Minors and Co factors – Ad joint of a matrix – Inverse of a matrix – Rank of a matrix – Solution of a system of linear equations using matrices – Cramer's rule – characteristic equations – characteristic roots – Applications in economics.

Module-2   Concept – Permutations, Combinations, Definition- classical, empirical, axiomatic approaches – Addition and multiplication laws, conditional probability –Bay's theorem, Random variables – Probability functions – Mathematical expectation – moments –Discrete Probability Distributions-Binomial , Poisson,– simple applications.– Continuous Probability Distributions - Normal - Lognormal - Pareto Distribution - Properties and applications.

Module-3   Population and Sample : Random Sampling - Parameter and Statistic - - Sampling Distribution and Standard Error – Sampling Distribution of Mean, Students t Distribution, Chi Square Distribution, F Distribution. Central Limit Theorem, Large Sample Distribution of Sample Mean and Sample proportions.

Module-4   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. Confidence Interval for proportions, Difference of proportions.

Module-5   Tests of hypothesis : Basic concepts - Simple and Composite hypothesis -Null and alternative hypothesis - Two types of errors –Level of significance, Critical region,   Tests concerning means of large and small samples - Tests for difference between means based on large and small samples – Tests concerning proportions, F test and One Way Anova, Chi Square Tests of Goodness of fit and independence of attributes.

Module-6   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 good research design.

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

References:

1. Taro Yamane, Statistics : An introductory Analysis, Harper and Ross Editions 3, 1973, Prentice Hail of India, New Delhi

2. Murray S. Speigel, Statistics, Schaum Series

3. Murray S. Speigel, Probability, Schaum Series

4. C.R Khothari, Research Methodology - Methods and Techniques, Wiley Eastern Limited.

5. Alpha C Chiang. Fundamental Methods of Mathematical Economics, Me Graw Hill, 19

6. Srinath Baruah- Basic Mathematics and its applications in Economics (2001) Mac Million India (P)Ltd.

7. S.P. Gupta Statistical Methods, Sultan Chand New Delhi

8. Hooda R. P. Statistics for Business Economics, Mac Millan, New Delhi.

ECO1C04

DEVELOPMENT ISSUES OF INDIAN ECONOMY
(WITH SPECIAL REFERENCE TO KERALA)-1

Module-1

Structural aspects

Structural changes in Indian economy- Role of agriculture, industry and service sectors- Debate on market Vs planned economy- Pre and post reform period performances- Growth rates, productivity and modernization of technology- second generation reforms- Role of good governance for institutional changes.

Module –II

Developmental Issues

Extent of poverty – methodological debates- recent committee reports- Tendulkar, Saxena, Hashim and Rangarajan - Poverty Gap Index- Squared Poverty Gap Index- Evaluation of poverty eradication measures after 1991

Measurement of unemployment in India- Key NSSO concepts- magnitude of unemployment- inter-state and inter-gender analysis- Trends in unemployment after 1991- Growth-employment relationship- Informalisation of labour

Inequality- status of trickling down after reforms- attempts towards inclusive growth- Right based approaches in employment, education and food.

Module III

 Demographic profile

Population and demographic indicators- overview of Census data 1951-2011- Birth, Death and mortality rates- International comparison- Demographic Dividend- Human resource

management- education and health status- Enrolment ratio-Inclusive education- Public spending on education and health

Module IV

Kerala Economy

Structural changes - Growth performance – poverty, unemployment and inequality in Kerala - demographic features - Population ageing – human resource development - development indicators - health and education – paradox of high life expectancy and high mortality and environmental and lifestyle reasons - quality management in higher education.

References

1. A P Thirlwall: Growth and Development, 6th Edition Macmillan Press Ltd., 1999
2. Jean Dreze, AmartyaSen: An Uncertain Glory : India and its Contradictions,Penguin Publishers,2013.
3. Bhagavathi, Jagadish and Arvind PangariaWhy Growth Matters: How Economic Growth in India Reduced Poverty and the Lessons for Other Developing Countries, 2013
4. Vijay Joshi & IMD Little: India's Economic Reforms; OUP, New Delhi,1991-2001
5. Nayyar Deepak, Liberalization And Development: Collected Essays, OUP, 2008.
6. Uma Kapila : Two Decades of Economic Reforms in India: Towards Faster, Sustainable and More Inclusive Growth, 3rd edition, Academic Foundation, New Delhi, 2013
7. RuddarDutt& KPM Sundaram: Indian Economy; S Chand & Co. Ltd., New Delhi, 2013
8. Basu, Kaushik, ed, India's emerging economy, OUP, 2007.
9. Parayil, Govindan (ed), 2000: Kerala: The Development Experience: Reflections On Sustainability And Replicability, Zed Books.
10. Frank, Richard &T.M.ThomasIssac 2000, local democracy and Development: people's plan for decentralized planning in Kerala
11. M A Oommen: Essays on Kerala Economy, Oxford and IBH, 1993
12. B A Prakash: Kerala Economy-Problems and Prospects; Sage Publications, New Delhi,2006
13. P Surendran and N Radhakrishnan,The Kerala Economy; Vrinda Publications, New Delhi, 2009.
14. Misra.Puri:IndianEconomy,Himalaya Publishers,2013.

15. Iswar C Dhingra:Indian Economy; Environment and Policy, Sultan Chand and Sons 2013.

16. Agarwal A N**:** Indian Economy : Problems of Development and Planning, Vikas Publishing house, New Delhi.2013

17. Gopalji and Suman Bhakri : 'Indian Economy, Performance and Policies, Pearson, New Delhi 2013

Journals

1. 'Down to Earth'

2. 'Terra Green' published by Energy and Recourse Institute

Database on Indian Economy

1. www.rbi.org

2. www.mospi.nic.in

3. www.indiastat.com

4. www.planningcommission.nic.in

5. www.censusindia.gov.in

6. www.spb.kerala.gov.in

7. www.in.undp.org

8. www.undp.org

9. www.data.worldbank.org

ECO2C05
MICROECONOMIC THEORY -II

Module-1 (20 hours)

Extension of the traditional theory of the firm: The firm and the profit maximization hypothesis – realism and usefulness of the profit-maximizing hypothesis – Baumol's theory of sales revenue maximization – Marris' model of the managerial enterprise – theory of games (two-person zero-sum and non-zero sum) – Nash equilibrium – decision theory: subject matter and decision rules.

References:

1. Hal R. Varian, *Intermediate Microeconomics: A Modern Approach*, Affiliated East West Press, Chapter-28
2. James M. Henderson and Richard E. Quandt, *Microeconomic Theory: A Mathematical Approach*, Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 2003, Chapter-8.
3. Koutsoyiannis, *Modern Microeconomics*, Mac Millan, 1979, Chapters-15, 16, 17, 18, 19.
4. Edwin Mansfield & Gary Yohe, *Microeconomics*, W.W.Norton & Co., 2004, Chapter-12.
5. Walter Nicholson, *Microeconomic Theory: Basic Principles and Extensions*, The Dryden Press, Orlando, 1992, Chapter-21.
6. Dominick Salvatore, *Microeconomics: Theory and Applications*, Oxford University Press, 2003, Chapter-12.
7. Robert S. Pindyck and Daniel L. Rubinfeld, *Microeconomics*, Prentice Hall of India, 2003, Chapter-13.
8. William J. Baumol, *Economic Theory and Operations Analysis*, Prentice Hall of India Pvt. Ltd., 2000, Chapters-15, 18, 19.
9. David M. Kreps, *Microeconomics for Managers*, W.W. Norton & Co., London, 2004, Chapter-21.
10. Robert Y. Awh, *Microeconomics: Theory and Applications,* John Wiley and Sons, 1976, Chapters-11, 16

Module-2 (15 hours)

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

References:
1. Koutsoyiannis, *Modern Microeconomics*, Mac Millan, 1979, Chapters-11, 12, 13, 14.
2. Dominick Salvatore, *Microeconomics: Theory and Applications*, Oxford University Press, 2003, Chapter-11.
3. Robert Y. Awh, *Microeconomics: Theory and Applications,* John Wiley and Sons, 1976, Chapter-11.

Module-3 (18 hours)

Theory of distribution-I: Marginal productivity theory – product exhaustion theorem: Euler's theorem and the 'adding up' controversy – Clark-Wicksteed-Walras product exhaustion theorem – backward rising input supply curve – unions as monopolies – price of inputs in fixed supply: rent and quasi rent – non-homogeneous factors and wage differentials – elasticity of factor substitution – technological progress and income distribution.

References:
1. Dominick Salvatore, *Microeconomics: Theory and Applications*, Oxford University Press, 2003, Chapters-14, 15.
2. Walter Nicholson, *Microeconomic Theory: Basic Principles and Extensions*, The Dryden Press, Orlando, 1992, Chapter-22.
3. Robert S. Pindyck and Daniel L. Rubinfeld, *Microeconomics*, Prentice Hall of India, 2003, Chapter-14.

4. William J. Baumol, *Economic Theory and Operations Analysis*, Prentice Hall of India Pvt. Ltd., 2000, Chapter-24.
5. Koutsoyiannis, *Modern Microeconomics*, Mac Millan, 1979, Chapter-21
6. John P. Gould, Edward P. Lazear, *Microeconomic Theory*, Richard D. Irwin Inc., 2003, Chapter-14.
7. Donald Stevenson Watson and Malcolm Getz, *Price Theory and its Uses*, AITBS Publishers and Distributors, Delhi, 1996, Chapter-21.

Module-4 (15 hours)

Theory of distribution-II: Alternative distribution theories: The Ricardian model – neo-Keynesian model of Kaldor – Marxian theory – 'degree of monopoly' theory of Kalecki – modified model of Pasinetti – alternative widow's cruse models.

References:
1. William J. Baumol, *Economic Theory and Operations Analysis*, Prentice Hall of India Pvt. Ltd., 2000, Chapter-24.
2. Luigi l. Pasinetti, *Growth and Income Distribution: Essays in Economic Theory*, Cambridge University Press, 1974, Chapter-4.
3. G. C. da Costa, *Value and Distribution in Neoclassical and Classical Systems*, Himalaya Publishing House, Second Edition, 1992, Chapters-12.

Module-5 (22 hours)

General equilibrium and welfare economics: Interdependence in the economy – partial and general equilibrium – Walrasian general equilibrium – two-factor, two-commodity, two-consumer general equilibrium model.

Welfare economics: Criteria of social welfare – Pareto optimality criterion – perfect competition and Pareto optimality – Kaldor-Hicks compensation criterion – Scitovsky criterion – Bergson criterion – social welfare functions –maximization of social welfare and the point of bliss – determination of the welfare-maximizing output-mix, commodity distribution and resource allocation – misallocation of resources owing to beneficial and detrimental externalities – the theory of second best.

References:
1. James M. Henderson and Richard E. Quandt, Microeconomic Theory: A Mathematical Approach, Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 2003, Chapter-11.
2. Walter Nicholson, Microeconomic Theory: Basic Principles and Extensions, The Dryden Press, Orlando, 1992, Chapters-16, 17, 18, 26.
3. Edwin Mansfield & Gary Yohe, Microeconomics, W.W.Norton & Co., 2004, Chapters-16, 18.
4. Koutsoyiannis, *Modern Microeconomics*, Mac Millan, 1983, Chapter-22, 23.
5. G. C. da Costa, *Value and Distribution in Neoclassical and Classical Systems*, Himalaya Publishing House, Second Edition, 1992, Chapter-7.
6. William J. Baumol, *Economic Theory and Operations Analysis*, Prentice Hall of India Pvt. Ltd., 2000, Chapters-20, 21.
7. Gravelle. A. and R. Rees, Microeconomics, Pearson Education (Singapore) Pvt. Ltd., 2004 (Chapters-16, 17, 18 for supplementary reading).

8. Hal R. Varian, Intermediate Microeconomics: A Modern Approach, Affiliated East West Press, Delhi, 2000, Chapter-31.
9. Jack Hirshleifer, Amihai Glazer and David Hirshleifer, Price Theory and Applications: Decisions, Markets and Information, Cambridge University Press, 2005, Chapter-16.
10. John P. Gould, Edward P. Lazear, Microeconomic Theory, Richard D. Irwin Inc., 2003, Chapter-17.
11. Robert Y. Awh, *Microeconomics: Theory and Applications,* John Wiley and Sons, 1976, Chapters-19, 20.

ECO2C06

MACRO ECONOMIC THEORY- II

Module-1: Macro Economics in an Open Economy (35 Hours)

ISLM Analysis in an open economy – Foreign Exchange Market – Determination of Exchange Rates: Fixed Vs Flexible – Pegging of the currency – Balance of Payment/ Accounts – Disequilibrium in BOP – Depreciation, Appreciation, Revaluation, Devaluation, J-curve Effect – BOP in Keynesian Analysis – Exchange Rates – Money and Capital Flows in an Open Economy – Mundell-Fleming-Keynesian Model – Monetary Approach to Balance of Payments.

Module-2: Theory of Inflation and Unemployment (30 Hours)

Keynesian and Monetarist Approach to Inflation – Structuralist Theory of Inflation – Phillips Curve – Short run, Long run Phillips Curve – The Natural Rate of Unemployment Hypothesis – Modified Phillips Curve – Adaptive Expectation Hypothesis – Augmented Phillips Curve – Cost of Inflation and Inflation Targeting – Unemployment and Labour Market – Neoclassical Labour Market Equilibrium – Keynesian Labour Market – Under Employment Equilibrium.

Module-3: Current Controversies in Macro Economics (25 Hours)

Keynesian Counter revolution – R. W. Clower, and Leifohnufund – Dual Decision Hypothesis, Walrasian General Equilibrium – Neo-Keynesian Quantity Constrained Model – Rational Expectations – New Classical Macro Economics – Supply side Economics – Laffer Curve – Wedge Model – Real Business Cycle Approach – New Keynesian Economics – Stanley Fischer, Edmund Phelps and John Taylor.

Module-4: Macro Economic Policy (16 Hours)

Objectives of Macro Economic Policies – Target Variable and Instrument variable – Main Policy Instrument – Monetary Policy Vs Fiscal Policy Monetary – Okun's Law – Fiscal Policy and Budget Deficit – Crowding out Effect and Government Budget – Income Policy – Stabilisation Policy – New Cambridge Approach.

References:

1. Ackley G, Macro Economics; Theory and Policy, Macmillan, New York, 1978
2. Andrew B. Paul and Ben S Bernanke, Macro Economics, Pearson Education, New Delhi
3. Culbertson J. M, Macro Economic Theory and Stabilisation Policy, Mc Graw Hill, Tokyo
4. Dasgupta, A. K. and Hagger, A. J, The Objectives of Macro Economic Policy, Macmillan, London, 1971
5. Denberg, Thomas. F, Macroeconomics: Concepts, Theories and Policies, McGraw-Hill, New York, 1985
6. Eugene Diulio, Theory and Problems of Macro Economics, Schaum's Outline Series, Mc Graw Hill Publishing Company, Singapore
7. Friedman, M, Studies in the Quantity Theory of Money, The University of Chicago Press, Chicago
8. Gordon R. and S.G. Harris, Macro Economics, Addison Wesley, Massachusetts
9. Keynes, J. M, The General Theory of Employment, Interest and Money, Macmillan, London, 1961
10. Mankiw N. G, Macro Economics
11. Piston, M. H, Theory of Macroeconomic Policy, Philip Allen, Oxford, 1974
12. Prachowney, Martin F. J, The Goals of Macroeconomic Policy, Routledge, London, 1994
13. Richard T Froyen, Macro Economics; Theory and Policy, Macmillan Publishing Co., New York, 1990
14. Rosalind Levacic and Alexander Rebmann, Macro Economics: An Introduction to Keynesian-Neoclassical Controversies, The Macmillan Press Ltd, London
15. Rudiger Dornbusch, Stanley Fischer and Richard Startz, Macro Economics, Tata Mc Graw Hill Publishing Company Ltd, New Delhi, 1998
16. Salvatore, D, International Economics, Macmillan, New York, 1990

17. Shapiro, E, Macroeconomic Analysis, Galgotia Publications, New Delhi, 1994

18. Sodersten, B, International Economics, Macmillan, New York,

19. Snowdown B, H.R Vane and F. Wynarczyk, A Modern Guide to Macro Economics: An introduction to competing schools of thought

20. Y. P. Venieries and F. D. Sebold, Macro Economic Models and Policy

21. Andrew B. Abel, Ben S Bernale, Decn Croushore: *Macro Economics*, Pearson, New delhi, 2014

ECO2C07

DEVELOPMENT ISSUES OF INDIAN ECONOMY

(WITH SPECIAL REFERENCE TO KERALA)-II

Module 1

Sector wise analysis – Agriculture

Trends in production, productivity and cropping pattern – Public investment in Indian agriculture-Irrigation status-supply chain management problem- food inflation and food security issues- land bifurcation- debate on GM crops- WTO and Indian agriculture- Sustainable farming- New Agricultural policy-objectives and strategies-ever green revolution- availability of credit for agriculture.

Module II

Industry and Infrastructure

Impact of reforms on production and productivity- Inter-state disparities- FDI and industrial performance- Status of SEZs- Industrial growth and environment- Status of industrial labour - Infrastructure and economic development-Infrastructure strategy of Twelfth FYP- Global energy crisis- Role of IT sector- Review of transport and communication services- Public investment in Infrastructure.

Module III

India and Global Economy

India's role in global economy- Share in global trade and capital flows - BoP position – dependence on capital inflows- FDI and FPI- Impact of global economic crisis-WTO and Indian economy- Regional and other trade blocks- SAARC, BRICS, RICS, IBSA and G20 -India as an emerging global economic power.

Module IV

Kerala Economy

Land use and cropping pattern- food crisis- entrepreneurship and industrial development- government initiatives-dynamics of labour market- Immigration- Fiscal management in Kerala- Status of decentralization- Tourism industry- E-governance initiatives- WTO and Kerala- Trends in export and foreign remittances.

References

18. A P Thirlwall: Growth and Development, 6th Edition Macmillan Press Ltd., 1999
19. Jean Dreze, AmartyaSen: An Uncertain Glory : India and its Contradictions,Penguin Publishers,2013.
20. **Bhagavathi, Jagadish and Arvind Pangaria**Why Growth Matters: How Economic Growth in India Reduced Poverty and the Lessons for Other Developing Countries, 2013
21. Vijay Joshi & IMD Little: India's Economic Reforms; OUP, New Delhi,1991-2001
22. Nayyar Deepak, Liberalization And Development: Collected Essays, OUP, 2008.
23. Uma Kapila : Two Decades of Economic Reforms in India: Towards Faster, Sustainable and More Inclusive Growth, 3rd edition, Academic Foundation, New Delhi, 2013
24. RuddarDutt& KPM Sundaram: Indian Economy; S Chand & Co. Ltd., New Delhi, 2013
25. Basu, Kaushik, ed, India's emerging economy, OUP, 2007.
26. Parayil, Govindan (ed), 2000: Kerala: The Development Experience: Reflections On Sustainability And Replicability, Zed Books.
27. Frank, Richard &T.M.ThomasIssac 2000, local democracy and Development: people's plan for decentralized planning in Kerala
28. M A Oommen: Essays on Kerala Economy, Oxford and IBH, 1993
29. B A Prakash: Kerala Economy-Problems and Prospects; Sage Publications, New Delhi,2006

30. P Surendran and N Radhakrishnan,The Kerala Economy; Vrinda Publications, New Delhi, 2009.

31. Misra.Puri:IndianEconomy,Himalaya Publishers,2013.

32. Iswar C Dhingra:Indian Economy; Environment and Policy, Sultan Chand and Sons 2013.

33. Agarwal A N**:** Indian Economy : Problems of Development and Planning, Vikas Publishing house, New Delhi.2013

Database on Indian Economy

10. www.rbi.org

11. www.mospi.nic.in

12. www.indiastat.com

13. www.planningcommission.nic.in

14. www.censusindia.gov.in

15. www.spb.kerala.gov.in

16. www.in.undp.org

17. www.undp.org

18. www.data.worldbank.org

ECO2C08

PUBLIC ECONOMICS-I

Module-1

Theory of Social and Private Goods – social goods and market failure : free rider problem – provision for social goods – models of efficient allocation – mixed goods – theory of public choice

Module-2

Structure and growth of public expenditure – role of public expenditure – criteria for public expenditure – economic effects of public expenditure –theories of public expenditure – – fundamentals of project evaluation – types and measurements of benefits and costs of projects. Trends, issues and growth of public expenditure in India.

Module-3

Public Revenue – types and Sources of revenue :VAT ,CENVAT, GST – theory of optimal taxation – tax incidence under various market structure – measuring of incidence. Tax reforms in India

Module-4

public debt – causes classification – public v/s private debt -redemption of public debt - public debt in India – emerging issues in public debt management -debt burden and future generation – principles of debt management

Module-5

Fiscal policy : classical and modern concept – sound finance and functional finanace - monitary v/s fiscal policy -fiscal crises -indian fiscal policy since 1991 -

References:

Module-1

1. Musgrave & Musgrave, Public Finance in Theory and Practice: Ch. 1, 4 & 5.

2. John.C. Winfrey : Public Finance, Public Choice and The Public Economy - Harper *&*Row Publishers, New York, Part-1,chapters 1-5.

3. Browning, J.M. *&* Browning E.K.- Public Finance *&* the Price System, Macmillan, New York. Chapters 1-5

Module-2

1. Musgrave & Musgrave, Ch. 7 & 9.
2. Sudipto Mundle & Govind Rao : Public Expenditure in India : Trends *&* Issues in Public Finance-Policy lssues for lndia (ed.) Sudipto Mundle.
3. Peacock. A.T. *&* Wiseman.J. : The Growth of Public Expenditure in the U.K. George Allen *&* Unwin Ltd. 1967.
4. Browning, Ch. 4 & 8.

Module-3

1. Dwivedi. D.N: Reading in Indian Public Finance, Wiley Eastern Ltd, New Delhi, 1994.
2. Musgrave & Musgrave, Ch.12-17.
3. Krit S. Parik, Indian Development Report, 1997-2000, OUP.
4. Browning, Ch. 10.

Module-4

1. Sudipto Mundle and Govind Rao.M. Issues in Fiscal Policy in the Indian Economy (ed) by Bimal Jalan.
2. Barman k(1986) ,public debt management in India ,uppal publishing house new Delhi
3. Dwivedi. D.N. : Readings in Indian Public Finance, Ch. 2-3.
4. Standford C. T., The Economics of Public Finance, Pergamon Press, Oxford–Ch.11&12.

Module-5

1. Musgrave & Musgrave, Ch.12-17.
2. Chelliah. R.J. and Associates (NIPFP) Trends & Issues in Indian Federal Finance, chapter, 2-4.
3. Govind Rao. : Indian Fiscal federalism, major issues in Public Finance (ed) by Sudipto Mundle, 1997.
4. Gulathi. I.S. and George. K.K : Essays in federal Financial Relations, Oxford 1611,1988.
5. David Novick, Programme Budgeting, Programme Analysis and the Federal Government, Harvard University Press.
6. Reports of Finance Commission.
7. Reports of State Finance Commission.
8. L J Ahluwalia and IMD little Indias economic reforms and development (Ed) oxford university press new Delhi – 1998

ECO2C09
BASIC ECONOMETRICS

UNIT –I

Meaning, definition and scope of econometrics – types and methodology of econometrics – importance of stochastic assumptions – random variables- functions of random variables.

UNIT -II

Simple linear regression model - Methods of ordinary least squares – assumptions and properties of OLS estimators –Standard errors of least square estimates - test of significance of the parameter estimates – measure of goodness of fit. Regression analysis and analysis of variance - Functional forms of Regression model - the assumptions of randomness of u – the probability distribution of disturbances 'u' – Properties of OLS estimator under the normality assumption.

UNIT-III

Nature of the problem of auto correlation – consequences of auto correlation – Tests and solutions for the case of auto correlation – methods for estimating the auto correlation parameters. Assumption of Non-Multicollinear Regressors – Plausibility of the assumption – Tests for detecting Multicollinearity – Remedial measures. Practical consequences of Multicollinearity – Identification and Multicollinearity. Nature of Heteroscedasticity- OLS estimation in the presence of Heteroscedasticity - Method of Generalised Least Squares (GLS) - Consequences of using OLS in the presence of Heteroscedasticity - Remedial measures.

UNIT – IV

Simultaneous equation models: The Nature of Simultaneous equation models – Simultaneous equation bias – Identification Problem – Rules of Identification – Test of Simultaneity – Test for Erogeneity - Recursive models – ILS – 2SLS.

UNIT -V

Nature of forecasting – econometric approach to forecasting – policy evaluation using an econometric model. Forecasting with a single –equation linear regression model. Testing the difference between a single prediction and realization.

References:

1. William H. Greene "Econometric Analysis," Pearson Education.

2. A.Koutsoyiannis, "Theory of Econometrics: An Introductory Exposition of Econometric Methods", Educational Low-Priced Books Scheme, McMillan Education Ltd.,(1992)..ls2

3. Damodar Gujarathi "Basic Econometrics", Tata MCGraw Hill Ltd,1999.4th ed.

ECO3C10
PUBLIC ECONOMICS -II

Module-1

Changing dimension of public finance – role of government in national economy (allocation ,distribution and stabilization function) - theory of optimal distribution – approaches to distributive justice.

Module-2

Taxation – introduction -features of tax - canons of taxation - types -taxable capacity-tax buoyancy – chelliah committee report -kelkar committee report first and second -recent trends in DTC – incidence of major taxes in India -economic reforms of direct and indirect tax in India -

Module-3

Trends of public expenditure in India – trends in receipts -controlling methods of public expenditure -role of public expenditure in UDC -ERC -major recommendation of expenditure reform commission -issues of subsidies in India and black money

Module-4

Budget : Canons of budget – performance ,programme and zero based budget -difference between classical and modern theories of budget- balanced budget and fiscal policy -budget deficit -highlights of the current year budget

Module-5

Fiscal Federalism: Division of powers and functions – central-state financial relations in India – vertical and horizontal imbalance in inter-governmental transfer in India – modified Gadgil and Pranab mukhrjee Formula – finance commission -local finance – FRBM act

References:

Module-1

1.   Musgrave & Musgrave, Public Finance in Theory and Practice: Ch. 1, 4 & 5.

2.   John.C. Winfrey : Public Finance, Public Choice and The Public Economy - Harper *&*Row Publishers, New York, Part-1,chapters 1-5.

3.   Browning, J.M. *&* Browning E.K.- Public Finance *&* the Price System, Macmillan, New York. Chapters 1-5

Module-2

1. Musgrave & Musgrave, Ch. 7 & 9.

2. Sudipto Mundle & Govind Rao : Public Expenditure in India : Trends *&* Issues in Public Finance-Policy lssues for lndia (ed.) Sudipto Mundle.

3. Peacock. A.T. *&* Wiseman.J. : The Growth of Public Expenditure in the U.K. George Allen *&* Unwin Ltd. 1967.

4. Browning, Ch. 4 & 8.

5. Kelkar, Vijay L and VV Bhanojyi Rao -india development policy imperatives ,Tata MC Graw -Hill publishing co limited ,1996

Module-3

1. Dwivedi. D.N: Reading in Indian Public Finance, Wiley Eastern Ltd, New Delhi, 1994.

2. Musgrave *&* Musgrave, Ch.12-17.

3. Krit S. Parik, Indian Development Report, 1997-2000, OUP.

4. Browning, Ch. 10.

Module-4

1. Sudipto Mundle and Govind Rao.M. Issues in Fiscal Policy in the Indian Economy (ed) by Bimal Jalan.

2. Dwivedi. D.N. : Readings in Indian Public Finance, Ch. 2-3.

3. Standford C. T., The Economics of Public Finance, Pergamon Press, Oxford–Ch.11&12.

4. Buiter, WH; Pri cples of budget and fiscal policy , MIT press (1990)

Module-5

1. Musgrave & Musgrave, Ch.12-17.

2. Chelliah. R.J. and Associates (NIPFP) Trends & Issues in Indian Federal Finance, chapter, 2-4.

3. Govind Rao. : Indian Fiscal federalism, major issues in Public Finance (ed) by Sudipto Mundle, 1997.
4. Gulathi. I.S. and George. K.K : Essays in federal Financial Relations, Oxford 1611,1988.
5. David Novick, Programme Budgeting, Programme Analysis and the Federal Government, Harvard University Press.
6. Reports of Finance Commission.
7. Reports of State Finance Commission.

ECO3C11
INTERNATIONAL ECONOMICS-I

Module-1 (25 hours): Gain from international trade and its measurement - Determinants of Trade: Classical Theories of Trade: Adam Smith and the theory of absolute cost advantage – David Ricardo and the theory of comparative cost advantage – opportunity cost theory – Heckscher-Ohlin theory – factor-price equalization theorem – Stolper-Samuelson theorem – Rybczynski theorem

Module-2 (12 hours): New theories of international trade: Emmanuel's theory of unequal exchange – Posner's imitation gap theory – Donald B. Keesing's theory – Kravis' theory of availability – Krugman's theory – Linder's theory – Product life cycle hypothesis of Louis T. Wells – R & D factor and the structure of commodity trade – Neo-hotelling models

Module-3 (13 hours): Terms of trade: concepts of terms of trade – factors affecting terms of trade – Mill's doctrine – offer curve and equilibrium terms of trade – impact of devaluation on terms of trade – reasons for unfavorable terms of trade of under-developed countries

Module-4 (15 hours): Economic growth and international trade: production effect, consumption effect & combined production and consumption effects of growth – theory of immiserizing growth – Prebisch-Singer model – application to developing countries – effects of growth on terms of trade – trade: an engine of growth – export-led growth and capital flow-induced growth – foreign trade multiplier.

Module-5 (25 hours): Commercial policies of trade: tariffs: types of tariffs – effects of tariffs under partial and general equilibrium perspectives – optimum tariff- tariff and welfare – non-

tariff restrictions – quotas: types and impact – dumping- free trade and protection – trade policy and distortions in domestic markets: distortions in commodity markets and factor markets.

Reference books:
1. Thomas A. Pugel & Peter H. Lindert, *International Economics,* Irwin McGraw-Hill, 2000.
2. Peter B. Kenen, *The International Economy*, Cambridge University Press, 1994.
3. Carbaugh, *International Economics*, Thomson South-Western, 2008.
4. Peter H. Lindert, *International Economics,* Richard D. Irwin.inc., 1995.
5. Chacoliades, *International trade, Theory and Policy,* McGraw Hills, 1978.
6. Kindleberger. C. B., *International Economics*, Taraporewala and Sons, Bombay.
7. Bo Sodersten and Geoffrey Reed, *International Economics*, Macmillan, London, 1994.
8. Deepak Nayyar, *Trade and Industrialization*, Oxford University Press, 1997.
9. Jagadish Bhagwati, *A Stream of Windows: Unsetting Reflections on Trade, Immigration and Democracy*, Oxford University Press, 1999
10. Jagadish Bhagavathi, *Writings on International Economics* (Ed), Balasubramanyam, Oxford University Press.
11. Meier G.M, *International Economics of Development*, Harper and Row, New York, 1968.
12. Meier G.M., *Problems of a World Monetary Policy: Brettonwoods and After*, Macmillan, London.
13. Bardhan. P. K, *Economic Growth, Development and Foreign Trade*, Willet, New York, 1970.
14. Mundell. R. A, *The Appropriate Use of Fiscal and Monetary Policy for International External Stability,* IMF Staff Courses, 1962.
15. Machlup. F, *International Monetary Economics*, George Allen and Unwin, London, 1970.
16. Evan Luard, *The Management of the World Economy*, Macmillan, London, 1983.
17. Agarwal. M. R, *International Institutions and Economic Development of Underdeveloped Countries*, Indian Economic Association.
18. Nagesh Kumar, *Foreign Direct Investment and the WTO*, Oxford University Press.

19. Mithani. D.M., *International Economics,* Himalaya Publishing House, 2002.

20. Mannur. H.G., *International Economics,* Vikas Publishing House Pvt. Ltd, 2000.

21. Dominick Salvatore, *International Economics,* Wiley India Pvt. Ltd, 2004.

22. Francis Cherunilam, International Economics, Tata McGraw Hill Education Pvt. Ltd., 2011.

23. Current articles related to various modules in the referred journals.

24. Krugman Obstafeld: International Economics, Theory and Policy, Pearson, Newdelhi, 2014

ECO3C12
ENVIRONMENTAL ECONOMICS

Module-1

The economy and environment- inter linkages between the economy and environment. Material balance model and the law of thermo dynamics - environmental ethics. Resource taxonomy – economics of natural resources – managing renewable and non renewable resources – common property resources.

Module-2

Economics of sustainable development – key aspects of sustainable development – intergeneration equity and intra generation equity-guideline for sustainable society - indicators of sustainability – Hartwick, Solow approach. Safe minimum standard – Daly's operational principle – Water conservation, rainwater harvesting and watershed management.

Module-3

Climate change and Agriculture development-Climate change issues and sustainable approach- Montreal Protocol and amendments – five principles of economic incentives for tackling international environmental problems – full cost principle, cost effectiveness principle, property right principle, sustainability principle and the information principle- Disaster management-major disasters- floods, earth quakes, cyclones, landslides -mitigation measures.

Module-4

Environment Impact Assessment (EIA)- Environmental planning and management. Accounting for environment- Environment and health. Carbon taxes and carbon emission trading – economic and distribution impacts of carbon taxes – biodiversity - magnitude and levels- value of biodiversity and threats to biodiversity.

Module-5

Regulating pollution – command and control – economic incentives for environmental protection (price, rationing, liability rules, quantity rationing, pollution taxes, tradable pollution permits) cost-benefit Analysis.

References:

1. Tom Tietanberg (2004), Environmental and Natural Resource Economics; Pearson
2. Prakash Vohra & Ragesh Mehta (2007), Environmental Economics; Commonwealth Publishers, New Delhi.
3. Charles D. Kolstad (2000), Environmental Economics; Oxford University Press.
4. Nick Hanley & Collin J. Roberts (2002), Blackwell Publishers Oxford.
5. Nick Hanley, Jagonf, Shogern and Benwhite, Environmental Economics; Macmilian 1997.
6. Saxeena H M (2006), Environmental Studies: Rawat Publications.
7. Misra S P & Pandey S N (2009), Essential environmental Studies; Ane Book Pvt. Ltd.
8. Aravind Kumar (2004), Environment and Health, APH Publishing Co., New Delhi.
9. U. Shankar, Environmental Economics.
10. Russel S Clifford (2001), Applying Economics to Environment; Oxford University Press.
11. Eban S Goodstein (2002)Economics and the environment, John Wiley and Sons

ECO3C13

MATHEMATICAL ECONOMICS

Module – 1 (Theory of Consumer Demand)

Utility: Measurement, constrained maximisation – Derivation of demand functions – Elasticity – measurement – Slutsky equation– Direct and cross effects – Homogeneous and homothetic utility functions – Indirect utility function – Roy's identity – Linear expenditure systems – Constant elasticity models – Market demand – Applications.
(20 hours)

Module –2 (Theory of Production)

Production Function – Producers equilibrium – derivation of input demand functions - Cob-Douglas production function – CES, VES and Translog production function – properties. Cost function: Derivation of cost as a function of output – Duality–Shepherd's lemma – Derivation of supply function – generalized Leontief cost function – Applications. (20 hours)

Module –3 (Theory of Markets)

Monopoly and profit maximization – Price discrimination – Taxation and monopoly – Multiple plant and multiple product monopoly – Revenue maximization monopoly – monopoly in the input market – Cournot – Nash model – Stackelberg model – Sweezy model – Applications. (20 hours)

Module –4 (Optimisation over time)

Basic Concepts – Bond market, market rate of return, discount rate and present values – Multi-period consumption – utility function, budget constraint – consumption plan – investment theory of the firm – multi-period production function – investment opportunities function – investment plan – interest rate determination – investment theory and role of time. (15 hours)

Module –5 (Linear Models)

Linear programming: Primal and dual problem – General linear programme– Complementary slackness theorem – Simplex solution. Input Output Model: Open and closed, static and dynamic Leontief system – Technological viability – Hawkins-Simons conditions for viability. Theory of Games: Two person zero-sum game –Pure and mixed strategy – Saddle point theorem – Applications. (15 hours)

Reference:

1. Allen R.G.D (1956): "Mathematical Economics", Macmillan Co. Ltd.

2. Alpha C. Chiang (1988): "Fundamental Methods of Mathematical Economics", McGraw Hill International Editions.

3. Amitabh Kundu, et. al (1976): "Input Output framework and Economic Analysis", Centre for the study of Regional Development. New Delhi, 1976.

4. Birchanhall C and Grout P (1984), "Mathematics for Modern Economics", Philip Alien. Harness and Noble Books, Oxford.

5. David. F Heithfield and Soren Wibe (1987): "Introduction to Cost and Production Functions", Macmillan Education Ltd.

6. Eugene Silberberg (1990): "The Structure of Economics: A Mathematical Analysis" (2nd ed.), McGraw Hill International Ltd.

7. J.M Henderson and R.E Quandt (1980): "Microeconomic Theory a Mathematical Approach", McGraw Hill International Ltd.

8. Krishna K.L (ed.) (1987): "Econometric Applications in India", Oxford University Press, New Delhi.

9. Leontief. W.W. (1971): "The Structure of American Economy", 1919-1939, Vora and Co. Publishers (IM.) Lid. Bombay.

10. Michel D. Intriligator (1980): "Econometric Models, Techniques and Applications", Prentice Hall of India Ltd., Part IV, Ch. 7&8.

ECO4C14

INTERNATIONAL ECONOMICS-II

Module-1 (20 hours): Economic integration – forms of economic integration – customs union – trade creation and trade diversion – partial and general equilibrium analysis of customs union – Lipsey model – Vanek model – gains from customs union – regional integration: SAARC and ASEAN

Module-2 (20 hours): Balance of payments – accounting methods – adjustment theory – exchange depreciation and devaluation – internal and external balance – Swan model – Mundell model – theories of balance of payments – elasticity approach – Marshall-Lerner conditions – the absorption approach – monetary approach.

Module-3 (22 hours): Foreign exchange markets: Functions of foreign exchange markets – transactions in foreign exchange markets – spot and forward exchanges futures, options, swaps and arbitrages – exchange rate systems – theories of foreign exchange rate determination – exchange control – convertibility of currency: current and capital account convertibility – FEMA.

Module-4 (12 hours): International factor movements – international capital flows – classification and influences – multinational corporations – transfer of technology – international migration – international debt.

Module-5 (16 hours): International economic organizations : IMF, IBRD, IFC, ADB, UNCTAD, UNIDO and WTO.

Reference books:

1. Thomas A. Pugel & Peter H. Lindert, *International Economics,* Irwin McGraw-Hill, 2000.

2. Peter B. Kenen, *The International Economy*, Cambridge University Press, 1994.

3. Carbaugh, *International Economics*, Thomson South-Western, 2008.

4. Peter H. Lindert, *International Economics,* Richard D. Irwin.inc., 1995.

5. Chacoliades, *International trade, Theory and Policy,* McGraw Hills, 1978.

6. Kindleberger. C. B., *International Economics*, Taraporewala and Sons, Bombay.

7. Bo Sodersten and Geoffrey Reed, *International Economics*, Macmillan, London, 1994.

8. Deepak Nayyar, *Trade and Industrialization*, Oxford University Press, 1997.

9. Jagadish Bhagwati, *A Stream of Windows: Unsetting Reflections on Trade, Immigration and Democracy*, Oxford University Press, 1999

10. Jagadish Bhagavathi, *Writings on International Economics* (Ed), Balasubramanyam, Oxford University Press.

11. Meier G.M, *International Economics of Development*, Harper and Row, New York, 1968.

12. Meier G.M., *Problems of a World Monetary Policy: Brettonwoods and After*, Macmillan, London.

13. Bardhan. P. K, *Economic Growth, Development and Foreign Trade*, Willet, New York, 1970.

14. Mundell. R. A, *The Appropriate Use of Fiscal and Monetary Policy for International External Stability,* IMF Staff Courses, 1962.

15. Machlup. F, *International Monetary Economics*, George Allen and Unwin, London, 1970.

16. Evan Luard, *The Management of the World Economy*, Macmillan, London, 1983.

17. Agarwal. M. R, *International Institutions and Economic Development of Underdeveloped Countries*, Indian Economic Association.

18. Nagesh Kumar, *Foreign Direct Investment and the WTO*, Oxford University Press.

19. Mithani. D.M., *International Economics,* Himalaya Publishing House, 2002.

20. Mannur. H.G., *International Economics,* Vikas Publishing House Pvt. Ltd, 2000.

21. Dominick Salvatore, *International Economics,* Wiley India Pvt. Ltd, 2004.

22. Francis Cherunilam, International Economics, Tata McGraw Hill Education Pvt. Ltd., 2011.

23. Current articles related to various modules in the referred journals.

ECO4C15

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-2

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

Module-3

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-4

Decision theory: Basic concepts - decision rule - decision making under certainty, under risk, under uncertainty - Harwicz OC 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 x n and M x 2 games - dominance property - reducing the game problem to L.P.P., n-person games (concept only).

Module-5

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

References:

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.

Question Paper Pattern

Question type	No. of questions to be answered	Size of answer	Total pages	Marks per question	Total marks
Objective (multiple choice)	8 (out of 8)	…	…	½	4
Short answer	8 (out of 11)	Not to exceed one page	8	2	16
Short essay	4 (out of 6)	Not to exceed 2½ pages	10	5	20
Essay	2 (out of 4)	Not to exceed 6 pages	12	10	20
Total	22	---	30	…	60

Note: Questions should be asked as far as possible from all modules following a uniform distribution.

DISSERTATION FORMAT

General Guidelines

1. Selection of a Topic
2. Pilot Survey, if needed
3. Significance of the Study
4. Review of Literature
5. Research Gap (Optional)
6. Conceptual Framework – Conceptualization & Operationalization (precise and specific meaning of the terms and concepts)
7. Theoretical framework (Optional)
8. Formulation of Research Questions /Issues
9. Research objectives
10. Hypotheses (Optional)
11. Coverage (Universe/ Sample & period of study)
12. Data source (Primary/Secondary)
13. Tools of analysis (Analytical Framework)
14. Social Relevance of the study
15. Limitations of the study
16. Chapter outlines
17. Introductory chapter
18. Result Chapter(s)

19. Conclusion Chapter

20. Appendices

21. Bibliography /References & Webliography

Structure of the Report

1.1 Title page/ Cover Page

a. Title page

b. Title of the project

c. Name of the candidate

d. Name and designation of the supervisor.

e. Degree for which project is submitted.

f. Name of the College

g. Month and year the project is presented

h. Declaration of the student &supervisor

1.2 Preface

1.3 Table of contents

a. List of Tables

b. List of Figures

c. Glossary

d. List of abbreviations

e. Acknowledgment

1.4 Abstract/ Executive Summary (One page)

1.4. The Main Text

a. Introductory Chapter: Items 3 to 16 mentioned above

b. Other Chapters **-** Analysis, Results Interpretation

c. Conclusion Chapter: Conclusions, Recommendations & Summary

1.5 End Notes (after each Chapter)

1.6 Bibliography or References (at the end of the thesis)

1.7 Appendices

a. Questionnaire

b. Interview Schedule

c. Observation Schedule (optional)

d. Coding Frame (optional)

e. Letters sent to sample members (optional)

f. Any Other

Length of the Project

1. Report length 40 to 50 pages excluding Appendix and Certificates
2. Alignment : Justify
3. Font :Times New roman
4. Font size : 12
5. Line spacing : 1.5
6. No Page Border

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Departmental Requirement

(To be kept in the Department by the Supervisor)

Supervisor- Student Meeting Log

</div>

Date/Time	Discussion Areas	Summary of Discussions	Signature of the Supervisor
	Topic selection		
	Clarify Objectives		
	Literature Review		
	Seminar1 (Sem. 3)		
	Research Design		
	Collect Data		
	Analyze Data		
	Write up		
	Supervisor's Comments		
	Final Draft Seminar 2 (Sem.4)		

Name of the Supervisor:

Name of the Student:

Notes:

1. The dissertation work may be started in the III semester itself for timely completion of the work at the end of the IV Semester.

2. Internal marks may be awarded on the basis of the timely completion of work at each stage and the final internal viva-voce on the topic selected by the candidate

ELECTIVE COURSES
ECO3E01
AGRICULTURAL ECONOMICS

Module – 1

Nature and scope of Agricultural Economics – Role of agriculture in economic development – Theories of agricultural development – Schultz, Mellor, Lewis and Boserup – Inter-relationship between agriculture and industry – Some empirical evidence.

Module – 2

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 since 2000 AD – National Commission on Farmers – Impact of WTO Agreements on Agriculture – Trade liberalization and agricultural exports – Globalization of Indian economy and challenges and prospects of Indian agriculture.

Module – 3

Agricultural Production Economics – Production relationships – Resource use and efficiency – Production function analysis in agriculture – Systems and types of farming – Supply response of crops – Perverse supply response in traditional agriculture – Agricultural subsidies – Rationale for input subsidies in Indian agriculture – Risk and uncertainty in farming – Crop insurance – Futures trading.

Module – 4

Demand and supply of agricultural products – Characteristics of demand and supply – cobweb theorem – Agricultural prices – Behavior of agricultural prices – Stabilization of agricultural prices – Agricultural price policy and food security in India – Agricultural marketing – Present system of agricultural marketing in India – Agricultural credit – Structure and problems of credit in India.

Module – 5

Agricultural performance of Kerala – Trends in agricultural growth – Land reforms – Group farming – Lease land farming – Current problems of the agricultural sector – Shift in cropping pattern – Sustainable agriculture – Total Factor Productivity Growth Rate – Emerging constraints and prospects of agricultural development in the 21st century.

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

3. S. Ghatak & K. Ingersent, Agriculture and Economic Development, New Delhi.

4. W. A. Lewis, "Economic Development with unlimited supplies of labour"

5. Karl Eicher & Lawerence Witt, Agriculture in Economic Development, Vora & Co Publishers Pvt. Limited

6. C. E. Bishop & W. D. Toussiant, Introduction to Agricultural Economic Analysis

7. O. S. Srivastava, Theoretical Issues in Agricultural Economics Allied Publishers Pvt. Ltd.

8. R. N. Soni, Leading Issues in Agricultural Economics, Vishal Publishing Co.

9. R. K. Lekhi, Joginder Singh, Agricultural Economics, Kalyani Publishers

10. R. Desai, Agricultural Economics, Himalaya Publishing House

11. S. A. R. Bilgrami, An Introduction to Agricultural Economics, Himalaya Publishing House

12. Sadhu & Singh, Fundamentals of Agricultural Economics, Himalaya Publishing House

13. B. P. Tyagi, Agricultural Economics and Rural Development, Jai Prakash & Co., Meerut-19.

14. C. A. Robertson, An Introduction to Agricultural Production Economics and Farm Management

15. E.O. Heady, Economics of Agricultural Production and Resource use, Prentice Hall, 1961

16. C. H. Hanumantha Rao, Agricultural Production Function Costs and returns in India, Tata McGraw Hill, 1965

17. P. C. Joshi, Land Reforms in India: Trends and Prospects, Allied Publishers

18. S. S Acharya & D. S. Agarwal, Agricultural Price Analysis and Policy, Oxford & IBH Publishing Co. Ltd

19. A.S. Kalhon & D. S Tyagi, Agricultural Price Policy in India, .Allied Publishers, New Delhi

20.   P. C. Malhothra, Stabilisation of Agricultural Prices in India

21.   Uma Kapila, Understanding the Problems of Indian Economy, Academic Foundation

22.   Uma Kapila, Indian Economy Since Independence, Academic Foundation

23.   M. A. Oommen, Kerala Economy Since Independence, Oxford & IBH Publishing Co.

24.   B.A. Prakash (Ed), Kerala Economy Problems and Prospects, Sage Publications, New Delhi

25.   M. A. Oommen (Ed), Kerala's Development Experience – II, Institute of Social Science, Concept Publishing Co.

26.   B. A. Prakash. (Ed), Kerala's Economic Development, Performance and Problems in the Post Liberalization Period, Sage Publications, New Delhi

27.   G. S. Bhalla, "Globalization & Agricultural Policy in India", Indian Journal of Agricultural Economies, Vol. 5O, No. l, January-March, 1995.

28.   C. H. Hanumantha Rao, "Liberalization of Agriculture in India", Indian Journal of Agricultural Economics, Vol. 50, No. 3, July-September, 1995

29.   D. Rudrappan, "Economic Reforms and Agriculture", Yojana, Vol. 47, No. 11, November, 2003

30.   Dr. P. Bhattacharya & Dr. Krishna Bihan, " Scope of Organic Farming in India" Yojana, Vol. 47, No. 11, November, 2003

31.   C. H. Hanumanha Rao, "WTO and Viability of Indian Agriculture", Economic & Political Weekly, September 8-14, 2001, Vol. XXXVL, 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. 1 l, 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.

ECO3E02

INDUSTRIAL ECONOMICS

Module-1

Meaning, Scope, Need & Significance of the Study of Industrial Economics-Industrial Profile : Private Sector, Large, Medium & Small Scale Industries, Village Industries, Public Sector- Role and Problems of Public Sector Industries-growth of the firms and merger, integration and acquisitions (Marrio, Mursen and Downs, Williamson and Galbraith)

Module-2

Role of Industrialization in Economic Development - Factors for and against industrial development- role of state in industrial development -Theories of industrial location – Weber ,August Losch and Sargent Florence- Factors affecting location.

Module-3

Meaning , Scope and Importance of 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 Financial institutions: IDBI, IFCI, ICICI, SFCs, NIDC, SIDCs, UTI, LIC and GIC.

Module-4

Industrial growth in India: Trends and prospects - Public sector enterprises in India: efficiency, productivity and performance constraints- Performance & Problems of Small Scale & Cottage Industries in India- Industrial sickness and Exit policy - Concept of competitiveness - Nominal protection coefficients (NPC) and effective rate of protection (ERP)- Competition Act, 2002- Pricing policies: Administered pricing and LRMC based tariffs - Industrial location policy in India and regional imbalance - Governments Policy towards Foreign Capital- Role of MNC's in India-Industrial Policies of 1948, 1956, 1977 and1991- Trends in Industrial Growth after 1991.

References:

1. Stephen Martin, Advanced Industrial Economics, Basic Blackwell, 1993. (Module I)
2. Dilip Mookherjee, Indian Industry Policies and Performances, Oxford University Press 1995. (Module- I: Chapter 1, Remaining Chapters For Module IV).

3. Barthwal, R.R, Industrial Economics, Wiley Eastern Ltd., New Delhi, 1985. (Module I : Chapter 3, 8, 16, Module III: Chapter 18)

4. Deepak Nayyar, Trade And Industrialisation, Oxford University Press, New Delhi, 1977. (Module I : Chapter 2, Module IV: Chapter 4, Module III: Chapter 5)

5. Isher Judge Alhuwalia, Industrial Growth In India, Oxford University Press, New Delhi, 1985.

6. Deepak Nayyar, Industrial Growth And Stagnation. Oxford University Press, 1994. (Module IV)

7. Francis Cherunilam, , Industrial Economics : Indian Perspective , Himalaya Publishing House, Mumbai,1994. (Module IV)

8. Desai B: Industrial Economy In India, Himalaya Publishing House, Mumbai, 1999.

9. Divine, P.J, Jones, R.M, Lee, N, and Tyson, W.J., An Introduction To Industrial Economics, George Allen And Unwin Ltd., London, 1974.

10. Sharma, A.K, Industrial Economics, Anmol Publication Pvt Ltd, New Delhi,2006(Module-II)

ECO3E03
DEVELOPMENT OF ECONOMIC IDEAS

Module – 1

Introduction – What is Economic thought – Definitions – Economic thought before Adam Smith: China, India, middle ages, Mercantilism and Cameralism, Major ideas of Mercantilists: Population, Interest, Wages, Production and Taxation – Physiocracy and Physiocratic doctrines: Natural Order, Net Product, circulation of wealth.

Module – 2

The Classical School – Adam Smith: Division of labour, Naturalism and optimism, Economic Liberty, Theory of Value, Theory of Distribution (on wages, profit and 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 and Glut – J B Say: Scope of Political Economy, Law of Market – Jeremy Bentham – J S Mill: Mill's Socialist Programme – Von Thunen: Price, Distribution.

Module – 3

Critics of Classical School – The Nationalist critics: Muller, Fredric List – Historical Critics: William Roscher, Gustav Schmoller – The British School: Waller Bagehot – Socialist Critics: St. Simon, Sismondi, Robert Owen, Charles Fourier, Louis Blanc, Joseph Proudhon – State Socialists: Karl Robertus, Ferdinand Lassasis – Scientific Socialists: Karl Marx – Materialistic Interpretation of History, Dialectical Materialism, Theory of Surplus Value, Theory of Economic Development – Fredric Engels, Karl Kautsky, Rosa Luxemburg, Rudolf Hilferding, Y I Lenin.

Module – 4

Neoclassical School – Subjective School: Karl Menger, Von Wieser, Bohm Bawerk – Marginal revolution: Jevons, Menger, Walras – Mathematical School – Heimann Gossen, 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: money, investment and cycles – Post-Keynesians: Milton Friedman – Economic thought at historical crossroads: rise of mathematics and statistics in economics, public choice, rational expectation, financial instability hypothesis, Epic, recession, financial crisis.

Module – 5

Indian Economic thought – Ancient Economic Thought: Kautilya – Modern Economic Thought: Dadabai Naoroji, M. G. Ranade, Mahatma Gandhi, Ambedkar, Bhagavathi and Amartyasen.

REFERENCES:

1. Eric Roll, *A History of Economic Thought*.
2. L. Hanley, *History of Economic thought.*
3. J. P. Bell, *A History of Economic Thought.*
4. Y. A. Schumpeter, *A History of Economic Analysis*.
5. O.H. Taylor, *A History 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. F. Whittaker, *School And Streams Of Economic Thought*

11.   M. K Gandhi, *Collected works (3 Volumes)*

12.   Karl Marx, *Theory of Surplus value (3 Volumes)*.

13.   Blaug, Mark, *Economic Theory in Retrospect*, Cambridge University Press

14.   Rothbard, Murray. N, *Economic Thought Before Adam Smith (Volume-I and II),* Edward Elgar Publishers

15.   Brue, Stanley L, *The Evolution of Economic Thought*, Dryden Press

16.   Coleman, William Oliver, *Economics and Its Enemies*, MacMillan New York

17.   Rasmus, Jack, *Epic Recession: Prelude to Global Depression*, Pluto Press, London.

ECO3E04

ACCOUNTING TECHNIQUES FOR ECONOMICS

Module-1

Capital Investment – Importance, Types, Difficulties; Capital Budgeting; Need for Accounting; Definition, Functions and Uses of Accounting; Branches of Accounting; Management Accounting Vs Financial Accounting.

Module-2

Capital and Revenue – Classification of Income, Expenditure and Receipts; Accounting Concepts; Accounting Conventions; Accounting Principles; Book- keeping and Accounting; Systems of Book- keeping; Systems of Accounting.

Module-3

Journalising Transactions – Journal, Rules of Debit and Credit, Compound Journal Entry, Opening Entry; Sub-division of Journal – Cash Journal, Petty Cash Book, Purchases Journal, Sales Journal, Sales Return Journal; Ledger Posting and Trial Balance – Ledger, Posting, Relationship between Journal and Ledger, Rules of Posting, Trial Balance, Voucher System.

Module-4

Matching Concepts – Components and Problems in Matching; Final Accounts – Trading Account, Profit and Loss Account, Manufacturing Account, Balance Sheet, Adjustment Entries,

Work sheet; Rectification of Errors – Classification of Errors, Location of Errors, Suspense Accounting, Rectifying Accounting Entries.

Module-5

Financial Statement – Meaning, Types, Nature and Limitations; Steps in Financial Statement Analysis – Ratio Analysis; Funds Flow Statement – Meaning, Uses and Preparation; Cash Flow Statement – Meaning, Uses, Preparation and Limitations; Sources of Cash; Funds Flow Analysis Vs Cash Flow Analysis.

References:

1. Prasanna Chandra, Projects: Planning, Analysis, Selection, Financing, Implementation and Review, 6th edition, Tata Mc Graw-Hill Publishing Co. Ltd, New Delhi - 2006

2. S. N. Maheshwari & S. K. Maheshwari, A Text Book of Accounting For Management, Vikas Publishing House, New Delhi

3. S. N. Maheshwari & S. K. Maheshwari, Corporate Accounting, Vikas Publishing House, New Delhi

4. I. M. Pandey, Financial Management, Vikas Publishing House, New Delhi

5. H. R. Machiraju, Indian Financial System, Vikas Publishing House, New Delhi

6. S. N. Maheshwari & S. K. Maheshwari, Advanced Accountancy, Vikas Publishing House, New Delhi

7. P. C. Tulsian, Accountancy for CA-PCC/ IPCC, S. Chand & Com., New Delhi

8. Harry. I. Wolk, James L. Dodd, et.al, Accounting Theory, Sage Publishers, New Delhi

9. http://en.wikibooks.org/wiki/Accountancy

ECO3E05

ECONOMICS OF EDUCATION

Module-1

Concept of Human Capital - New Development paradigm - The Missing people in development planning- The Human development paradigm - Human development index – A frame work for sustainable development.

Module-2

Education and Economic development - The contribution of education to economic growth - The opportunity cost of educational investment -- Criteria for evaluating investment projects - The rate of return to investment in education - The link between education and productivity - Brain drain - Globalization and education development.

Module-3

Analysis of demand for manpower - The concept of manpower requirements - Methods of forecasting - The Private demand for education.

Module-4

Financing education investment - Arguments for public subsidy of education - Effects of public subsidy and equity and efficiency - Cost recovery in education – Regional inequality in human capital formation - Economics of discrimination in the labour market.

Module-5

Review of the state of education in Kerala - Educational Financing - The role of state in education system -- New educational system - Employment and unemployment -Educated unemployment in Kerala.

References:

1. Mahbub Ul haq, Reflections of Human Development, Oxford University Press, New Delhi, 1999 (Module I)
2. George Pascharopoulos, Education for Development, Oxford University, New York, 1985 (Module II. Ill, IV - Chapters 2 to 7)
3. J.D.G Tilak. The Economics of Inequality in Education, Sage. New Delhi. 1987 (Module V)
4. Ashok Mitra, Report of the Kerala Education Commission, Kerala Shastra Sahitya Parishath, 1999 (Module V)
5. E.T Mathew. Employment and Unemployment in Kerala Sage, New Delhi, 1997 (Module V)

6. *Binod Khadria. The Migrat ion of Knowledge Workers. Sage. Publications, New Delhi, 1999 (Module II Chapter 2).*

7. K.K George. Limits to Kerala Model, Centre for Development Studies, Trivandrum (Module -- V)

8. Alvin Prakash, Kerala's Economy, Sage Publishers, New Delhi, 1994.

9. Alvin Prakash, Kerala's Economic Development: Issues and Problems. Sage Publishers, New Delhi, 1999 (Module V)

ECO4E06

PROJECT ANALYSIS

Modeule I

Phases and Objectives of Capital Budgeting- Generation and screening of project ideas-Concepts, Scope and Uses of Project Evaluation- Project Evaluation and Project Cycles- Market analysis, Demand Analysis and Situational analysis-Project appraisal-Technical Appraisal, Commercial Appraisal, Economic appraisal, Financial appraisal and Management Appraisal of Projects-Government projects and Social Projects- Appraisal Criteria

Module II

Special decision Situation-Cost of Project-Components of Capital Cost of a Project-Analysis of Project Risk-Types of Risk-Firm Risk and Market Risk-Techniques of Risk Analysis-Measurement of Risk-Empirical Testing

Module III

Social Cost Benefit Analysis (SCBC)- Classes of Project Costs and Benefits- Indicators of Cost Benefit Comparison- Traditional Cost Benefit Analysis(CBA)- Valuation of unmarketable items-Effects of Induced price changes- UNIDO approach- SCBA by financial institutions, Project Financing in India-Project Appraisal by banks and financial institutions-Environmental Appraisal of Projects

Module IV

Project management: Organization, Planning, control-Human aspects and pre-requisites-Financing Infra structure Projects: Concepts, rational and financial instruments- public finance for infrastructure projects-BOOT/BOT system for infrastructure projects- Approaches for infrastructure, PPP model- Mix of Government support and regulation

Module V

Project Evaluation and Audit- Sources of financing, role of institutions in project financing-project evaluation- use of NPV, PI, IRR, BCR, NBCR- Value added method-Sensitivity and risk analysis-Integrative frame work of project evaluation-Project cost overruns and cost control-Phases of post audit-types of post audit

References:

1. Chandra, Prasanna, Projects, Planning analysis, Selection, Implementation and Review, Tata Me Graw Hill, New Delhi, 2002

2. Bhavesh, M. Patel, Project Management, Vikas Publishing House, New Delhi

3. Machiraju, H.R, Project Finance, Vikas Publishing House, New Delhi

4. Rao, P.C.K, Project Management and Control, Sulktan Chand & Sons, New Delhi

5. Gido & Clemens, Successful Project Management, Prentice Hall of India, New Delhi, 2008

6. Sang Mend-Rang, 1999, Project Evaluation: Techniques and Practicals for Developing Countries, Avebury and Aldershot

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ECO4E07

POPULATION STUDIES

</div>

Module-1

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-2

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-3

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-4

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

Module-5

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

References:

Module-1

1. K.C Sacaria and S Irudyarajan. 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.

Module-2

1. Colin Nuewcll, Methods and Models in Demography, Belhaven Press, London, 1998.

2. Manar Chaffers, Mohan Munasingha and Rabin Ganguly, Environment and Health in Developing Countries. A.P.II Publishing Corporations, 1998.

3. K.C Sacaria and S Irudyarajan, Kerala's Demographic transition - Determinants and consequences. Sage Publications, 1997

Module-3

1. Colin Nuewell, Methods and Models in Demography, Belhaven Press, London, 1988

2. Peter R Cox, Demography, Universal Book Stall, New Delhi, 1989.

3. Economic and Political Weekly, 1990.

4. P.G.K Panikar and C.R Soman, Health Status of Kerala, Centre for Development studies, Trivandrum. 1985,

Module-4

1. Demeny and Geoffrey Menicoll, Population and Development, Earth Scan Publications, 1998.

2. K.D Gaur. Management of Poverty Alleviation in India, Manak Publications, 1998.

3. Prasad P.K. Populations Planning, Policy and Programme, Deep and Deep Publications, New Delhi, 1990.

4. Peter R Cox., Demography, Universal Book Stall, New Delhi, 1989.

Module-5

1. Manas Chatterll, Mohan Munasingha and Robin Ganguly, Environment and Health in Developing Countries, A.P.II Publication. 1998.

2. Demeny and Geoffrey Menicoll. Population and Development, Earth Scan Publication, 1998

3. K.D Gaur, Management of Poverty Alleviation in India, Manak Publications, 1998.

ECO4E08

BUSINESS ECONOMICS

Unit I: Introduction to Business Economics

Nature and scope of Business Economics – Economic theory and Business Economics – **Basic Economic tools in business economics:** Opportunity cost principle, Incremental principle, Principle of time perspective, Discounting principle and Equi-marginal principle – Gaps between theory of the firm and business economics - Role of a business economist – Responsibilities of a business economist.

Unit II: Demand Analysis and Forecasting

Demand determinants: Price and demand, Income and demand, Prices of related goods and demand and Advertising and demand - **Demand distinctions:** Producers' goods and consumers' goods, durable goods and non-durable goods, derived demand and autonomous demand, industry demand and company demand – distinctive types of elasticity – **Methods of demand forecasting:** Survey of buyers' intentions, Delphi method, Expert opinion, Naïve models, smoothing techniques, controlled experiments and judgmental approach.

Unit III: Cost Analysis

Cost concepts, classifications and determinants: cost data for business decisions, cost concepts and classifications, cost relationships and cost determinants. – **Cost-output relationship**: cost-output relationship in the short and long run – cost functions – Stigler's survivorship technique. – **Economies and Diseconomies of scale**: Sargant Florence and Economies of scale, Economies and diseconomies of scale and empirical evidence, Economies of scope – **cost control and cost reduction:** Cost control and cost reduction - Factors hampering cost control in India.

Unit IV: Pricing Policies & Practice:

Pricing policies: Role of cost in pricing, demand factor in pricing, consumer psychology and pricing, reduction & increase in prices. – **Pricing method:** Cost-plus or Full-cost pricing, Pricing for a rate of return, marginal cost pricing, going-rate pricing, customary prices and sealed bid pricing. – **Pricing problems:** pricing over the life cycle of a product, pricing by retailers, resale price maintenance, dual pricing, transfer pricing, pricing policy in the public sector. - **Price discounts:**

distributors' discounts, quantity discounts and cash discounts. – **Product-line coverage and pricing:** concept, need for market research for product addition, product-line pricing.

Unit V: Capital Management

Capital Budgeting: Concept, Need for capital budgeting, nature of capital budgeting problems and determining the size of capital budget. - **Methods of appraising profitability**: Ranking of alternative investments - Pay-back method, Accounting rate of return, Internal rate of return, and NPV index method, other considerations, Role of managerial judgment, Investment decisions in public sector enterprises and Replacement Decisions. – **Risk, probability and investment decisions:** Discounting risk, Sensitivity analysis, Probability theory approach, Certainty equivalent approach and Utility theory approach.

Reference:

1. R.L Varshney and K.L Maheshwari, "Managerial Economics", Eighteenth revised edition, 2004.
2. John Sloman and Mark Sutcliffe, "Economics for Business", Third Edition, 2006.
3. Craig Petersen et.al., "Managerial Economics", 2006.
4. Dominick Salvatore, "Microeconomic theory", third edition, 2000.

ECO4E09
HEALTH ECONOMICS

Module-1: Introduction Why Health Economics? Nature and Scope- Determinants of Health - Health and Development – Issues of Availability, Accessibility, Cost and quality - Health and Environment.

Module-2: Theoretical Foundations in Health Economics Supply and Demand for Health-The Production of Health- The Demand for Health –Health Capital-Grossman Model. Technology of Health Care.

Module-3: Health planning Types – stages and challenges in planning – health inequalities – health financing – and health problem performance – concepts, criteria and measurement – health system organisation models – free market models – social insurance model – national health service model.

Module-4: Externalities and Market Failure Issues of Externalities, Moral hazard and Adverse Selection. Relative Roles of Public and Private Providers - Preventive and Curative Care- Government Intervention in Health Care Markets - Economic Rationale for Government Intervention - Government Failures and Competitive Strategies.

Module-5:Health Care Sector in Developing Countries Health Care Sector in India- Public and Private Care Providers-Factors influencing the growth of private sector in health- Economic Reforms and Health Sector in India - Health Insurance: Issues and Strategies – User Financing: Issues. Health and nutritional deprivation among the marginalized - Health Care Development in Kerala - Is Kerala's Health Care Sector Sustainable? Growing population and health of elderly.

Essential Readings:

1) Holland, Goodman and Stano (2009) The Economics of Health and Health Care, Pearson Education
2) Zweifel, P and Breyer, F (1997) The Health Economics, OUP, Oxford.
3) Turshen, M (1989) The Politics of Health, Zed Books, Ltd. London.
4) Monica Das Gupta,Chen, L.C and Krishnan T. N (1996) Heath , Poverty and Development in India, OUP, New Delhi.
5) John davis (2001) The Social Economics of Health Care, Routledge, London
6) Imrana Quadeer ed. (2003) Public Health and Poverty of Reforms, Sage
7) Lee, Kenneth and Anne Mills ed. (1985) The economics of Health in Developing Countries, OUP, Oxford.
8) Baru, R,V(1998) Private Health Care in India: Social Characteristics and Trends, Sage.
9) Ashokan, A(2009) Perspectives of Health Economics, Serials Publications, New Delhi.
10) Berman Peter (1995), Health Sector Reforms in Developing Countries, Making Health Developments Sustainable, Harvard School of Public Health, Boston.
11) Gangadharan K. (2009), Paradigm Shift in health and Education in India, Serials, New Delhi.
12) Arrow, Kenneth J (1963): Uncertainty and welfare economics of medical care, *American Economic Review,* 53, 941-973.
13) Narayana D (2008): High Health Achievements And Good Access To Health Care At Great Cost: The Emerging Kerala Situation in Haddad et.al (ed): Safeguarding the health

sector in times of macro economic instability: policy lessons for low- and middle-income countries.

14) Wagstaff, Adam (1986), The Demand for Health: A Simplified Grossman Model, *Bulletin of Economic Research,* Vol.38, No.1.

15) Gangadharan K. (2010), Health and Development: The Millennium Perspectives, Rawat Books, New Delhi.

16) Gangadharan K(2012)Nutritional and Health care deprivation An inter caste analysis, Manglam Publication, New Delhi

ECO4E10
TRANSPORT ECONOMICS

Module-1

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

Module-2

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-3

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

Module-4

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

Module-5

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.

Reference:

1. S.K. Srivasthava, The Economics of Transport, Sulthan Chand and Company (Module - I)

2. P.C Stubbs, W.J Tyson and M.Q Daivi, Transport Economics, George Alien and Umvin, Boston, 1986 (Module - II)

3. G.J Bell, D.A Blackledge, P.J Bowen. The Economics and Planning of Transport, Henemann, London, 1983 (Module II, III, IV)

4. Kirth Parik, India Development Report, 1997 and 2000 (Two Reports), Oxford University Press, New Delhi.

ECO4E11

ENERGY ECONOMICS

Module-1

Origin and development of energy and energy sources al the national and global level - Energy parameters - energy constraints

Module-2

Forms s of energy - Availability of each source of energy and its limitations – Indian energy scenario - role of renewable energy — Energy constraints in India — coal, diesel, electricity -• Hydro and Thermal Indian Energy policies.

Module-3

Energy economics Cost analysis — Fixed charges - Capacity charges – Administered prices - Shadow prices - Marginal pricing - Cost plus pricing. Demand and supply analysis - Role of . SEBs in India - Recent Policy changes.

Module-4

Energy tariff - Electricity pricing - Energy productivity - Energy ratios as indices of economic development.

Module-5

Energy for development - Demand for energy - Conventional approach - Paradigm shift - Demand .side management (DSM). Policies of DSM - energy audit theory and practice - Energy and environment - Environmental issues of energy development – Policy alternatives.

Projects:

* Energy audit in any development organization

* Calculation of demand for energy al the micro level

* Inter-industry analysis terms of energy ratios.

References:

Basic Text Books:

1. Robert Hill, Keefee O Phil and Snap Colin. Future of energy Use, Earth Scan Publishers, London. 1993.
2. Goldenberg, AKN Reddy and Others, Energy for a Sustainable World, Wiley Eastern Publishers Bangalore. 1988.
3. Ashok V Desai (ed), Energy Demand Analysis, Management and Conservation, Wiley Eastern Publishers. 1990 (E.R.G) series 12 books. Energy Research Group Series

Supplementary Reading:

1. G.N Pandey, A Text Book on Energy System Engineering. Vikas Publications. 1994.
2. Ministry of Finance, New Delhi, Govt. of India Infrastructure Report, 1997.
3. Raikhy P.S. Energy Consumption in India - Pattern and Determinants, 1990, Deep and Deep Publishers.
4. Tata Energy Research Institute (TERI) Tata Energy Development Directory.(Annual publication) .
5. Mohan Muna Singhe and others (ed), Energy Economics, Demand Management and Conservation.

Journals

1. Energy Policy Butter Worth Publication U.K.
2. Power Line - New Delhi.
3. E.P.W.

ECO4E12
ADVANCED ECONOMETRICS

Module-1: Regression Analysis with Time Series Data – I

Nature of time series data – time series regression models – Finite sample properties of OLS – Functional form, dummy Variables and index numbers – trend and seasonality –Stationality and weakly dependent time series – Asymptotic properties of OLS – Properties of OLS with serially correlated errors – testing and correcting for serial correlation – Differencing and serial correlation – Heteroscedasticity in Time Series Regression.

Module-2 : Time Series Econometrics

Infinite distributed lag models – Koyck and rational distributed lag models – Unit roots –Testing for unit roots – Spurious regression – Cointegration and error correction models –Forecasting.

Module-3 : Simple Panel Data Methods

Pooling independent cross sections across time – Policy analysis with pooled cross sections– two period panel data analysis - Policy analysis with two period panel data – differencing with more than two time periods.

Module-4 : Simultaneous Equation Models

Nature of Simultaneous Equation Models – Simultaneity bias in OLS – identifying and estimating structural equations - Simultaneous equation models with time series. Simultaneous equations models with panel data.

Module-5 : Econometric Project

The nature of empirical project – the model – the data – estimation of the model – writing up an empirical COURSE.

References:

1. Wooldrige, J M (2007): Introductory Econometrics: A Modern Approach, Thomson, Akash Press, New Delhi. Chapters 10, 11,12, 13, 16, 18.

2.Gujarathi, D & Sangeetha (2006): Basic Econometrics, McGraw Hill Book Co.

3. Intriligator, M D (1978): Econometric Models, Techniques and Applications, Prentice

   Hall of India.

4. Green, W H (2003) : Econometric Analysis, Pearson Education.

5. Maddalla, G.S (1986), Econometrics, McGraw Hill Book Co.

ECO4E13

RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS

MODULE 1

Research methodology fundamentals: Meaning of research – 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 – Special features of social research – Approaches in social research.

MODULE 2

Formulation of research problem – identification and operationalization of the problem, survey of literature, development of working hypotheses, preparation of research design, investigation in availability of information, sampling design, error minimization, evaluation of time and cost, collection of information, processing of collected information, hypothesis testing, interpretation and generalization, systematization of findings

MODULE 3

Sampling methods – Random, stratified, multistage, systematic, cluster, quota and judgment samples – Data analysis techniques – Drawing inferences from analysis – writing of report, references and bibliography

MODULE 4

Computer applications – 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 – Using EXCEL/SPSS for computation and estimation-Gretel.

REFERENCES:

Modules 1,2, &3

Goode, W. J and P.F Hatt (1952): "Methods in Social Research", McGraw Hill Book Company, New York.

Kothari C. R (1990): "Research Methodology, Methods and Techniques", Wiley Eastern Ltd. New Delhi.

Wisonsky and Bhadarkar (1992): "Methodology and Techniques of Social Research", Himalaya Publishing House,Bombay

Young, Pauline (1988): "Scientific Social Surveys and Research", Prentice Hall India Pvt. Ltd , New Delhi

Estelle M. Phillips and D. S Pugh (1993): "How to get a Ph. D", UBS Publishers and Distributors Ltd., New Delhi.

Module 4

Sarma KVS (2001): "Statistics Made Simple – Do it yourself on PC" Prentice Hall India Pvt. Ltd , New Delhi.

Walkenbach, John (2005):"Favorite Excel Tips & Tricks", Wiley Publishing Inc.

ECO4E14
ECONOMICS OF GENDER AND DEVELOPMENT

General Objectives:

The main objective of the course is to introduce the students to major concepts used in gender analysis . The course intends to equip the students with broad principles and theories of gender and development . Course would provide students an understanding of the nature of economic role of women ,their contributions, and the challenges they face in the development process. The modules provide understanding of various issues   related to gender development with special emphasis to Indian context .

Module 1: Introduction to Gender studies

Concepts of Gender and Sex –Feminity and Masculinity-importance of women studies – Patrilineal and Matrilineal systems and its relevance to present Indian society- Demography of female population in India-age structure,mortality rates –Inter state variations in sex ratio-causes of declining sex ratio- Measurement of fertility and its control-UNDP's Gender Related Measures.

Module-2 : Women and Labour Markets

Factors affecting female entry in labour markets-supply and demand for female labour in developed and developing countries,particularly in India- Female work participation studies in agriculture,non-agriculture rural activities, informal sector, cottage and small industries, organized industry and service sector- Wage differentials and its determinants- Gender, Education,Skill, Productivity, Efficiency -Impact of technology and modernization on women's work participation – Effects of Globalization and Liberalisation on women .

Module -3: Tools of women Empowerment

women and education- GER ratio in India -Addressing gender inequalities in education-Gender equity in health-Access to nutrition-Women's participation in Decision making -Role of civil society –Role of N.G.O's in empowering women- Gender and Community Economic Development (CED)-Self –Employed Women's Association(SEWA)-Shramshakti-Kudumbashree in Kerala -

Module-4: Social Security and social Protection for Women

Measures for gender well being- Entitlements, ensuring economic independence and risk coverage ,access to credit and insurance market- 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.Boserup, Ester(1970),Earthscan ,U.K,Distributed by Viva Books Pvt.Ltd,New Delhi.(2008)

2.Sen,Suvarna ,(2006),Gender and Development,ICFAI university Press,Hyderabad

3.Dutta,Nandita and,Sumitra Jha(2014),Womenand Rural Development ,Pacific Books Internat.,Delhi

4. Dutta,Nandita and,Sumitra Jha(2014),Women and Agricultural Development ,Pacific Book,New Delhi.

5. Dutta,Nandita and,Sumitra Jha(2014),Women Social Work and Social Welfare ,Pacific Books International,New Delhi.

6. Jitendra Ahirrao(2013), Entreprenuership and Rural Women in India ,New Century Publications,New Delhi.

7.A.Venkateswarlu, et al. (2013) ,Dimensions of Female Sex Ratio.;Interstate Variations in India ,Serials Publications,New Delhi.

8.Desai,N and M.KRaj (1974), Women and Society in India ,SNDT University ,Mumbai

9.Krishna Raj .M, Sudarshan.R.M, and Shariff.A,(1999) ,Gender,Population and Development ,Oxford University Press,New Delhi

10. Seth .M,(2000)Women and Development ;The Indian Experience ,Sage Publications,New Delhi

11.Srinivasa.K, and A.Shroff (1998)India Towards population and Development Goals , OUP,New Delhi

12.Wazir,R,(2000),The Gender gap in Basic Education,;NGO's as change Agents,Sage Publications, Delhi

13.Sen,Amartya.(1990), "More than 100 million women are missing"Newyork Review of books,vol.37,No.20,1990.

14.UNRISD,(2004)"Gender Equality; Striving for Justice in an Unequal World,UNRISD,France ,2004

15.Harilal,K.N.,Kanji,N.,Jeyaranjan,J.,Eapen,M.and Swaminathan,P.Power in Global Value Chain; Implications of cashew nut industry in India ,IIED ,2006

16.ILO,Women and Men in the Informal Economy; A statistical Picture,ILO,2002

17.Govt. of India (1974),Towards equality-Report of the committee on the status of women in India ,Dept of Social Welfare,Ministry of Education and Social Welfare,New Delhi.

18.Govt.of India (2009), Gender Equality and Women Empowerment in India ,National Family Health Survey 2005-06 (NFHS-3),IIPS,Mumbai

19. Various issues of Economic and Political Weekly.(for e.g .John Mary .E.(1996)"Gender and Development in India EPW,31(47),PP 3071-77)

20.Sen,Sujatha ,(2012) Gender studies,Dorling Kindersely(India)Pvt.Ltd,New Delhi.

21.Pal,Manoranjan et .al (Ed)(2011),Health,Nutritional Status and Role of women in India, Oxford University Press, New Delhi.

ECO4E15
MATHEMATICAL ECONOMICS
(for M. A Economics and M.A Development Economics)

Module-1 (Theory of Consumer Demand)

Utility maximisation – derivation of demand functions - Elasticity – measurement - Slutsky equation - Direct and cross effects - Homogeneous and homothetic utility functions - Indirect utility function - Roy's identity - Linear expenditure systems -Constant elasticity models

Module-2 (Theory of Production)

Production Function – Producers equilibrium – derivation of input demand functions - Cob-Douglas production function - CES production function -VES production function – Translog production. Cost function: Derivation of cost as a function of output – Duality - Shepherd's lemma – derivation of supply function – generalized Leontief cost function - Technological progress and production function.

Module-3 (Theory of Markets)

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

Module-4(Linear Models)

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

Input Output Analysis: Open and closed, static and dynamic Leontief system – Technological viability - Hawkins-Simons conditions for viability.

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

Reference:

1. Allen R.G.D (1956), Mathematical Economics, Macmillan Co. Ltd.

2. Birchcnhall C and Grout P (1984), Mathematics for Modern Economics Philip Alien. Harness and Noble Books, Oxford.

3. David. F Heithfield and Soren Wibe (1987), Introduction to Cost and Production Functions. Macmillan Education Ltd..

4. Eugene Silberberg (1990), The Structure of Economics a Mathematical Analysis (Second Edition), Me Graw Hill International Ltd..

5. J.M Henderson and R.E Quandt (1980), Microeconomic Theory a Mathematical Approach. Me Graw Hill International Ltd..

6. Michel D. Intriligator (1980), Econometric Models, Techniques and Applications, Prentice Hall of India Ltd., Part IV, Ch. 7&8.

7. Alpha C. Chiang (1988), Fundamental Methods of Mathematical Economics, McGraw Hill International Editions.

8. Amitabh Kundu, et. Al, Input Output framework and Economic Analysis, Centre for the study of Regional Development. New Delhi, 1976.

9. Leontief. W.W. (1971), The Structure of American Economy 1919-1939, Vora and Co. Publishers (IM.) Lid., Bombay.

10. Krishna K.L (ed.) (1987), Econometric Applications in India, Oxford University Press, New Delhi.

LIST ELECTIVE COURSES

Semester	Course Code	Title of Course
III	ECO3E01	Agricultural Economics
	ECO3E02	Industrial Economics
	ECO3E03	Development of Economic Ideas
	ECO3E04	Accounting Techniques for Economics
	ECO3E05	Economics of Education
IV	ECO4E06	Project Analysis
	ECO4E07	Population Studies
	ECO4E08	Business Economics
	ECO4E09	Health Economics
	ECO4E10	Transport Economics
	ECO4E11	Energy Economics
	ECO4E12	Advanced Econometrics
	ECO4E13	Research Methodology and Computer Application
	ECO4E14	Economics of Gender and Development
	ECO4E15	Mathematical Economics*

*For M. A Economics and M. A Development Economics

ECO1C01 – MICRO ECONOMIC THEORY -I
(CORE COURSE)

Time: 3 Hours   Max. Marks: 60

Instructions:
  1) *Answer* **all questions** *in* **Part-A**. *All questions carry* **equal marks**.
  2) *Answer any* **eight questions** *in* **Part-B**. *Each question carries* **two marks**. *No answer should exceed* **one page**.
  3) *Answer any* **four questions** *in* **Part-C**. *Each question carries* **5 marks**. *No answer should exceed* **two and a half pages**.
  4) *Answer any* **two questions** *in* **Part-D**. *Each question carries* **10 marks**. *No answer should exceed* **six pages**.

Part – A

1. The risk associated with the holding of a portfolio is given by the …….. of the probability distribution of returns.
(a). Standard deviation   (b) Mean   (c) variance   (d) Geometric mean

2. Demand functions expressing the idea that current purchasing decisions are influenced by past behavior of variables, can take the form of …..
(a). Linear expenditure systems   (b) Static demand function
(c) Quantity constrained models   (d) Distributed lag models

3. Diminishing marginal utility of income generally implies …..
(a). Risk-preference (b) Risk-aversion (c) Risk-certainty indifference (d) Uncertainty preference.

4. One of the earliest linear expenditure models was suggested by
(a). Samuelson   (b) Stone   (c) Stigler   (d) Peterson

5. The concept 'market signaling' was first developed by …..
(a). Sidney Alexander   (b) Akerlof   (c) Michael Spence   (d) Robert S. Pindyck

6. When an uninformed party takes actions to induce the informed party to reveal private information, the phenomenon is called
(a). Screening   (b) Moral hazard   (c) Signaling   (d) Induction

7. In linear programming, the unutilized units of a factor of production is described by the term …
(a). Slack variable   (b) Ordinary variable   (c) Structural variable   (d) Null variable

8. Sweezy's kinked demand model explains the following problem which is often found in oligopolistic markets:
(a) Price rigidity   (b) Price flexibility   (c) Output rigidity   (d) Demand 0

(8 x ½ = 4 marks)

Part – B

9. Bring out the meaning of portfolio diversification. Examine its advantages.

10. Examine the attitude of a person towards insurance if, for him, the marginal utility of income increases.

11. Show that for Cobb-Douglas production function, elasticity of substitution is equal to unity.

12. Distinguish between capital-deepening and labour-deepening technical progress.

13. Distinguish between 'balance equations' and 'structural equations' of an input-output model.

14. Explain why the demand curve is indeterminate under conditions of oligopoly.

15. What is 'cartel'?. Discuss the different forms of cartels.

16. Write a short note on 'distributed lag models' of demand.

17. Explain the problem of 'adverse selection' in the context of asymmetric information.

18. Distinguish between risk aversion and risk preference.

19. Briefly explain the Edgeworth's model of oligopoly.   **(8 x 2 = 16 marks)**

Part – C

20. Describe the 'constant elasticity demand function'.

21. Explain 'homogeneous production function'. Under what circumstances will it show constant returns to scale? Give illustration.

22. Briefly explain the direct consistency tests developed by Hicks in his "A Revision of Demand Theory".

23. Bring out the relevance of the expression 'constant elasticity of substitution' with reference to the CES production function.

24. Explain the method of preparing the 'dual' of a primal linear programming maximization problem and give an economic interpretation of the same.

25. Briefly discuss how the rational consumers distribute their consumption over time, in terms of the intertemporal choice model.   **(4 x 5 = 20 marks)**

Part – D

26. Explain the mean-variance approach to portfolio choice under conditions of uncertainty.

27. Formulate and solve a linear programming maximization problem.

28. Explain Cournot's oligopoly model of stable equilibrium.

29. Explain how a consumer maximizes satisfaction from attributes. Also examine whether law of demand operates in the context of the attribute theory.

          (2 x 10 = 20 marks)

ECO1C02
MACRO ECONOMIC THEORY – I

Time: Three Hours   Maximum Marks: 60

Part A
Answer all Questions. Each carries ½ Mark

1. Which of the following shows the irreversibility of consumption function?
     A) Demonstration Effect. B) Haavelmo Problem. C) Consumption Pyramid. D) **Ratchet Effect**.
2. Dorothy Bradley is associated more with ---------- Hypothesis.
     A) Relative Income. B) Permanent Income. C) **Absolute Income**. D) Lifecycle.
3. In Keynesian macroeconomic system money wage is rigid -------------------------
     A) **Downward**. B) Upward. C) Both Upward & Downward. D) Neither Upward nor Downward.
4. The sum of excess demand in each market is identically equal to zero.
     A) Walras' Identity. B) **Says' Identity**. C) Keynesian Identity. D) Classical Identity.
5. The theoretical inference that the balanced budget has multiplier effect.
     A) Fiscal Stabilizer. B) **Haavelmo Effect.** C) Pump Priming. D) Kuznets Puzzle.
6. Which of the following is also called as Keynesian Unemployment?
     A) Frictional. B) Voluntary. C) **Involuntary**. D) Structural
7. Difference between GDP growth rate and interest rate
     A) DDP Gap. B) Markup. C) Fiscal Gap. D) **Domar Gap**.
8. Money has no real effect.
     A) **Neutrality of Money**. B) Monetary Neutrality. C) Dichotomy. D) Wealth Effect.

(8 x ½ = 4 Marks)

Part B
Answer Any Eight Questions. Each carries Two Marks.
9. What is meant by Kuznets Puzzle?
10. What are the differences between Friedman's Quantity Theory of Money and Fisher's Identity?
11. What is meant by monetary base?
12. Briefly explain the Q ratio of Tobin.
13. Explain real balance effect.
14. What is Fooling Theory?
15. What is meant by Secular Decline in MEC?
16. Explain the Accelerator Theory of Investment. Explain how far effective it is to explain the business cycle phenomenon.
17. Explain the fundamental tenets of Fiscalism and Monetarism.
18. What is liquidity trap?
19. What is Tax Multiplier?

(8 x 2 = 16 Marks)

Part C
Answer Any Four Questions. Each carries Five Marks.
20. Why people demand money? Critically analyse the Classical and Keynesian approaches to the demand for money.
21. Briefly explain the Financial Theory of Investment.

22. Explain consumption function. What are the features of Keynesian consumption function?
23. Explain Consumption Puzzle. What is Haavalmo Problem in consumption theory?
24. Explain briefly the Endogenous Money Supply Theory.
25. Explain Baumol's theory of investment.

(4 x 5 = 20 Marks)

Part D
Answer Any Two Questions. Each carries 10 Marks.

26. Explain the alternative approaches to the relative effectiveness of monetary and fiscal policies with the help of ISLM model.
27. Explain with the help algebra and relevant diagrams the Keynesian equilibrium income determination for a three sector economy.
28. Explain the Animal Spirit and volatility of investment in Keynesian economics. Explain the Keynesian view of perfect interest elasticity of speculative demand for money and perfect interest inelasticity of investment.
29. Explain Lifecycle Hypothesis and Permanent Income Hypothesis. Explain their similarities and differences.

(2 x 10 = 20 Marks)

ECO1C03
QUANTITATIVE TECHNIQUES FOR ECONOMIC ANALYSIS

Time: 3 Hours   Total :60
PART – A
*Answer **all** questions*

I
1. Rank of a matrix is defined as
    a) the maximum number of linearly independent columns of a matrix
    b) The order of highest minor
    c) The sum of diagonal elements
    d) the largest column sum
2. A matrix B for which $B^2 = B$ is called
    a) singular   b) Idempotent   c) Identity matrix   d) nilpotent
3. A probability distribution for which mean is greater than variance is
    a) Poisson   b)Binomial   c) Lognormal   d) Pareto
4. Any function of sample values is called
    a) parameter   b) hypothesis   c) statistic   d) None

5. In a Poisson distribution with parameter , $P(X = 0) = P(X = 1)$. The value of   is
    a) 0   b) 1   c) 2   d) 3
6. The standard error is
    a) directly proportional to the sample size
    b) inversely proportional to the sample size
    c) equal to the sample size
    d) None of these

7. An estimator is said to be efficient if it has
    a) Maximum variance   b) Minimum variance
    c) Mean=Variance   d) Mean=Standard deviation

8. Type II error is committed if we
    a) Accept H0 when it is true   b) Reject H0 when it is false
    c) Reject H0 when it is true   d) Accept H0 when it is false

(8 x ½ = 4)

PART- B
Answer any 8 questions.

9.   Find A and B if

$$A + B = \begin{bmatrix} 11 & 7 & 2 \\ 8 & 9 & 2 \end{bmatrix}$$

and

$$A - B = \begin{bmatrix} -3 & 3 & 4 \\ -4 & -1 & -6 \end{bmatrix}$$

10. If

$$A = \begin{bmatrix} 4 & 2 \\ 1 & 1 \end{bmatrix}$$

   i.
find $(A - 2I)(A - 3I)$ where I is the second order identity matrix.

11. Define
  i)Independent events

  ii)Conditional probability.

12. Define binomial distribution in the usual notations.
13. Distinguish between population and sample.
14. Define 't' statistic.
15. Distinguish between an estimator and an estimate.
16. What are the desirable properties of a good estimator?
17. Define level of significance and power of a test.
18. Define test statistic and critical region.
19. Explain the procedure adopted for testing a simple hypothesis against a simple alternative.

(8 x 2 =16)

PART-C
Answer any 4 questions.

20. If

$$A = \begin{bmatrix} 1 & 2 & 3 \\ -1 & 0 & 4 \end{bmatrix}$$

$$B = \begin{bmatrix} 1 & 2 \\ 3 & 0 \\ -2 & 4 \end{bmatrix}$$

$$C = \begin{bmatrix} 2 & 4 \\ -6 & 3 \\ 1 & 5 \end{bmatrix}$$

then verify that A(B + C) = AB + AC.

21. Briefly explain various methods of sampling.

22. Evaluate the determinant

$$\begin{bmatrix} 1 & a & b+c \\ 1 & b & c+a \\ 1 & c & a+b \end{bmatrix}$$

23. A purse contains 2 silver and 4 copper coins. Another purse contains 4 silver and 5 copper coins. If a coin is selected at random from one of the two purses, what is the probability that it is a silver coin?

24. Describe Pareto distribution. Bring out its importance in economic analysis.

25. Suppose a sample of 500 people were interviewed and 200 of them stated that they were in favour of a certain candidate for president. Obtain 95% confidence interval for the population proportion in favour of the said candidate.

(4 x 5 - 20)

PART-D
Answer any two questions.

26. Find the inverse of the matrix.

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

27. A factory has two machines. Past records show that machine I produces 30% of the items of output and machine II produces 70% of the item. Further 5% of the items produced by machine I were defective and only 1% produced by machine II were defective. If a defective item is drawn at random, what is the probability that the defective items were produced by machine I? Which principle was adopted for obtaining the probability?

28. Explain the ^{2} – test for testing the independence of attributes. A certain drug and sugar pills were administered to 164 patients and the data is given below. Test whether the drug is effective or not over the sugar pills.

	Helped	Harmed	No effect
Drugs	50	10	20
Sugar pills	44	12	26

29. Define:
    i)   Uniform distribution   ii)
          Exponential distribution
    Find their moment generating functions and hence find their first raw and second central moments.

(2 x 10 =20)

ECO1C04
DEVELOPMENT ISSUES OF INDIAN ECONOMY WITH SPECIAL REFERENCE TO KERALA-I

Max.Mark – 60   Time- 3 Hrs

Part A (Objective Type Questions.
Write all the **Eigh**t Questions. Each question carries **½** Marks)

1. Share of Industry in India for the year 2012-13
    a. 26%   b) 30%   c) 20%   d) 15%

2. The MRTP Act has been replaced by
   a. FERA Act b) FEMA Act c) Competition Act d) FRBM Act
3. As per the Tendulkar Committee Report, rural poverty rate in 2009 is
   a) 29%   b) 33%   c) 24%   d)19%
4. Public spending on education during post-reform period shows
   a) Substantial reduction   b) near stagnation
   c) Continuous increase   d)   moderate decrease
5. Paradox in Kerala health refers to
   a) high literacy and high incidence of communicable diseases
   b) high life expectancy and high rate of morbidity
   c) high human development and low infant mortality
   d) High percapita consumption and low birth weight
6. The major reason for labour immigration in Kerala is
   a) Higher wage rates   b) shortage of labour for doing manual works
   c) Both a and b   d) None of the above
7. 'Uncertain Glory-India and its Contradictions' was written by
   a) Amartya Sen and Jean Dreze   b) Jagdish Bhagwati and Padma Desai
   c) Jagdish Bhagwati and Pangaria   d) Amartya Sen and Rangarajan
8. As per 2011 Census, the percentage of population above 60 in Kerala was around
   a)14.1%   b)12.6%   c)11.2%   d)9.7%

$8 \times 1/2 = 4$

Part B (Short Answer Type Questions.
Write any **Eigh**t Questions. Each question carries **2** Marks)
9. Define Squared Poverty Gap
10. Explain the concept Demographic Dividend
11. What is meant by Informalisation of Labour?
12. Distinguish between Mortality and Morbidity
13. Explain the trend in under five sex ratio in Kerala
14. What is meant by Second Generation Reforms?
15. Explain the status of gender development in India
16. What are the major problems in Kerala's Higher Education System?
17. What is meant by Inclusive Growth?
18. Explain the major Right Based Approaches in India
19. What is Trickling Down?

$8 \times 2 = 16$

Part C (Short Essay Type Questions.
Write any **Four** Questions. Each question carries **5** Marks)
20. Compare the growth rates of Indian Economy before and after liberalization
21. Briefly evaluate MNREGP
22. Comment on the problem of Ageing in Kerala
23. Analyse the dynamics in labour market of India
24. Critically evaluate Tendulkar Methodology for poverty estimation in India
25. Explain the major trends in Inequality in India

$4 \times 5 = 20$

Part D (Short Answer Type Questions.
Write any **Two** Questions. Each question carries **10** Marks)
26. Critically analyse the debate on Market Vs Planned Economy in the context of economic reforms in India
27. Critically evaluate the human resource management in India in the context of demographic dividend

28. Evaluate poverty eradication programmes after 1991
29. Explain the various strategies adopted for inclusive growth in India

2 x 10 = 20

ECO2C05- MICRO ECONOMIC THEORY -II
(CORE COURSE)

Time: 3 Hours   Max. Marks: 60

Instructions:
1) *Answer **all questions** in **Part-A**. All questions carry **equal marks**.*
2) *Answer any **eight questions** in **Part-B**. Each question carries **two marks**. No answer should exceed **one page**.*
3) *Answer any **four questions** in **Part-C**. Each question carries **5 marks**. No answer should exceed **two and a half pages**.*
4) *Answer any **two questions** in **Part-D**. Each question carries **10 marks**. No answer should exceed **six pages**.*

PART – A

1. In Marris' model of managerial enterprise, the leverage ratio is defined as …..
a) Liquid assets/total assets   b) Value of debts/total assets
c) Total profits/total assets   d) Total assets/liquid assets

2. In terms of the theory of games, the equilibrium solution preferred by the duopolists is called …..
a) Zero-sum point   b) Saddle point   c) Minimax point   d) Maximin point

3. Baumol, in his 'Business Behaviour, Value and Growth', has replaced the traditional marginalist rule by another rule …..
a) P = AVC + GPM   b) MR = MC   c) MR = AR   d) MR = 0

4. The theory of tatonnement is the contribution of …..
a) Arrow   b) Williamson   c) Pareto   d) Walras

5. In Kaldor's theory of income distribution, the APS of the workers (sw) and the APS of the profit earners (sp) are related as ………..
a) sw > sp   b) sp > sw   c) sp = sw   d) sp + 1 = 1 – sw

6. In the limit pricing model of Franco Modigliani, a new entrant is assumed to enter the industry with …..
a) The smallest plant size   b) The largest plant size
c) Sub-optimal plant size   d) Minimum optimal plant size

7. In the Marxian theory, the organic composition of capital is defined as …..
a) The ratio of variable capital to total capital
b) The ratio of constant capital to total capital
c) The ratio of surplus value to variable capital
d) The ratio of variable capital to surplus value

8) Clark-Wicksteed- Walras product exhaustion theorem works …..
a) If the production function shows constant returns to scale
b) If the production function shows increasing returns to scale
c) If the production function shows diminishing returns to scale
d) Irrespective of the nature of the production function.

(8 x ½ = 4 marks)

PART-B

9. Comment on the realism and the usefulness of the profit maximization hypothesis.
10. Explain the mark-up rule of pricing.
11. What is 'product differentiation barrier' to the entry of new firms into an industry?
12. Bring out the essence of the product exhaustion theorem.
13. Distinguish between rent and quasi rent.
14. What is 'elasticity of factor substitution'?
15. Comment on the backward rising input supply curve.
16. Explain the factors responsible for wage differentials in labour market.
17. Discuss the nature of interdependence in an economy.
18. Give an instance to show how detrimental externalities will lead to misallocation of resources.
19. Bring out the essence of the theory of 'second best'.   **(8 x 2 = 16 marks)**

PART- C

20. Bring out briefly the important decision criteria of the Decision Theory.
21. Explain the concept of 'Nash Equilibrium' in Game Theory.
22. Explain how the findings of Hall and Hitch contradicted the basic assumptions underlying the traditional theory of pricing.
23. Briefly explain the limit pricing model of Sylos-Labini.
24. Explain and comment on Marx's labour theory of value.
25. Explain the concept 'macro degree of monopoly' developed by Kalecki.

(4 x 5 = 20 marks)

PART- D

26. Explain briefly Baumol's theory of sales maximization..
27. Explain the process of price determination under oligopoly in terms of Bain's limit pricing theory developed in "Oligopoly and Entry Prevention".
28. Explain how Pasinetti modified the distribution model of Kaldor. Are their conclusions very much different?`
29. Compare and contrast the Pareto optimality criterion, the Kaldor- Hicks criterion and the Scitovsky criterion of social welfare.   **(2 x 10 = 20 marks)**

ECO2C06
MACRO ECONOMIC THEORY – II

Time: Three Hours   Maximum Marks: 60

Part A

Answer all Questions. Each carries ½ Mark

1. The theoretical inference that the balanced budget has multiplier effect.
     B) Fiscal Stabilizer. B) Haavelmo Effect. C) Pump Priming. D) Kuznets Puzzle.
2. Inventor of Rational Expectation Hypothesis.
     A) John Muth. B) Leijonhufvud. C) Clover. D) Edward Prescott.
3. Prediction that a one percentage point increase in the expected inflation rate will raise the nominal interest rate by one percentage point, leaving the real expected interest rate unaffected.
Marshall Effect. B) Fisher Effect. C) Friedman Effect. D) Keynes Effect.

4. New Keynesians have ---------------- the Keynesian price rigidity.
    A) Tightened. B) Relaxed. C) Removed. D) Retained.

5. "The fall in the real interest rate that results when an increase in expected inflation raises the nominal interest rate, lower real money balances and real wealth, and there by reduces consumption and saving"
    A) Mundell-Tobin effect. B) Mundell-Fleming effect. C) Real balance effect. D) Wealth effect.

6. The use 'policy to smooth out the business cycle'
 A) Macroeconomic policy activism. B) Fiscal activism. C) Monetary activism. D) Laissez faire.

7. ---------------- states that a devaluation improves the current account balance if the combined price elasticities of demand for exports and imports are greater than unity.
    A] Ohlin - Lerner condition. B] Mill - Lerner condition. C] Keynes - Lerner condition. D] **Marshall - Lerner condition**

8. Value of Keynesian investment multiplier, k is ----------------- when MPS is equal to 20%.
    A) 8. B) 6. C) **5**. D) 4.

(8 x ½ = 4 Marks)

Part B
Answer Any Eight Questions. Each carries Two Marks.
9. Explain the implications of New Classical macroeconomics.
10. Analyse the phenomenon of inflation and sacrifice ratio.
11. What is meant by Seigniorage?
12. What is Structuralist Hypothesis?
13. What is meant by the Policy Ineffectiveness Proposition (PIP)?
14. Define Keynesian unemployment.
15. What is Laffer Curve?
16. What is Fooling Theory?
17. What is Menu Cost Model?
18. Distinguish between appreciation and depreciation related to exchange rate.
19. What is meant by Hysteresis?

(8 x 2 = 16 Marks)

Part C
Answer Any Four Questions. Each carries Five Marks.
20. Explain the major distinctions between Neo Keynesian and New Classical macroeconomics as far as the methodological framework and conclusions are concerned.
21. Explain how Real Business Cycle Theorists explain cyclical fluctuations in output and employment.
22. What is Natural Rate of unemployment? Explain how Okun's Law concludes on output and unemployment.
23. 'Keynesian macroeconomic model is a Non Walrasian Model'. Analyse.
24. Explain the 'Crowding out' in relation to the Twin Deficits'.
25. Explain how Neo Keynesians prove the existence of Keynesian unemployment.

(4 x 5 = 20 Marks)

Part D
Answer Any Two Questions. Each carries 10 Marks.

26. Explain with the help of Mundell-Fleming model the relative effectiveness of fiscal and monetary policies in an open economy under fixed and flexible exchange rates and imperfect capital mobility.

27. Explain short run Phillips Curve. Analyse how Rational Expectation Hypothesis concludes on U-I Tradeoff.

28. Distinguish between Rational and Adaptive Expectations Hypotheses. Explain Luca's Inter Temporal Substitution model.

29. Explain the Neoclassical labour market equilibrium. Analyse the Keynesian departure from the Neoclassical labour market equilibrium.

(2 x 10 = 20 Marks)

ECO2C07
DEVELOPMENT ISSUES OF INDIAN ECONOMY WITH SPECIAL REFERENCE TO KERALA-II

Max.Mark – 60   Time- 3 Hrs

Part A (Objective Type Questions.
Write all the **Eigh**t Questions. Each question carries **½** Marks)

1. Food grain production in India during the period 2012-13 was
   a) 234mt   b) 268mt   c) 248mt   d) 271mt

2. Which country accounts for highest share of FDI in India
   a) United Kingdom   b) USA   c) Mauritius   d) China

3. The Chairman of Fourth State Finance Commission of Kerala
   a) M.A.Oommen   b Prabhath Patnaik   c) Thomas Isec
        d)K.M.Mani

4. The emerging model for infrastructure development is
   a) Special Purpose Vehicle   b) Public-Private Partnership

   c) Decentralised Plan Model   d)   NGO Participatory Approach

5. India's current account showed a positive balance in
   a) 2011-12   b) 2009-10   c) 2005-06   d) 2007-08

6. The proposed amount for infrastructure development in XII Five Year Plan is
   a) US $ 1 Trillion   b) Us $ 500 Billion
   c) US $ 1 Million   d) US $ 500 Million

7. SEZs were introduced in the year
   a) 2008-09   b) 2005-06   c) 2004-05   d) 2007-08

8. India's forex reserves as on March 31, 2013 was
   a)$ 367 billion b)$ 132 billion c) $ 270 billion   d) $ 34 billion

8 x 1/2 = 4

Part B (Short Answer Type Questions. Write any **Eigh**t Questions. Each question carries **2** Marks)

9.   What is meant by Agreement on Agriculture
10. Explain the term supply chain management
11. What are the main reasons of Food Inflation in India?
12. Elaborate the concept Ever Green Revolution
13. Comment on the status of industrial labour in India
14. Distinguish between FDI and FPI
15 Expalin the government initiatives for developing entrepreneurship in Kerala
16. What are the major trends in foreign remittances in Kerala?
17. Analyse the nature of current account deficit in India

18 Explain why infrastructure is considered as a key sector in India

19. Analyse th land-use pattern in Kerala

<div align="right">8 x 2 = 16</div>

Part C (Short Essay Type Questions. Write any **Four** Questions. Each question carries **5** Marks)

20. Examine food security level of India by considering growth in production and productivity in agriculture

21. Examine the energy crisis in India with a long-run perspective

22. Analyse the reasons for agricultural stagnation in Kerala

23. Critically evaluate the fiscal management in Kerala

24. Compare the merits and demerits of GM crops

25 Comment on the regional imbalance in indusrial development across India

<div align="right">4 x 5 = 20</div>

Part D (Short Answer Type Questions. Write any **Two** Questions. Each question carries **10** Marks)

26. Analyse the performance of industrial and agricultural sector before and after economic reforms

27. Evaluate the success and failures of decentralized planning in Kerala

28. Explain and evaluate the infrastructure strategy of XII Five Year Plan

29 Analyse the features of India as an emerging economic power

<div align="right">2 x 10 = 20</div>

ECO2CO8

PUBLIC ECONOMICS -I

Time: 3 hrs   **Max.marks:60**

PART- A

(Answer all questions –Objective type)

1. Functional finance is associated with the name of

   a. Dalton   b. Mus grave   c. A.P Lerner   d. Keynes

2. Market failure in the provision of social good due to

   a. Excludability   b. Rival consumption   c. Non -excludability   d .None of these

3. The value added tax was first introduced in :

   a. England b. Germany   c. United states   d. France

4. Which one of the following taxes is levied by state

   a. Tax on motor vehicle b. Tax on hotels c. Educational cess d. Tax on wealth

5. Chairman of the indirect taxes enquiry committee

   a. K.N Raj   b. L.K Jha   c. N. K aldor   d. K .N Wanchoo

6. which of the following is a local tax

   a. Turn over tax   b. Advertisement tax . c. Property tax   d. Capital gain tax

7 Grants in aid is suggested by

a. Planning commission b. RBI c. Finance commission d. NDC

8. A public good is

a a good that the public must pay for .b .non-rival in consumption.

c More costly than a private goo d paid for by the government.

(8 x½ = 16)

Section B

(Answer any **Eight** questions; **each** carries 2 marks)

9. Mixed good

10. Debt redemption

11. GST

12. Optional   taxation

13. Functional finance

14. Tax incidences and shifting

15. Distinguish between monetary and fiscal policy

16. Pump priming

17. Median vote theorem

18. Taxable capacity

19. Define externality

(8 x 2 =16)

Answer any four questions; each carries five marks)

20. Explain market failure?

21. Role of public expenditure to the economic development?

22. What are the measurement technique for benefit and cost of a project

23. Evaluate the reasons of growth of public debt in India?

24 Explain the theory of public choice?

25 What are the principles of debt management?

(4 x 5 = 20)

Section D

(Answer any **two** questions; **each** carries 10 marks)

26 Indian fiscal policy since 1991?

27 Trends, issues and growth of public expenditure in India?

28   Explain the tax reforms in India?

29 Discuss the role of finance commissions in the transfer of resources from the union to the states in India?   (2 x 10 = 20)

ECO2C09
BASIC ECONOMETRICS

Time: 3 Hours   Total : 60 Marks

PART – A
*Answer **all** questions*

1.   The econometric model building is based on the relation between dependent and independent variable, which is
   a) Non-stochastic   b) Predictive   c) Stochastic   d) None of these

2.   The term 'regression' was introduced by
   a) Henry Theil   b) Ragnar Frisch
                                                                                                            c) Arthur S. Goldberger   d) Francis galton

3.   The OLS model assumes that $\sum \bar{U}_i^2 = \sum (Y_i - \bar{Y})^2$ is
   a) Maximum   b) Minimum   c) Zero   d) Infinity

4.   The problem of autocorrelation is a feature of
   a) time series data   b) panel data
   c) Cross section data   d) None of these

5.   Under the problem of heteroscedasticity OLS estimates are
   a) BLUE   b) Not BLUE   c) Efficient   d) None of these

6. R^2 is equal to
   a) TSS/ESS   b) ESS/TSS   c)   1-(TSS/ESS)   d) 1-(ESS/TSS)

7.   The model $Y =$ + X_t + X_{t-1} + U_t is known as
   a) Autoregressive model   b) Disturbed lag model
   c) Lag normal model   d)   Dummy variable model

8.   The method used to remove the correlation between Y_{t-1} and the error term in koyck adaptation expectation model is
   a) Weighted least square method   b) Dummy variable model
   c) Instrumental variable model   d) None of these

(8 x ½ = 4)

PART- B
Answer any 8 questions.
9.   What is a stochastic variable? Give one example.
10. Distinguish between time series and cross sectional data.
11. State and explain Gauss Markov theorem.
12. Distinguish between an economic model and econometric model.
13. What is an AR(1) scheme? Explain the meaning of the terms involved in it.
14. What is a dummy varible trap?
15. What are the reasons for lags?
16. Explain Von-Neumann ratio test for autocorrelation.

17. What is the difference between heteroscedasticity and homoscedasticity?
18. What do you mean by auxiliary regression?
19. What are the limitations of econometric model?

(8 x 2 = 16)

PART-C
Answer any 4 questions.
20. Justify the role of random error term in an econometric model.
21. Distinguish between R_2 and adjusted R_2. Show that R^2 is greater than adjusted R^2.
22. What is multicollinearity? What are the consequences of multicollinearity?
23. How will you compare two regressions using the dummy variable approach?
24. What is the role of lags in economics?
25. Explain adaptive expectation models and partial adjustment models.

(4 x 5 =20)

PART-D
Answer any two questions.
Each answer should not exceed six pages.
26. Suppose that from a sample of size n = 20 we estimate the following consumption function

$$\hat{e} = 100 + 0.70Y$$
$$(75.5)\ (0.21)$$

where the figures in brackets are the standard errors of the coefficients $\hat{\alpha}$ = 100 and $\hat{\beta}$ =0.70. Apply a suitable test to test the significance of $\hat{\beta}$.

27. Explain how will you estimate the parameters in a Almon's polynomial distributed lag model.
28. Discuss the problem of autocorrelation in regression analysis, citing how the problem arises, how it is detected and how it is solved.
29. Discuss the role and importance of statistical methods used in econometrics. Give suitable examples.

(2 x 10 = 20)

ECO3C10

PUBLIC ECONOMICS 11

Time: 3 hrs   **Max. Marks: 60**

PART- A

(answer all questions –Objective type)

1. Balanced budget theory was supported by

   a. classicals   b. neo-classicals   c. Keynesians   d. modern economist

2. The general theory of clubs is related to

   a. Lindal   b. Arrow   c. Buchanan   d .Samuelson

3. Who dealt with the optimality problem of local public goods

a. Pareto b. Tiebout c. Wicksell   d. Bowen

4. Which one of the following tax belongs exclusively to the state government of India?

    a. income tax   b. agriculture income tax   c. wealth tax   d. excise duties

5. Which one of the following forms the largest share of deficit in government of India's budget?

    a. fiscal deficit   b. budget deficit c. revenue deficit   c primary deficit

6. Private goods are following the principle of

    a. Non-excludability   b. Non-rivalry . c. Rivalry   d. maximum profit

7. Chairman of the direct taxes enquiry committee

    a. K.N Raj   b. L.K Jha   c. N. K Aldor   d. K .N Wanchoo

8 zero base bud getting

    a. it is against the wastage of public expenditure b. assumes that public expenditure at the time

review is zero   c. demand justification of every item in public expenditure d. all of the above

(8 x ½ = 4)

Section B

(Answer any **Eight** questions; **each** carries 2 marks)

9. Optimal distribution
10. Taxable capacity
11. Federal finance
12. Programme budgeting
13. Budget deficit
14. Neutrality of tax
15. FRBM act
16. Pranab Mukhrge formula
17. Tax buoyancy
18. Black money
19. Horizontal and vertical imbalances

(8 x 2 = 16)

Answer any **Four questions; each carries five marks)**

20 Explain market failure?

21 Role of public expenditure to the economic development?

22. What are the measurement technique for benefit and cost of a project

23. Evaluate the reasons of growth of public debt in India ?

24. Explain the theory of public choice?

25. What are the principles of debt management?

(4 x 5 = 20)

Section D

(Answer any **two** questions; **each** carries 10 marks)

26. Examine the changing dimension of public finance

27. Briefly explain the centre state financial relations in India?

28. Explain the economic reforms of direct and indirect tax in India?

29. Explain centre state financial relations in India?

(2 x 10 = 20)

ECO3C11
INTERNATIONAL ECONOMICS-1

Time: 3 Hours   Max. Marks: 60

Instructions:
1) *Answer **all questions** in **Part-A**. All questions carry **equal marks**.*
2) *Answer any **eight questions** in **Part-B**. Each question carries **two marks**. No answer should exceed **one page**.*
3) *Answer any **four questions** in **Part-C**. Each question carries **5 marks**. No answer should exceed **two and a half pages**.*
4) *Answer any **two questions** in **Part-D**. Each question carries **10 marks**. No answer should exceed **six pages**.*

Part – A

Choose the correct answer:

1. According to Ricardo, a country has a comparative advantage in producing a good if the ……… cost of its production is lower at home than in the other country.
(a). Money   (b). Real   (c). Absolute   (d) Opportunity

2. The Stolper-Samuelson theorem explains ………..
(a) The process of factor price equalization
(b). The effect of tariff on income distribution among factors
(c). The terms of trade effect of growth
(d). The conditions under which devaluation will be successful

3. According to Emmanuel, the main reason for *unequal exchange* between the *centre* and the *periphery* is:
(a).Difference in the productivity of capital (b). Difference in natural resource endowments
(c).Differences in the wage rates   (d). Difference in the interest rates.

4. Gruber and Vernon tried to establish a link between export performance and ………
(a).Research effort   (b).Domestic wage level
(c).International specialization   (d).Trade barriers

5. The Prebisch-Singer hypothesis explains ....
(a). A long-term deterioration in the terms-of-trade of primary products
(b). A long-term deterioration in the terms-of-trade of manufactured goods
(c). Inverse relationship between growth and welfare
(d). The effect of growth on the balance of payments.

6. If the output of the export good has fallen along with an increase in the production of import goods, we have ……… bias in the growth of production.
(a). Ultra-anti-trade   (b). Anti-trade   (c). Pro-trade   (d). Ultra-pro-trade

7. The index number measure of the price of exports relative to the price of imports is known as ………
(a). Gross barter terms of trade   (b) Net barter terms of trade
(c). Income terms of trade   (d). Real cost terms of trade

8. If a tariff is imposed as a flat sum per physical unit of the commodity imported or exported, it is known as ………
(a). Ad-valorem tariff   (b). Specific tariff   (c). Single column tariff   (D). Countervailing tariff

(8 x ½ = 4 marks)

Part-B
9. Bring out briefly the subject matter of international economics.
10. Bring out the advantages of international trade.
11. Explain Keesing's view on the relationship between labour skills and commodity trade.
12. Explain the product life cycle hypothesis of Louis T. Wells.
13. Bring out the essence of the factor price equalization theorem?
14. What is optimum tariff?
15. Bring out the impact of devaluation on terms of trade.
16. Explain the concept of foreign trade multiplier
17. What are the non-tariff restrictions on trade?
18. Advance some arguments in favour of free trade.
19. Explain Mill's doctrine of terms of trade.   **(8 x 2 = 16 marks)**

Part-C
20. Briefly explain the theory of immiserizing growth.
21. Explain briefly the factors influencing the terms of trade of a country.
22. Explain the process of determination of international terms of trade in terms of the offer curve analysis.
23. Explain Haberler's opportunity cost theory of international trade.
24. Explain the process by which factor price equalization takes place because of international trade.
25. Examine how 'factor intensity reversal' invalidates the Heckscher-Ohlin theorem
(4 x 5 = 20 marks)

Part-D
26. The Ricardian theory of international trade is an improvement upon Adam Smith's theory of absolute cost advantage: Discuss.

27. Develop a method for measuring the gain from international trade..
28. Briefly explain the effects of tariffs under partial and general equilibrium perspectives.
29. Discuss the possible distortions in the domestic commodity market consequent upon the adoption of specific trade policies.

(2 x 10 = 20 marks

ECO3C12
ENVIRONMENTAL ECONOMICS

Time: 3 Hours   Total Marks:60

PART -A
Answer all questions
Each question carries ½ mark.

1. The safe minimum standard (SMS) approach developed by ....
a). Robert Solow   b). Daly   c). Cyracy, Waatrup   a). None
2. Ria conference of United Nations On Environment and Development was held in ....
a). 2002   b). 1991   c). 1992   d). 2000
3. 'City Zoning Laws' is an example for ....
a). Exclusive property right   b). Private ownership c). CIR d). None.
4. Pollution resulting from 100 much of emissions of hydrocarbons from auto mobile exhausts is called
a). CO2   b). Photo chemical smog   c). Nitrogen oxide   d). None
5. Refundable deposits methods was developed by
a). Robert, Solow, Edwin Mill   b). Daly   c). Edgeworth d). None
6. The main oponents   of sustainable development are
a). Economic Component   b). Social component c). Environmental Component
d). All of these.
7. Method of conservation of natural resources are,
a). Recycling   b). Product   c). Optimum recycling   d). All
8. 'Tragedy of Commons' is related to
a). Environmental quality   b). Deforestation   c). Environmental pollution
d). None.

(½ x 8 = 4 Marks)

PART B
Answer any eight questions
Each questio carries 2 mark

9   What is acid rain?
10 Define ozone depletion.
11 What is pollution tax?
12 Explain Hart wick-Solow approach to sustainable development
13 Explain thermal pollution.
14 What do you meant by material balance model ?
15 What do you meant by common property resources ?
16 What is Jyoto protocol ?
17 What do you meant by carbon tax ?
18 Define biodiversity.

PART C
Answer any four questions
Each question carries 5 Marks

19 Explain the basic approaches and the evaluative criteria for controlling pollution.
20 Examine the problem of radioactive waste and highlights its dangers.
21 Define the concept of sustainability and analyze the indicators.
22 What are the environmental effects of global warming.
23 Explain the scope of environmental economics ?
24 Explain the five principles for tackling international environmental problems
(5 x 4 = 20 Marks)

ECO3C13
MATHEMATICAL ECONOMICS

TIME: THREE HOURS   TOTAL: 60
PART A
Objective type questions
Answer all questions

1. Utility function (with no constraint) is maximised when the first order derivative of the utility function is:
    (a) Zero   (b) Positive
    (c) Negative   (d) Either positive or negative
2. Marginal rate of technical substitution is the ratio of:
    (a) Price to Marginal products   (b) Marginal Product to price
    (c) Marginal Product to price   (d) Marginal Productivities
3. The function $Q^o = f(K,L)$, where Q^o is fixed output, K and L are variable inputs, represents:
    (a) Isocline   (b) Isoprofit curve
    (c) Isoquant   (d) Engineering curve
4. The slope of the isocost line is the ratio of:
    (a) Quantities   (b) Product prices
    (c) Costs   (d) Input prices

5. When the marginal and average product of labour at a point are respectively $AP_L = 2.5$; $MP_L = 0.5$. The output is -------------- with respect to labour.
    (a) Elastic   (b) Perfectly elastic
    (c) Inelastic   (d) Perfectly inelastic
6. When the area below the demand curve is 20 square units and the area of the rectangle representing consumer's expenditure is 10 square units, consumer's surplus in square units is:
    (a) 2   (b) 200
    (c) 10   (d) 30
7. The demand curve faced by a monopolist is $P = 100 - 2q$. The slope of the Marginal revenue curve is

(a) – 2

(b) – 4

(c) 2

(d) 4

8. Given the cost function $C = 5e^{2Q}$ the elasticity of cost function with respect to output is:

(a) 5/2

(b) 2

(c) 5

(d) 1/5

(8 X ½=4)

PART B

Short Answer questions, Answer any 8 questions

Answer should not exceed 1½ pages each

09. Define own price elasticity of demand. Obtain the own price elasticity from the demand curve $q_1 = p_1^{-0.5} p_2^{0.8}$

10. The indifference curve is defined by $U^o = xy$. Obtain the marginal rate of substitution of x for y.

11. State the Slutsky equation given the utility function $U^o = f(x_1, x_2)$ and the budget constraint $M = p_1 x_1 + p_2 x_2$.

12. Find the average and marginal products of inputs given the production function $q = ax_1 + x_2$ where x_1 and x_2 are variable inputs.

13. Define marginal rate of technical substitution. How is it related to marginal products?

14. Explain the relation ship among price elasticity of demand with marginal revenue and average revenue?

15. Find the equilibrium price from the demand $D = 12 - 3p$ and supply $S = -8 + 2p$ equations.

16. Given the linear expenditure system $P_i X_i = P_i \;_i + \;_i (M - \sum P_i \;_i)$, interpret the each of the components. Where P_i, the price of ith group of good, X_i and M, income.

17. Show that slope of isoquant is negative.

18. The total cost function is $C = 2q^2 + 5q + 18$. Obtain the average cost, average fixed cost and marginal cost.

19. Explain the types of discriminating monopoly.

(8 X 2 =16)

PART C

Short Essay, Answer any 4 questions

Answer should not exceed 2 ½ pages each

20. Define own price and cross price elasticity of demand. Obtain the two elasticity coefficients from the demand function. Interpret the result.

$\log_e q_1 = 0.7 \log_e p_2 - 1.2 \log_e p_1$.

21. Show that the demand curve $q = p_1 \; p_2 \; M$ is homogeneous of degree zero when

$\; + \; + \; = 0$

22. From utility function $u = x_1 x_2$ and the budget constraint $M = p_1 x_1 + p_2 x_2$ express the conditions for equilibrium.

23. Obtain the output elasticity of labour and capital from the production function,

$q = K \; L$ where L is labour and K, capital inputs respectively.

24. Explain how a homogeneous production function is used to know the returns to scale.
25. Specify and explain the CES production function.

(4 X 5 =20)

PART- D

*Long essay – Answer any **two** questions*

*Answer should not exceed **6 pages** each*

26. Derive Slutsky equation. Interpret the result.
27. Derive the input demand functions given the production function

$q = x_1 x_2$ and the cost constraint $C^o = r_1 x_1 + r_2 x_2$.

28. Given the average cost $200 - 5q + 0.02q^2$ and demand function, $p = 200 - 2.5q$

obtain the profit function and the optimal level of output that maximises profit. What is the level of output that minimises average cost?

29. How the price and output are determined by a firm and industry under perfect competition?

(2X 10 =20)

ECO4C14
INTERNATIONAL ECONOMICS-II

Time: 3 Hours   Max. Marks:60

Instructions:

1) *Answer **all questions** in **Part-A**. All questions carry **equal marks**.*
2) *Answer any **eight questions** in **Part-B**. Each question carries **two marks**. No answer should exceed **one page**.*
3) *Answer any **four questions** in **Part-C**. Each question carries **5 marks**. No answer should exceed **two and a half pages**.*
4) *Answer any **two questions** in **Part-D**. Each question carries **10 marks**. No answer should exceed **six pages**.*

Part –A

Choose the correct answer:

1. A rise in currency's par value is:

    a)Hedging   b) Currency Swaps   c) Devaluation   d) Appreciation

2. Investments in shares and government stocks are :

    a) Portfolio investment   b) Private investment   c) Direct investment   d) All the above

3. A devaluation of domestic currency initially worsening the BOP and then improving is shown by

    a)Monetary approach to BOP

    b)Marshall Lerner conditions

    c) Absorption approach to devaluation

    d)J curve effect

4. Indian Rupee is convertible on

    a) Capital account   b) Current account   c) Both capital and current   d) None of these

5. Covering the risk of exchange rate fluctuation is
   a) Hedging   b) Speculation   c) Arbitrage   d) None of the above
6. The international unit of account in which official accounts of IMF are kept
   a) Gold   b) Dollar   c) SDRs   d) Yen
7. The absorption approach to BOP is firstly developed by
   a) Mundell   b) Friedman   c) Alexander   d) Smith
8. The highest form of economic integration
   a) Customs union   b) Economic Union   c) Common market   d) None of
   these

   (1/2 ×8= 4 marks)

Part- B

Answer **any eight** questions. Each question carries two marks.
9. Distinguish between nominal and real exchange rate.
10. What are the functions of foreign exchange market?
11. Write a note on FEMA.
12. Distinguish between current and capital account.
13. Explain the significance of regional trade associations.
14. What is customs union?
15. What are the objectives of exchange control?
16. Distinguish between depreciation and devaluation.
17. What are the important forms of economic integration?
18. Explain the concept of transfer pricing.
19. State the effects of international capital flows on developing economies.   (8×2=
    16 marks)

Part- C

Answer **any four** questions. Each question carries five marks.
20. Explain the monetary approach to balance of payments.
21. Critically evaluate the purchasing power parity theory.
22. Explain the role of IMF in attaining international liquidity.
23. Explain the cases for and against flexible exchange rate system.
24. Explain the role of MNCs in developing countries.
25. How can internal and external balance be achieved through monetary and fiscal
    policy mix?
                                                                      (4×5=
    20marks)

Part-D

Answer **any two** questions. Each question carries ten marks.
26. Explain the elasticity and absorption approaches to balance of payment problems.
27. Evaluate the role WTO in promoting trade between countries.
28. Discuss the role of foreign capital in developing countries.
29. Critically evaluate the partial and general equilibrium effects of customs union.

(2×10=20marks)

ECO4C15
OPERATIONS RESEARCH FOR ECONOMIC ANALYSIS

Time: 3 Hours   Max. Marks: 60

Part – A

*Answer **all questions** in **Part-A**. All questions carry **equal marks***

1. The term OR was first coined by
(a). Fisher   (b) Walras   (c) Keynes   (d) Mcklovey and Trefthen

2. The criterion for realism was developed by
(a). Hurwicz   (b) Taylor
(c) Waldian   (d) None of these

3. Value of the game is Zero is called
(a). Fair game (b) Zero sum game (c) N person game (d) None of these

4. Optimum transportation problem can be solved by
(a). NWC rule   (b) MODI method   (c) Lowest cost entry method (d) None of these

5. The activity which has no time and resources is called…………

(a). Dummy activity (b) Critical activity   (c) Predecessor activity   (d) None of these

6. The method of decision taking under risk is

(a). EMV   (b) Maximax   (c) Mini max   (d) None of these

7. The area which satisfies all the constraints in a LPP is called
(a). Critical region   (b) Optimum region   (c) Feasible region   (d) None of these

8. In an assignment problem, number of rows not equal to number of columns
(a) Balanced   (b) Unbalanced   (c) Maximised   (d) None of these

(8 x ½ = 4 marks)

Part – B
*Answer any **eight questions** in **Part-B**. Each question carries **two marks**.*

9. What do you mean by decision rule?

10. Explain Non linear programming

11. What do you mean by duality

12. Explain North West corner solution

13. Solve the following assignment problem

JOBS

		A	B	C	D
PERSONS	I	10	12	25	30
	II	20	30	40	50
	II	10	15	20	25

14. Explain the scope of OR

15. Find the saddle point and value of the game

Player A

	B1	B2
A1	40	50
A2	20	25

Player B

16. What do you mean by constrained maximisation

17. Explain the rules of network construction

18. Distinguish between zero sum and non zero sum game

19. Explain EMV and EOL   **(8 x 2 = 16 marks)**

Part – C

*Answer any **four questions** in **Part-C**. Each question carries **5 marks**.*

20. Solve the LPP graphically

Min Z = 2x + 3y

Subject to   x + 3y   90

5x + y   100

3x + 2y   120

x   0, y   0

21. Explain the methodology of OR

22. Distinguish between transportation and assignment problem

23. Bring explain PERT analysis

24. Explain different decision making situations

25. Briefly discuss about Kuhn- Tucker condition   **(4 x 5 = 20 marks)**

Part – D

*Answer any **two questions** in **Part-D**. Each question carries **10 marks**.*

26. Explain the nature, importance and limitations of OR

27. What are the methods of mixed strategy game problems?

28. Solve the LPP by using simplex method

Max Z = 5x + 2y

Subject to   2x + 4y   10

5x + 10y   8

x   0, y   0

29. Solve the following network technique problem by using CPM method

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

  a) Draw network diagram
  b) Calculate EST, LST, EFT, LFT
  c) Calculate TE and TL values
  d) Find critical path and project duration

(2 x 10 = 20 marks)

ECO3E01
AGRICULTURAL ECONOMICS

Time: 3 Hours   Total
Marks: 60

Part A
*Answer **all** questions*
1. Food grains in India are canalized by
      (a) ONGC (b) FCI (c) OIL (d) MMTC
2. In Primary sector ....is the prominent feature
      (a) Disguised unemployment (b) educated unemployment (c) depressed unemployment (d) none of these
3. "Kuttanad packages" is very well related to the name of
       (a) K N Raj (b) V Kurien (c) A K Sen (d) M S Swaminathan
4. TFPGR in Kerala is
          (a) Increasing (b) stagnant (c) zero (d) positive
5. In the Dual economy model economic system consists of:
       (a) Primary and secondary
       (b) Traditional and modern
       (c) Agricultural and industrial
       (d) Backward and downward
6. Nerlovian model relates to:
   (a) Supply response   (b) supply demand gap

   (c) Demand projections   (d) sustainable development
7. One method of adjustment to uncertainty is:
   (a) Crop management   (b) crop insurance
   (c) Crop farming   (d) crop control
8. Hanumantha Rao committee recommended:
   (a) Fair price   (b) minimum price
                                            (c) support price
       (d) Protective price

(08 x 1/2 = 04 Marks)
Part B
*Answer any **eight** questions.*
Each answer should not exceed one page.
9. Explain the role of agriculture in the economic development of a country?

10. How agriculture is linked to the industrial sector of Indian economy?
11. What is the meaning of supply response of crops?
12. What are the issues of agricultural marketing in India today?
13. Explain the role of bio-technology in the Indian agriculture?
14. Explain the nature of cropping pattern in Kerala in the last few decades?
15. Define Cobb-web theorem?
16. State how the new economic policy of 1991 affects Indian agriculture?
17. What do you mean by future trading in agriculture?
18. What are the objectives of twelfth five year plan on Indian agriculture?
19. Make a note on organic farming?   (8 × 2 = 16 Marks)

Part C
*Answer any **four** questions.*
Each answer should not exceed two and half a pages.
20. Briefly explain the problems of agricultural finance in India?
21. Explain the agricultural production function in economics?
22. Prepare a note on TFPG Rate of Kerala agriculture?
23. Explain the nature and importance of technology in Indian agriculture?
24. What is "group farming"? Is it relevant in the Kerala agriculture?
25. Explain the rationale for input subsidies in India?
                                                        (4 × 5 = 20
Marks)
Part D
*Answer any **two** questions.*
Each answer should not exceed six pages.
26. Briefly explain the risk and uncertainty involved in Indian farming. What are the measures taken by the government to avoid risk and uncertainty?
27 What do you mean by "sustainable agriculture"? Explain the challenges of agricultural sustainability in Kerala?
28. Explain the challenges and prospects of Indian agriculture since liberalization and globalization of the economy?
29. What is agricultural finance? Briefly explain the important features of the structure and problems of agricultural finance in India?   (2 × 10 = 20 Marks)

ECO3E02
INDUSTRIAL ECONOMICS
Model Question Paper
PART A
Answer all questions. Each question carries half mark. Choose the most appropriate answer from the following.
   1. Who introduced the Central Place Theory?
       a. Christaller b. Losch   c. Greenhut   d. S. Florence
   2. The author of the book, 'The Theory of the growth of the firm' is
       a. E. Penrose   b. J.Dowine   c. R. Marris   d. G.T. Renner
   3. Mergers are carried out for
       a. Diversification   b. Integration c. Market dominance d. None of these
   4. Which variable is not considered in measuring the size of a firm or plant?
       a. Employment   b. Profits   c. Sales   d. Assets
   5. The MRTP Act was enacted in

a. 1969   b. 1956   c. 1961   d. 1966
6. FERA was replaced with FEMA in the year
   a. 1991   b. 2000   c. 1999d.2008
7. A private sector business organization owned and controlled by a single individual is called
   a. State owned enterprise   b. Corporate firm   c. Sole proprietorship d. None of the above
8. Industrial Finance Corporation of India was established in
          a. 1948   b. 1993   c. 1951d. 2001
                              (8 X 0.5 = 4)
PART B
Very short Answers. (any 8)
9. What is industrial stagnation?
10. What is the significance of industrial location
11. Define Effective Rate of Protection
12. What is meant by 'Vertical Integration'?
13. Differentiate between small scale industries and village industries.
14. Explain Central Place Theory.
15. What do you mean by disinvestment?
16. What is the role of National Manufacturing Competitiveness Council?
17. Explain the major principles which guided the framing of New Industrial Policy 1991.
18. How can foreign nationals invest in India?
19. Distinguish between merger and acquisition.
                              (8 X 2 = 16)
PART C
Short Essay (Any 4)
20. Explain Galbraith`s approach to Growth of firms.
21. Explain the role of state in industrial development
22. Examine the causes of industrial sickness.
23. Write a note on problems of small and medium enterprises.
24. What are the main functions of IDBI?
25. Discuss the role of public sector in India
                              (4 X 5 = 20)
PART D
Essay Questions (Any 2)
26. Critically examine the new industrial policy of India.
27. Discuss the role of small industries for economic development of India
28. Critically analyze the performance of industrial sector of Kerala.
29. Critically examine the role of industrialization in the economic development of India. What are the factors for and against industrial development?
                              (2 X 10 = 20

ECO3E03
DEVELOPMENT OF ECONOMIC IDEAS
Time: 3 Hours   Total Marks: 60

Part A
*Answer **all** questions*
1. The welfare of all means
   (a) Swaraj   (b) Sarvodaya   (c) Branhmacharya   (d) Swadeshi

2. Natural Economy is the economic idea of
    (a) Marx   (b) Keynes   (c) Aristotle   (d) J B Say
3. One of the leading Physiocrats among the following is
    (a) Sir Thomas Mun   (b) William Petty (c) John Locke (d) Francois Quesnay
4. Amartyasen got Nobel Prize in economics in the year
    (a) 1991   (b) 1995   (c) 1999   (d) 1998
5. Tableau Economique is
    (a) Patinkin's Model (b) Quesnay's Model (c) Keynes Model
    (d) Hicks-Hansen Model
6. Among the following which is the economic concept developed by Robert Owen
    (a) Back to land (b) Labour exchange (c) social workers (d) exchange bank
7. Who wrote the collective choice and social welfare?
    (a) Pareto   (b) A C Pigou   (c) H H Gossen   (d) Amartyasen
8. $\dfrac{c}{c+v}$ is
    (a) Surplus value (b) rate of profit (c) organic composition of capital
    (d) Industrial reserve   army

(08 x 1/2 = 04 Marks)

Part B
*Answer any **eight** questions.*
Each answer should not exceed one page.
9. Explain the implications of marginal school for the theory of value?
10. State Marshall's contribution to monetary economics.
11. Briefly explain the influence of Physiocrats on applied economics.
12. What is the 'doctrine of trusteeship'?
13. Write the essential ideas of institutionalist school?
14. Prepare a note on 'drain theory'.
15. Explain the points where Keynes differed from the classical economists.
16. What are the impacts of general theory on economic analysis?
17. What are the economic ideas of Kautilya on public finance?
18. Distinguish between natural rate of interest and monetary rate of interest.
19. Explain the financial instability hypothesis?   (8 ×2 = 16 Marks)

Part C
*Answer any **four** questions.*
Each answer should not exceed two and half a pages.
20. Write a note on the new welfare economics.
21. What do you mean by Neo-Classicism? Explain the important economic ideas of different
    Neo-Classical economists?
22. Explain the economic ideas of St. Thomas Aquinas.
23. Briefly explain Amartyasen's contribution to welfare economics.
24. Explain the Marxian theory of surplus value.
25. Discuss Walrasian concept of general equilibrium.   (4 × 5 = 20 Marks)

Part D
*Answer any **two** questions.*
Each answer should not exceed six pages.
26. What do you mean by marginal revolution? Explain the essential ideas of the marginalist
school?

27. Explain the important economic ideas of the Indian economists of the Post-British period.
28. What is Utopian socialism? Briefly explain the economic ideas of three Utopian socialists?
29. Explain the Post-Keynesian developments in the area of macro economics.

(2 × 10 = 20 Marks)

ECO3E04
ACCOUNTING TECHNIQUES FOR ECONOMICS

Time: 3 Hours   Total :60

PART–A
*Answer **all** questions*

1. The practice of appending notes regarding contingent liabilities in accounting statements is in pursuant to
   a) Convention of consistency   b) Money measurement concept
   c) Convention of conservatism   d) Convention of disclosure

2. An amount of Rs.200/- received from 'p' credited to 'q' would effect:
   a) Account of P and Q   b) Cash account
   c) P's account only   d) Q's account only

3. Goods purchased from 'A' for Rs.2000/- passed through sales book . The rectification of error will result in
   a) Increase of gross profit   b) Decrease of Gross profit function
   c) No effect on gross profit   d) Cannot identify the effect

4. Assuming the current ratio is 2, the purchase of fixed asset:
   a) The ratio will improve   b) The ratio will remain constant

   c) The ratio will decline   d) None of these

5. Tax paid is:
   a) Application of fund   b) Source of fund

   c) No flow of fund   d) Sinking fund

6. Cash from operation is equal to:
   a) Net profit plus increase in outstanding expense
   b) Net profit minus increase in outstanding expense
   c) Net profit plus increase in debtors
   d) Net profit plus increase in stock

7. Sale of long term investments indicates:
   a) Source of fund   b) Application of fund
   c) Change in current assets   d) Slinking fund

8. The prime function of accounting is to:
   a) Record economic data   b) Provide information for action

   c) Attain non-economic goals   d) Classify and record business transactions

(8 x ½ = 4)

PART–B
Answer any 8 questions.
Answer should not exceed 1½ page each.

9. How does accounting differ from book-keeping?

10. Distinguish between promissory note and trade bill.

11. What is meant by Suspense account?

12. What is a voucher?

13. What is solvency ratio.

14. What is meant by fictitious assets?

15. What are the advantages of ratio analysis?

16. What is meant by quick or liquidity ratio?

17. What are the difficulties in capital budgeting?

18. Distinguish between financial accounting and management accounting.

19. What is Imprest System of petty cash book

(8 x 2 = 16)

PART-C
Answer any *4* questions.
Answer should not exceed 2½ pages each.

20. What are the relationship between journal and ledger?.

21. Explain the principles of accounting?.

22. What is a trial balance? Explain its objectives?.

23. The following data has been abstracted from the annual accounts of a company.

Share capital	Rs in Lakhs20000
Equity shares of Rs 10 each	200.00
General Reserves	156.00
Investment allowance reserve	50.00
15% long tern loan	300.00
Profit before tax	140.00
Proposed dividends	10.00

Calculate   (i) Return on Capital employed &

(ii) Return on net worth

24. What are the uses of Fund Flow Statement?

25. Bring out different categories of Journal?

(4 x 5 = 20)

PART-D
Answer any _two_ questions.
Answer should not exceed six pages each.

26.   Illustrate the 'Grouping' and 'Marshalling' used in connection with the Balance Sheet?

27.   Describe Financial Statement Analysis. What are its uses?

28.   From the following Balance Sheet, prepare schedules of changes in working capital of 2008 and 2009.(hint; tax payable is a current liability-all amounts in rupees).

LIABILITIES	31 MARCH 2007	31 MARCH 2008	31 MARCH 2009
Share Capital	40000	50000	50000
9% Debentures	20000	20000	30000
Sundry Creditors	20000	20000	40000
Outstanding Expense	10000	20000	20000
Tax payable	10000	15000	20000
Retained earnings	20000	30000	20000
Total	**120000**	**155000**	**180000**

ASSETS	31 MARCH 2007	31 MARCH 2008	31 MARCH 2009
Cash	30000	40000	45000
Inventories	10000	15000	10000
Accounts Receivable	20000	20000	25000
Land	20000	20000	30000
Plant	40000	60000	70000
Total	**120000**	**155000**	**180000**

29.   Explain the rules regarding the posting of transactions into the Ledger. Journalise the following transactions and post them into a Ledger

Date	Items	Amount in Rs
2009 Jan 1	'A' Started business with cash	5000
Jan 2	Goods purchased from 'B' on credit	200
Jan 3	Goods sold to 'C'	500
Jan 4	Goods purchased from 'D' for cash	400
Jan 5	Paid for wages	50
Jan 15	Goods purchased from 'C'	100
Jan 17	Good sold to 'E'	50
Jan21	Goods purchased from 'F'	300
Jan 23	Paid for interest	15
Jan 24	Goods purchased from 'E'	200
Jan 28	Cash received from 'C'	100
Jan 31	Cash paid to 'F'	300
Jan 31	Paid for rent	10

(2x 10 = 20)

ECO4E06
PROJECT ANALYSIS

Time: 3 Hours

Total : 60

PART-A
*Answer **all** questions*

1. Working capital refers to:
   (a) Buildings   (b) Raw materials   (c) Machinery   (d) Plant intangibles.

2. Present Value of Rs. 1000 receivable after 3 years when rate of discount is 10%:
   (a)Rs.751   (b) Rs.761   (c) Rs.741   (d) Rs.748

3. Fixed cost is known as:
   (a) Prime Cost   (b) Special Cost   (c) Direct Cost   (d) Overhead Cost

4. Debentures are a component of:
   (a) Equity capital   (b) Debt capital   (c) Mutual Funds   (d) Gilts

5. At this point project proposals are rejected:
   (a)Pay back   (b) Cut-off   (c) IRR   (d) Profit rate

6. Technique which measures change in probability as a result of change in key variables is called:
   (a)Simulation Analysis   (b)Sensitivity Analysis
   IBreak-even Analysis   (d)Capital Rationing Analysis

7. In the risk-adjusted discount rate method, the rate of discount is:
   (a)Adjusted for the degree of risk   (b)Not adjusted to risk
   INot adjusted to NPV   (d)Adjusted to NPV

8. Capital consumption allowance is also called as:
   (a)Inventory   (b)Depreciation   (c)Interest   (d)Unsold stock

(8 x ½ = 4)

PART-B
Answer any *8* questions.
Each answer should not exceed one and a half pages.

9. What do you mean by a Project Index?

10. What factors have to be considered in Demand Analysis?

11. Explain the break-even analysis?

12. What do you mean by shadow pricing?

13. Specify the commonly used trend relationships in demand forecasting.

14. What is Scenario Analysis?

15. What are the two possible interpretations of IRR?

16. Distinguish between merit and demerit goods.

17. How is the NPV defined? Explain its rationale.

18. What is a work schedule? What purpose does it serve?

19. What is Pareto Optimality?   (8 x 2 = 16)

PART-C
Answer any *4* questions.
Each answer should not exceed two and half a pages.

20. Describe the three types of risk. Evaluate sensitivity analysis as a method for assessing risk.

21. What is the role of COR in Investment Analysis?

22. What is demand forecasting? Explain its objectives.

23. What is a cash flow? State the method by which we can work out present and future value of a single cash flow.

24. Discuss the uncertainties in demand forecasting. How one can cope with them?

25. State the important non-discounting criteria of Project Appraisal.

(4 x 5 = 20)

PART-D
Answer any *two* questions.
Each question should not exceed six pages.

26. Explain time series projection method of demand forecasting.

27. Explain the key stages involved in Simulation analysis.

28. Describe the steps involved in the identification of a project..

29. (a) Define the following for a new project as well as a replacement project.

    (i)   Initial Investment

    (ii) Operating Cash Inflows

    (iii) Terminal Cash Flow.

    (b) Explain the important factors that influence the time horizon for cash flow analysis.

(2 x 10 = 20)

ECO4E07
POPULATION STUDIES

TIME: 3 hours   **Max. Marks:60**

PART- A
Answer all questions. Each question carries ½ marks:

1. The capacity for reproductive performance is called
a) Fecundity b) Fertility rate C) Fertility d) None of these
2. The death of live born children before attaining four weeks are called
a) Child morbidity b) Neonatal Mortality c) infant mortality d) Child mortality
3. Economically active or population of working age in India is in the age group of
a) 15-69 b) 15-59 c) 14-55   d) 15-60
4. Ratio of working population to total population is called
a) Unemployment rate b) Labour participation c) Dependency load d) Labour productivity
5. The number of live births in a given year per 1000 women is called

a) Fertility rate b) Crude birth rate c) Population growth rate d) Birth rate

6. The infant mortality rate in Kerala according to 2011 census

a) 12   b) 13 c) 14 d) 20

7. According to Malthus population grows at

a) Exponential rate b) Geometric rate c) Constant rate d) Arithmetic rate

8. The interval between two successive births or the interval between marriage and first birth is called

a) Birth rate b) Birth spacing c) Birth order d) None of these

<div align="right">(8x½ =4)</div>

PART- B
Very Short Answer questions: Answer any eight questions. Each question carries 2 marks

9. What is meant by demographic transition?
10. Explain the relationship between poverty and fertility.
11. Briefly explain the factors that determine urbanisation.
12. What is meant by the problem of ageing?
13. What is 'Cohort fertility'?
14. What is dependency ratio?
15. What is 'zero population growth'?
16. Write a note on family planning.
17. Distinguish between fecundity and fertility.
18. What is the importance of age at marriage?
19. Distinguish between old age dependency ratio and young age dependency ratio.

<div align="right">(8x2=16)</div>

PART-C
Short Essay: Answer any four questions. Each question carries 5 marks

20. Critically evaluate Malthusian theory of population.
21. Explain the trends in urbanisation since independence.
22. What is population pyramid?
23. What are the problems of population growth in India?
24. Explain how health status is related to environment.
25. Discuss the economic impact of gulf migration on Kerala economy.

<div align="right">(4x5=20)</div>

PART- D
Long essay – Answer any two questions. Each question carries 10 marks

26. Examine the pattern, causes and consequences of urbanisation in India.
27. Explain the population policies in India with special emphasis on new population policy of India.
28. Explain the relationship between population growth and economic development.
29. Why is mortality is so low in Kerala, despite the fact that it lags behind all-India in many indicators of economic progress?

ECO4E13

RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS

Time: Three Hours   Total: 60 MARKS

Part A

*Answer **all** questions*

I. Choose the Correct Answer

1. Empirical research excludes knowledge gained by :
   (a) Manipulation of data   (b) Re-examination of data
   (c) First hand data   (d) Consulting authorities

2. Which of the following is not related to good scientific writing?
   (a) Emotional   (b) Clear
   (c) Focussed   (d) Objective

3. In the functional form $\log y = r + sT$, where T is variable for time, the coefficient s stands for:
   (a) Slope   (b) Growth rate
   (c) Elasticity   (d) Mean

4. Study of relevant literature on the subject enables researcher primarily to:
   (a) Write a report   (b) Identify problem
   (c) Analyse data   (d) Establish relationships

5. Which of the following is not a source of hypothesis?
   (a) Experience of researcher   (b) Body of theories
   (c) Findings of other studies   (d) Objective of study

6. Which of the following is not an attribute of data collection technique?
   (a) Relevance   (b) Validity
   (c) Convenience   (d) Reliability

7. Collecting and organising information relating to interpersonal relationships and sentiments is related to :
   (a) Historiography   (b) Biometrics
   (c) Econometrics   (d) Sociometry

8. Which of the following does not form non-probability samples?
   (a) Accidental samples   (b) Purposive samples
   (c) Quota samples   (d) Stratified sampling

                                                        (8 X ½ = 4)

Part B

*Answer any **8** questions*

Answer should not exceed 1 ½ pages

9. What do you mean by 'ethical neutrality' in scientific research? Explain.

10. What are the qualities of a good researcher?

11. Explain the various sources of hypothesis in social science research.

12. Explain different phases of research design.

13. What are the main forms of data collection responses? Explain.

14. Describe the advantages of interview method.

15. What are the considerations to be borne in mind while designing a questionnaire?

16. Write a note on the use and abuse of statistics in social science research.

17. Examine the role of theory in social research.

18. Explain how descriptive statistics are computed using MS Excel.

19. How would you estimate the trend equation using the graphical wizard in MS Excel?

(8 X 2 = 16)

Part C

*Answer any **4** questions*

Answer should not exceed 2 ½ pages each

20. Critically examine the use of deduction and induction as methods of scientific research.

21. Discuss the pros and cons of non-participant observation.

22. Explain the main forms of data collection responses.

23. Explain probability sampling design.

24. What are the relative advantages of open-end and closed questions?

25. Examine the role of value in social research.

(4 X 5 =20)

Part D

*Answer any **two** questions*

Answer should not exceed 6 pages each

26. Examine the question of objectivity in Social science research.

27. Explain the methods and techniques associated with sampling.

28. What is growth rate? Explain the method of estimation of growth rate using Excel.

29. Discuss the contents of a research report.   (2X 10= 20)

ECO4E14

ECONOMICS OF GENDER AND DEVELOPMENT

Time: 3 hours   **Max.Marks: 60**

PART-A
(Answer all the eight questions in Part –A. Each question carry 1/2 mark)

1.One of the path breaking work in Gender Economics "Women's role in Economic Development " was written in 1970 by ………………………..
 a) Amartya Sen b) Paul Krugman c) Esther Boserup   d) Mah bub ulhaq
2. ………………… agency developed G.E.M
 a) IMF   b)World Bank c) WTO   d) UNDP
3.The National Credit Fund for Women was set up in…………year .
a)1990 b) 1991 c) 1992 d) 1994
4. Gender Budgeting is related to womens'……………
a)Poverty b) Health c) d) Empowerment d) rights
5.Magsaysay award winner Ms.Ela Bhat is the moving spirit of………. Women's organization.
a)NAWEE b) NYEE c) SEWA d)STREE SAKTHI YOJANA
6."Mahila Udayam Nidhi"(MUN)is a programme of ………………..
a)   R.B.I b) NABARD c) IDBI d) Indian Bank
7. ……………………. Programme is related to preparation of nutritious food to Anganvadi.
a) Kamadhenu Yojana b) Mahar Yojana c) Annapoorna Yojana d)Janani Suraksh Yojana
8. …………. Report presents ,Key findings on gender equality and women empowerment in India
   a)   NFHS-1 b) NFHS-2 c) NFHS-3 d) NFHS -4   **(8 X ½ = 4 marks)**

PART-B
(Answer any eight questions in Part –B. Each question carries 2 marks. No answer should exceed one page)
11.Distinguish between gender and sex
12.Critically evaluate falling sex ratio in India
13.Explain importance of Work participation rate in gender studies.
14."Gender is not static or immutable". Explain.
15."Gender tends not be value neutral ". Comment.
16.Explain major determinants of women's wage.
17.Explain fertility rate and mortality rate . Explain trends in these rates in Kerala
18.Discuss the phenomenon pointed out by Amartya Sen of"Missing 100 million women".
19.What is "Feminization of agriculture" and why it happens?
20.Explain the implications of "falling G.E.R. of girls " in India.
21.Explain Gender Budgeting and its importance.   **(8x2=16 marks)**

PART-C
(Answer any four questions in Part –C .Each question carries 5 marks . No answer should exceed two and half pages)
22. Discuss the role of micro credit in women empowerment.

23. What is feminization of industry, agriculture and service ? Analyse it with particular reference to India .

24. Evaluate the role played by SEWA in women empowerment .

25.Discuss the impact of technological development and modernization on women workers.

26.Critically examine the role of migration in gender equality.

27. Discuss various schemes to develop and empower women entrepreneurs in India

(4x5=20 marks)

PART –D

(Answer any two questions in Part –D. Each question carries 10 marks .No answer should exceed six pages.)

28.Discuss various measurement methods of gender disparity and women empowerment.

29. Discuss the effects of globalization and liberalization on women well being in developing nations.

30. Explain the role of N.G.O's and Self Help Groups in empowering women. Give some examples from the Indian context.

31. Analyse various legislations and efforts of national and international agencies for empowering women in the developing nations, specifically India.

(2 x 10 =20 marks)