APPENDIX - P
MADURAI KAMARAJ UNIVERSITY
(University with Potential for Excellence)

M.A. ECONOMICS (Semester)
CHOICE BASED CREDIT SYSTEM
REVISED SYLLABUS

(With effect from the academic year 2018-2019)
Scheme of examination, Regulation and Syllabus

1. Introduction of the Programme

The Master of Arts in Economics is a postgraduate degree in Economics. MA Economics is a full-time programme spread over 2 years and is divided into 4 semesters. The programme of study shall consist of 12 core courses which are compulsory and 8 are elective courses. Each of these carry 100 marks and students are ordinarily required to do the courses each semester. It has been developed to provide students the opportunity to be trained in modern Economics. The course is designed to impart the students a vigorous training in economic theories, econometrics and / or Economics. Our approach is a comprehensive one. It is believed that teaching students both how to ask and address questions with the help of economic theories in order to substantiate arguments with rigorous data analysis. This programme has been designed to expose students to alternative paradigms of economic theories and their applications to contemporary national and international problems .Training is imparted in the use of quantitative and analytical techniques. At the end of the course, students are expected to have state-of-the-art quantitative skills valued both in academia and in the corporate world. During the course time, one gets an in-depth knowledge about core subjects like Microeconomic theory, Macroeconomic theory and Mathematical Economics. The curriculum is structured around core subjects, with subject-elective papers and non-subject elective papers complementary to the programme focus. The core modules are usually in Microeconomic theory, Macroeconomic theory, Growth and development, Public Economics, Research methodology, International Economics, Monetary Economics, Computer Applications in Economics and Econometrics. Though the degree is a theory based, more emphasis shall be given to mathematical approaches so that easy understanding of the subject and verification of theories shall be possible. Hence, a separate course in Mathematical Economics shall also be offered.

The optional or additional coursework shall depend on the programme's emphasis. Accordingly 4 subject-elective papers such as Agricultural Economics / Welfare Economics, Industrial Economics / HRD Economics, Health Economics / History of Modern Economic Analysis, and Environmental Economics/ Demography shall be introduced. Further, 4 non-subject elective papers like Economics of Insurance/Institutional Economics, Economics of Infrastructure / Rural Development Economics, Economics of Tourism / Economics of

Gender and Development, and Labour Economics / Behavioural Economics shall be offered. In the forth semester students shall opt for project in the place of non-subject elective paper or the non-subject elective paper.

Given the broad scope of subject, a Master of Economics degree is rapidly becoming a popular choice for those pursuing graduate studies, alongside courses such as Finance, Accounting, and Management, Financial Economics, International Economics, Development Economics, Sustainable Economic Development and Agricultural Economics.

Applicants who are able to solve problems with logical thoughts, observation and inference from data, and present ideas in writing and speech, etc. are the most suitable candidates for this course. Candidates who want to contribute towards India's economic development and growth by their innovative techniques and policies can opt for this Masters' degree course. Students who want to go for a wide variety of careers from accountant to investment banker, money manager to personal finance consultant are found suitable for this course.

2. Eligibility for Admission

B.A,/ B.B.A,/ B.Com, /B.Sc.,/ and B.E degree holders with Economics, Mathematics and Statistics as major or ancillary subjects and candidates who studied Mathematics / Business Mathematics at +2 level are eligible for seeking admission into M.A Economics. Candidates belonging to general category should have secured at least 55 % of marks, OBC candidates must have secured 50 % of marks and SC / ST / Person with disability candidates must have passed in the qualifying examination for admission.

3. Objectives of the Programme

- To offer a balance between theories of Microeconomics, Macroeconomics, and Econometrics alongside their scientific applications.
- To avail live experiential learning in the form of internships and also focusing on research undertaking pertaining to economic policy issues with access to empirical data.
- To develop core competencies on critical thinking skills, hypothesizing and solving problems, data acquisition skills, data analysis techniques, the application of economic theory to analyze economic data, writing and reporting skills, and competency in the use of computer software.
- To have scope for creating job opportunities in a wide variety of fields which include professional careers in business, banking, financial services, Federal, State and Local Governments, consulting, and not-for-profit organizations.
- To design and conduct Master's program in Economics with a solid foundation for pursuing higher education like a Ph.D. degree in Economics or further graduate studies in related fields such as Management, Business and Law.

4. Outcome of the Programme
Scope of the Course
- It serves as a basis for further higher studies and research in this field such as M.Phil and Ph.D. Degree in Economics.
- On successful completion of this course one can apply for the UGC-NET or JRF exam. The success in these exams makes teaching or research as good options.
- The degree holders can opt for further higher studies and career in various specialisations of Economics such as in Micro and Macro Economics, Economics of Agriculture, Economic Statistics, Development Planning, International Economics, Home Economics, Monetary Economics, Fiscal Economics, Economics of Growth and Development, Environmental Economics, Regional Economics, Behavioural Economics and many more.
- Post-Graduates in Economics can take up research work in various fields of India's national security problems including the international relations, geostrategic, geopolitical, socio-economic, tactical aspects of war, etc.
- The greatest scope after the course is that it not only makes you eligible but also gives you a better chance to qualify the IES (Indian Economics Services) exam.
- Law schools are a very common destination now-a-days for recent post graduates in Economics.

Employment Areas
- Corporate Sectors (marketing and accounts sections)
- Finance, Commerce and the Banking Sectors
- Economic Consulting Firms
- Custom Departments
- Import / Export Companies
- UPSC
- Agricultural Economics

Job Types
- Accountant
- Research Associate
- Business Analyst
- Money Manager
- Corporate Analyst
- Financial Analyst
- Investments Analyst
- Market Analysts
- Investment Banker
- Marketing Manager
- Operations Manager
- Personal Finance
- Consultant Securities Analyst
- Advance Courses in M.A. Economics
- Economist

Career Opportunities

Economists may work in a variety of specialized fields at the professional level. They may study the financial information of specific industries, companies or time periods. Probable job titles include:

- Industrial Economists
- Micro Economists
- Financial Economists
- Macro Economists

Graduates of a Master's degree program in Economics can seek immediate employment without further education. However, while a Bachelor's or Master's degree can qualify professionals for economic work, top economists within most organizations must typically have a Ph.D. in Economics. These programs are ideal for those who want higher-level positions, including college professors.

Students seeking to advance their careers or desire to specialize in specific areas of Economics should consider a Master of Science in Economics. The degree will help sharpen your skills and broaden your knowledge of theories, research, and trends in Economics.

5. Core Subject Papers

Core Subject papers shall consist of 12 papers as listed below.

1. Micro Economics-I
2. Macro Economics-I
3. Mathematical Economics
4. Micro Economics-II
5. Macro Economics-II
6. Econometrics
7. Economics of Growth and Development
8. Public Economics
9. Research Methodology
10. International Economics
11. Monetary Economics
12. Computer Applications in Economics

6. Subject Elective Papers

Subject Elective Papers shall consist of 4 papers as listed below.

1. Agricultural Economics / Welfare Economics
2. Industrial Economics / Human Resource Development Economics
3. Health Economics / History of Modern Economic Analysis
4. Environmental Economics / Demography

7. Non-Subject Elective Papers

Non- Subject Elective Papers shall consist of 4 papers as listed below.

1. Economics of Insurance / Institutional Economics
2. Economics of Infrastructure / Rural Development Economics
3. Economics of Tourism / Economics of Gender and Development
4. Labour Economics / Project

The table below shows the core subjects, subject-elective papers and non-subject elective papers along with the credits to be given to each subject.

Semester	Paper No	Subject	Credit	Exam hours	Marks		
					Internal	External	Total
I	1	Micro Economics-I	4	3	25	75	100
	2	Macro Economics-I	4	3	25	75	100
	3	Mathematical Economics	4	3	25	75	100
Subject Elective - I	4	Agricultural Economics/ Welfare Economics	5	3	25	75	100
Non-Subject Elective-I	5	Economics of Insurance/ Behavioural Economics	5	3	25	75	100
	6	Micro Economics-II	4	3	25	75	100
II	7	Macro Economics-II	4	3	25	75	100
	8	Basic Econometrics	4	3	25	75	100
Subject Elective -II	9	Industrial Economics/ HRD Economics	5	3	25	75	100
Non Major Elective -II	10	Economics of Infrastructure/ Rural Development Economics	5	3	25	75	100
III	11	Economics of Growth and Development	4	3	25	75	100
	12	Public Economics	4	3	25	75	100
	13	Research Methodology	4	3	25	75	100
Subject Elective -III	14	Health Economics / History of Modern Economic Analysis	5	3	25	75	100
Non Major Elective - III	15	Economics of Tourism/ Economics of Gender and Development	5	3	25	75	100
IV	16	International Economics	4	3	25	75	100
	17	Monetary Economics	4	3	25	75	100
	18	Computer Applications in Economics	4	3	25	75	100
Subject Elective -IV	19	Environmental Economics/ Demography	5	3	25	75	100
Non Major Elective - IV	20	Labour Economics / Project	5	3	25	75	100

8. Unitization

Each subject Paper shall consist of five units.

9. Pattern of Semester Examinations

Two year M.A Economics degree shall be having examinations of 12 Core papers, 4 subject- elective papers and 4 non- subject elective papers to be conducted in four semesters. Each semester shall consist of five examinations for five subjects. First and Third semester examinations shall be conducted in the month of November. The Second and Fourth semester examinations shall be held in the month of April. Each paper shall carry 100 marks, of which 25 marks for internal assessment tests and 75 marks for external examinations.

10. Scheme of Internal Assessment

The components of Internal Assessment marks shall be as follows:

Test	:	10 Marks (Average of the best two tests)
Assignment	:	5 Marks
Seminar/ Group Discussion	:	5 Marks
Peer- team Teaching	:	5 Marks

Total	:	25 Marks
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11. External Examinations

External examinations for each paper shall be conducted for 75 marks.

12. Question paper pattern

Internal Examinations of each paper shall be for 10 marks having the following question pattern.

Section A	: 5 Objective type questions	(5 X 1=5 marks)
Section B	: 2 questions in either or type	(2 X 5=10 marks)
Section C	: One out of 2 questions	(1 X 10=10 marks)

Total : 25 marks which shall be converted into 10 marks.

External examinations of each paper shall be for 75 marks having the following question paper pattern.

Section A : 5 Multiple choice questions (One question from each unit)   (5 x 1 = 5 marks)
Section B : 5 Short answer type questions (one question from each unit)(5 x 2 = 10 marks)
Section C : 5 either or type questions Answer should not exceed 2 pages. (5 x 6 =30 marks)
Section D : 3 out of 5 questions. Answer should be in 4 pages.   (3   x   10=30 marks)

Total   :   75 Marks.

13. Scheme of Evaluation

Students shall be evaluated on the basis of internal tests, seminar, and assignment, peer-teaching and external examinations. Question paper setters shall be requested to prepare scheme of valuation for all the papers.

14. Passing Minimum

Total Passing Minimum	:	50 Marks out of 100 Marks
Internal Assessment	:	No minimum pass mark out of 25 Marks
External Assessment	:	34 Marks out of 75 Marks

15. Model Questions

Each course shall have a model question paper which shall be given after the reference books.

16. Teaching Methodology

The success of a lesson depends on the methodology that the teacher adopts. Teaching Economics shall be done through the methods like cooperative learning, project, experimental learning, interdisciplinary approach, and constructivism etc. Methodology shall consist of stimulation of students' interest, presentation of teaching material, team formation and activities' determination, conduction of activities and discussion and assessment. For the sake of simplicity and easy understand, the methods like problem solving method, discussion method, demonstration method, role playing method, lecture method and case study method shall be adopted. The use of ICT shall be coopted for the visual presentation of the lessons.

17. Text Books
The list of text books are given at the end of the syllabus of each paper / course.

18. Reference Books
The list of reference books is given at the end of the syllabus of each paper / course.

19. Retotaling and Revaluation Provision
Students shall be provided the facility of applying for retotaling the marks within 15 days after the publication of results on payment of a minimum fee fixed by the University and they shall be allowed to apply for revaluation of their papers within 15 days after the publication of results on payment of a fee to be fixed by the University.

20. Transitory Provision (2+2)
Syllabus revision shall be done once in 2 years and afterwards 2 years shall be under transitory provision.

21. Subjects and paper related websites.
The related websites for each paper shall be provided at the end of the syllabus.

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Core paper-1

MICRO ECONOMIC ANALYSIS - I

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Objectives

1) to teach the students to know the basic concepts, demand and production analysis.
2) to understand the cost concepts, revenue concepts, market structure etc.

Unit I - Introduction and Basic Concepts

Basic Economic Problems - Choice and scarcity. Deductive and inductive analysis. Positive and Normative Economics. Economic Models: Nature–concepts in model building–uses–limitations. Characteristics of equilibrium and disequilibrium systems.

Unit II - Demand Analysis

Demand curves-utility analysis of demand-the cardinal utility. Indifference curves theory: Marginal Rate of Substitution (MRS). Consumer's equilibrium, Price, income and substitution effects. The Slutsky Theorem. Compensated demand curves. The Revealed Preference theory. Hicks Revision of Demand theory.The Neumann-Morgenstern Cardinal Utility Theory. The Friedman- Savage hypothesis. Cobweb Theorem.

Unit III Production Analysis

Laws of Production: The law of Variable Proportions- Laws of returns to scale –internal and external economies. Iso-cost Expansion Path- Least cost combination of factors. Choice of Optimal Expansion Path: Short run and long run. Equilibrium of the multi-product firm: Euler's Theorem. Technical Progress and production function: Cobb-Douglas Production function, CES, VES and Translog production functions.

Unit IV   Cost and Revenue

Cost: Concepts of Cost: Economic cost, accounting cost, real cost, opportunity cost, private cost and social cost. Production cost: variable cost, fixed cost, total cost, average cost, marginal cost- long run average cost curve. Revenue: Revenue function, Average and Marginal revenue - Average and marginal revenue curves under perfect and imperfect competitions. Importance of revenue curves in price analysis.

Unit V Market Structure

Perfect Competition: Short –run and long run equilibrium of the firm and industry. Monopoly: Short –run and long run equilibrium of the firm of monopolist- discriminating monopoly- bilateral monopoly. Monopsony. Monopolistic competition: Meaning, Assumptions- equilibrium of the firm and industry- non- price competition. Duopoly Models: Cournot- Betrand- Edgeworth Chamberlin. Oligopoly: Kinked demand curve – Stackelberg model. The models of low cost and dominant firm. Baumols's sales maximization hypothesis.

Reference Books

1. Ahuja, H.L., "Modern Micro Economics: Theory and Applications", Thirteenth Edition, S. Chand& Company Ltd., New Delhi, 2006.
2. Alfred Marshall., "Principles of Economics", Eighth Edition, Macmillan& Co. Ltd., London.1962.
3. Baumol, W.J., "Economic Theory and Operations Analysis", Fourth Edition, Prentice-Hall of India, New Delhi, 2003.
4. Cauhan, S.P.S "Micro Economics- An Advanced Treatise", PHI Learning Private Limited, New Delhi, 2009.
5. Dewett, K.K Modern Economic Theory" S. Chand& Company Ltd., New Delhi, 2005.
6. Gupta, K.R., "Micro Economics", Second Edition, Atlantic Publishers and Distributers (P) Ltd., Delhi, 2009.
7. Jhingam, M.L., Macro Economic Theory", Vrinda Publications Private Ltd., New Delhi, 2010.
8. Koutsoyiannis, A., "Modern Micro Economics", Second Edition, Mc Millan, London,2004.
9. Maddala,G.S and Miller,E " Micro Economics-Theory and Applications", Tata Mc Graw- Hill Publishing Company Limited, New Delhi,2005.
10. Pindyck, R.S and Rubinfeld, D.L "Micro Economics", Prentice Hall of India Pr5ivate Limited, New Delhi, 2008.
11. Salvatore, D "Principles of Micro Economics", Fifth Edition, Oxford University Press New Delhi, 2009.
12. Salvatore, D Micro Economics- Theory and Applications", Fourth Edition, Oxford University Press New Delhi, 2003.
13. Varian Hal, R., "Micro Economic Analysis", Third Edition, Vinod Vasishtha for Viva Book (P) Ltd, Delhi 2010.

Model Question Paper
Micro Economic Analysis-I

Time: Three Hours   **Max. Mark: 75**
Section-A   **(5X1=5 Marks)**
Answer All Questions

1. Deduction goes from
   a) **General to particular**   b) Particular to general
   c) Particular to specific   d) General to total
2. Which one of the following is not a true property of indifference curves?
   a) Slopes downward from left to right   b) Need not be parallel
   c) **Concave to the origin**   d) Neither touch nor intersect each other

3. Law of returns to scale operate during
   a) Short period   b) **Long period**
   c) Very short period   d) All the above

4. AR curve under perfect competition is
    a) Vertical   b) Downward sloping
    c) Upward sloping   d) **Horizontal**
5. Changing different prices from different consumers at the same time is prevailed under
    a) **Discriminating monopoly**   **b)** Monopsony
    c) Monopoly   d) Bilateral monopoly

Section-B   (5X2=10 Marks)

Answer All Questions

6. Why do problem arise in the economy?
7. Define 'consumer's equilibrium.
8. Comprehend the term 'Expansion Path'.
9. Differentiate fixed cost from variable cost.
10. What is meant by non-price competition?

Section-C   (5X6=30 Marks)

Answer All Questions

11. a) Explain the limitations of economic models.   or
    b) Differentiate 'Deduction from Induction'.
12. a) Describe the Properties of indifference curves. or
    b) Write a note on Friedman-Savage Hypothesis.
13. a) Analyse the law of variable proportions.   or
    b) Discuss the CES Production function.
14. a) Elucidate the relationship between AC and MC diagrammatically.   or
    b) Describe the importance of revenue curves in price analysis.
15. a) Analyse the price - output determination under monopoly.   or
    b) Discuss the kinked demand model of oligopoly.

Section-D   (3X10=30 Marks)

Answer THREE Questions

16. Is economics a positive science or normative science? Comment.
17. Discuss the revealed preference theory given by Samuelson.
18. Explain the properties of Cobb-Douglas production function.
19. Write an essay on different types of costs.
20. Analyse the equilibrium of the firm under perfect competition during short run and long run.

Core Paper-2

MACRO ECONOMIC ANALYSIS – I

Objectives:

- To introduce the students on the sectoral flow of national income, its accounting and factors influencing income at current and constant prices.
- To enable students develop a critical insight on classical, Keynesian macroeconomic models and a functioning at four different market conditions.
- To make students to understand roll of expectation uncertainty and the relationship between inflation and employment. Contents:

UNIT: I

Meaning and Nature of Macroeconomics - The Circular Flow of Income and Goods -National Income and its concepts -Classical Theory of Employment and The Keynesian Theory of Income Employment.

UNIT: II

Consumption Function and Investment Function - Keynes Psychological Low of Consumption -Theories of Consumption Function: Absolute Income, Relative Income, Permanent Income and Life Cycle Hypothesis - Investment Function, Marginal Efficiency Capital and Investment-Long run and short run- Accelerator and Investment behaviour classical, Neo Classical and Keynesian Theories of Interest.

UNIT: III

Supply and Demand for Money -Definition of money supply - Determinants of Money supply - High powered Money and Money multiplier Derivation of Money Multipliers -Approaches to demand for money -Classical, Keynesian and Post Keynesian approaches -Demand for money.

UNIT: IV

IS-LM Functions : General Equilibrium of product and Markets - The product Market equilibrium -The Money Market Equilibrium -General equilibrium of product and Money market - Changes in General equilibrium.

UNIT: V

Business Cycles - Phases of Business cycle - Theories of Schumpeter -Kaldor, Samuelson and Hicks -Control of Business Cycle -Relative Effectiveness of monetary and Fiscal policies.

Reference Books

Culbertson, J.M. (1968), Macroeconomic Theory and Stabilization Policy, McGraw Hill. Kogenkosh, Tokyo.

Duesenberry, J.S. (1949), Income, Saving and the Theory of Consumer Behaviour. Harvard University Press, Harvard.

Edey, M. and A.T. Peacock (1967), National Income and Social Accounts, Hutchinson University Library, London.

Friedman, M. (1956), Studies in the Quantity Theory of Money, The University of Chicago Press, Chicago.

Friedman, M. (1957), The Theory of Consumption Function, Princeton University Press, Princeton.

Gupta, S.B. (1995), Monetary Planning in India, Oxford University Press, New Delhi.

Hicks, J.R. (1974), The Crisis in Keynesian Economics, Oxford University Press, New Delhi.

Keynes, J.M. (1936), The General Theory of Employment, Interest and Money, Macmillan, London.

Mankiw, N.G. and D. Romer (Eds.) (1991), New Keynesian Economics, (2 Vols.), MIT Press, Cambridge.

Sheffrin, S.M. (1996), Rational Expectations, Cambridge University Press, Cambridge.

Turnovsky, S.J. (1977), Macroeconomics Analysis and Stabilization Policy, Cambridge University Press, Cambridge.

Model Question Paper
Macro Economic Analysis - I

Time: Three Hours   **Max. Marks: 75**

Section- A   (5×1=5 Marks)
Answer ALL questions.

1. Macro Economics deals with the study of
   - (a) Industrial Trade
   - (b) International Trade
   - (c) Production possibilities
   - (d) The economy's overall Performance

2. The fundamental psychological law of consumption is associated with
   - (a) Hansen
   - (b) Evans
   - (c) Keynes
   - (d) Robert Solow

3. Distinction between transaction, precautionary and speculative demand for money is due to

(a) Change in income   (b) Change in money supply

(c) Change in rate of interest   (d) both (a) and (c)

4. J.R. Hicks developed the IS-LM Model of product and money market equilibrium in the year

     (a) 1937   (b) 1947   (c) 1950   (d) 1956

5. Business cycles

     (a) are a common phenomenon across time and space

     (b) have no fixed periodicity or amplitude

     c) rarely synchronize across countries

     d) all the above

Section-B   (5×2=10 Marks)

Answer ALL questions.

6. What is meant by circular flow of income?

7. What do you mean by investment?

8. Define multiplier.

9. State the factors that determine the slope of the IS and LM curves.

10. Mention the different phases of a trade cycle.

Section-C   (5×6=30 Marks)

Answer ALL questions, choosing either (a) or (b)

11. (a) Explain any two methods of calculating national income.   or

   (b) Describe Say's law of market.

12. (a) What are the measures to increase consumption function?   or

   (b) Explain the relationship between multiplier and marginal propensity to consume.

13. (a) Evaluate the classical approach to demand for money.   or

   (b) Explain Baumol – Tobin model of demand for money.

14. (a) Discuss the factors that determine the slope of the IS and LM curves. or

   (b) Elucidate the weaknesses of IS and LM general equilibrium model.

15. (a) What are the control measures of business cycle?   or

   (b) Describe the Samuelson's theory of trade cycle.

Section- D   (3×10=30 Marks)

Answer any THREE questions.

16. Analyse Keynes' theory of employment.

17. Discuss the salient features of life cycle hypothesis.

18. Explain the concept of High-powered money and its implications.

19. Describe the general equilibrium of product and money market with the help of IS-LM curves.

20. Discuss the relationship effectiveness of monetary and fiscal policies.

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Core Paper- 3
MATHEMATICAL ECONOMICS

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Objectives of the Course:

This course provides a comprehensive introduction to basic mathematical economics concepts, tools and applications. It covers mathematical concepts like functions, models and optimization techniques in various micro economic contexts. The course also covers the application of those concepts to explain the principles of economics.

Outcome of the Course:

The course provides for

- Reformulating economic theories using mathematical notation and construct mathematical economic models.
- Enabling students to understand the working of mathematical tools in studying economic theories and models.
- Learning mathematical tools that are frequently used in Micro, Macro and Econometrics.
- Applying mathematical tools to solve some economic problems.
- Graduates to get through entrance exams conducted by the institutes of eminence at national level and undertake higher level professional research career in economics.
- Preparing for competitive exams conducted by RBI and other professional research bodies.

Course Outline

UNIT 1 : DIFFERENTIAL CALCULUS

Differentiation: Meaning – Basic Rules - Successive Differentiation of the functions up to Second Order - Partial Differentiation - Total Differentiation. Optimization: Unconstraint (both one and two independent variables) and constraint - Applications of derivatives in theory of consumer and firm.

UNIT 2: THEORY OF CONSUMER

Utility Analysis: Utility function, budget line - Indifference curve analysis: Indifference curves - properties, consumer's equilibrium, derivation of ordinary and compensated demand functions - price and income elasticities of demand, derivation of Slutsky equation, expression of Slutsky equation in terms of price and income elasticities of demand.

UNIT 3: THEORY OF FIRM

Production function - Equal Product Curves (Isoquants) - Shape of Isoquants - Isoquants and Ridge Lines - Cobb Douglas Production Function - Properties. Revenue function: Average, Marginal Revenue- Relationship between Average Revenue and Marginal Revenue – Cost function: Average, Marginal Cost - Relationship between

Marginal Cost and Average Cost – Profit Function: Profit Maximization under Perfect Competition and Monopoly.

UNIT 4: MARKET EQUILIBRIUM

Demand and Supply functions - Market Equilibrium (Static, Comparative Static and Dynamic) - Existence and stability of equilibrium: Walras and Marshall Stability Condition.

UNIT 5: GAME THEORY

Concepts of Games in economics: Player, Payoff, Outcome and Types – Different forms of representing Games – Equilibriums in Games and Simple Problems (Pure and Mixed Strategies) – Idea of Nash Equilibrium.

Textbooks:
1. Metha B.C. & Madnani G.M.K, Mathematics for Economists, S.Chand Publications, NewDelhi, 2007
2. Henderson and Quant, Micro Economic Theory, McGraw-Hill International Edition, 1980.
3. Sydsaeter, Mathematics of Economic Analysis, Pearson Education, New Delhi, 2000
4. Fundamental methods of Mathematical Economics - Alpha Chung-i Chiang, Kevin Wainwright 2005
5. Anthony, Mathematics for Economics and Finance, Cambridge University Press, London,UK 2005

Reference Books:
1. Allen, R.G.D. Mathematical Analysis for Economists, Andesite Press, Berlin Germany,2015
2. Despande. V.D. et.al Elementary Mathematical Techniques for Economics, S.Chand, NewDelhi, 1986
3. Chiang, A.C., Fundamental Methods of Mathematical Economics, McGraw-Hill International, Student Edition.

Online Resources:
Videos:

Video Lectures on Mathematical economics at https://cosmolearning.org/video-lectures?topic=356

Other Materials:
http://ocw.uci.edu/courses/math_4_math_for_economists.html
Mathematics: Free Online Courses
https://inomics.com/mathematics-free-online-courses
Free Online Courses in Mathematical Economics
Study free online Mathematical economics courses and MOOCs from top universities and colleges. Read reviews to decide if a class is right for you.

Model Question Paper
MATHEMATICAL ECONOMICS

Time: 3 Hours   Max. Marks: 75

Part – A   **(5 x 1 = 5marks)**
Answer all the Questions

1. If $y = e^x$, dy/dx = ?
   a). 1   b). x   c). e^x d). e

2. The income elasticity of demand is ----- for inferior good.
   a). Zero   b). Negative   c). 0 to 1   d). Greater than one

3. For the Cobb-Douglas production function, the elasticity of substitution is
   a). 1   b). 0   c). $1/\alpha+\beta$ d). $\alpha+\beta$

4. According to Walras, ------------- is the prime mover in the adjustment mechanism of equilibrium.
   a). Price   b). Quantity   c). Both price and quantity   d). Income

5. Game theory is applicable to --------- market situation
   a). Perfect   b). Monopoly   c). Monopsony   d). Oligopoly

Part – A   **(5 x 2 = 10marks)**
Answer all the Questions

6. Define derivatives.
7. What is an indifference curve?
8. Define MRTS.
9. What is meant by expansion path?
10. What do you understand by pure strategy?

Part – C   **(5 x 6 = 30marks)**
Answer all the Questions

11. a . Differentiate the following.
    (i). $(4x^2 + 3x + 4)(5x^3 + 7x)$ (ii). $\log(x^3 + 3x)$.
    (or)
    b. Find maxima and minima of the function $y = x^2 - 4x - 5$

12. a. Prove that an indifference curve is convex towards origin.
    (or)
    b. If $U = 10q_1q_2$ derive the compensated demand function.

13. a. Given that the short run cost function of a firm is
    $C = q^3 - 12q^2 = 50q = 100$. Determine the equilibrium output q and the profit π if the competitive price is Rs.5.
    (or)

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b. Prove that Cobb Douglas production function satisfies Euler's theorem.

14. a. Explain the dynamic market equilibrium with suitable illustration

(or)

b. What do you understand by Stability, Existence and uniqueness of market equilibrium?

15. a. Write a note on game theory.

(or)

b. Solve the following game.

Player B

Player A   4   -4
             -4   4

Part – D   **(3 x 10 = 30marks)**

Answer any THREE Questions

16. Given the utility function is $U = 50q_1q_2$, the prices of the two commodities **Q₁** and **Q₂** are $P_1 = 2$ and $P_2 = 5$ and the income of the consumer is rupees 1000. Calculate the equilibrium values of q_1 and q_2

17. Derive Slutsk's equation.

18. State and prove any five properties of Cobb-Douglas production function.

19. If D = 35 − 7P, S = - 5 + 2P find the equilibrium price and the quantity.
Also verify the stability of the market equilibrium according to both Walras andMarshall.

20. Find the value of the game using dominance property.

2	-2	4	1
6	1	5	3
-3	2	0	6
8	3	7	7

Subject Elective Paper-1

AGRICULTURAL ECONOMICS

Objectives:

➤ To familiarize the agricultural situation in India
➤ To provide sound knowledge base on India's Agricultural Economy in the pre and post before Green Revolution periods.
➤ To develop a critical study on recent Agricultural crisis in India.

UNIT I: AGRICULTURE AND ECONOMIC DEVELOPMENT

Features of Agriculture - Importance of Agriculture in the Indian Economy - Policies for Agriculture and Rural Development - Relationship between Agriculture and Non-Agricultural sectors.

UNIT II: AGRICULTURAL PRODUCTION AND PRODUCTIVITY

Trends in agricultural Production and Productivity - Farm size and efficiency - Different cost concepts and income measures -Supply response of individual crops and aggregate supply - Technical change, labour absorption and gander issues in agricultural activities.

UNIT III: LAND REFORMS AND LABOUR MARKET

The Need and scope for land reforms - Objectives of land reforms - Tenancy and crop sharing - Forms , incidence and effects - Land reform measures and Performance - Problems of marginal and small farmers - Mobility of labour and Segmentation in Labour Markets - Nature, extent and trends in rural unemployment - Agricultural wages in India - Gender wise wage differences - Non-Agricultural rural employment - Trends and Determinants.

UNIT IV: AGRICULTURAL MARKET AND PRICES

Market and Marketed surplus - Defects in agricultural Marketing - Regulated Markets - Co-Operative marketing - Farmers Markets - Behaviour of agricultural prices - Cobweb Model : Price Income stability - State policy with respect to agricultural marketing - Warehousing -Prices - Taxation and insurance - Terms of Trade between agricultural and Non – agricultural prices - Need for state intervention - Objectives of agricultural price policy - instruments and evidence: Food security in India and Public Distribution System.

UNIT V: AGRICULTURAL GROWTH AND EXTERNAL SECTOR

Recent Trends in agricultural growth in India : Inter- regional variations in growth of output and productivity - Cropping pattern shifts -supply of inputs, pricing of inputs and role of subsidies. Role of public Investment and capital formation in Indian agriculture - Nature and features of agri - business - Role of MNC's, Globalization of Indian economy and problems and Prospects of Indian agriculture: Impact of WTO on Indian agriculture.

Reference Books:

Bardhan, P.(1984), Land, Labour and Rural Poverty, Oxford University Press, New Delhi.

Brahmananda, P.R. and V.R. Panchumukhi (Eds.) (1987), The Development Process of the Indian Economy, Himalaya Publishing House, Bombay.

Chakravarty, S. (1987), Development Planning: The Indian Experience, Oxford University Press, New Delhi.

Chaudhary, P.(1972), Readings in Indian Agricultural Development, George Allen & Unwin, London.

Papola, T.S. (1982), Rural Industrialisation in India, Himalaya Publishing House, Bombay.

Subbarao, K. and De Janvrt (1986), Agricultural Price Policy and Income Distribution in India, Oxford University Press, New Delhi.

Vaidyananthan, A. (1995), The Indian Economy: Crisis, Response and Prospects, Orient Longmans, New Delhi.

Visaria, P. and R.Basant (1994), Non-Agricultural Employment in India: Trends and Prospects, Sage Publications, New Delhi.

Wanmali S. and C.Ramasamy (Eds.) (1995) , Developing Rural Infrastructure, Macmillan, New Delhi.

Model Question Paper
Agricultural Economics

Time: Three Hours **Max: 75**
Section-A **(5 X 1 = 5 Marks)**

Answer All Questions

21. The Integrated Rural Development Programme is
    b) an irrigation Programme b) a Literacy Programme
    c) **an anti-Poverty Programme** d) a free food Programme
22. Cropping pattern refers to
    b) area under particular crop at an given point of time
    c) ration of area under one crop to another
    d) **relative distribution of cropped area under different crops at a given point of time**
    e) area of net sown area to total cropped area
23. Land reforms refer to
    b) protective land from soil erosion
    c) **abolishing the defective structure of land holding**
    d) preservation of land
    e) reclamation of land
24. Major defects of agricultural marketing in India is / are
    b) lack of transport b) lack of finance
    c) Absence of storage facility d) **All the above**
25. Food grains in India are categorized by
    b) ONGC b) OIL **c) FCI** d) MMTC

Answer All Questions
26. What are the features of Indian Agriculture?
27. Define farm size.
28. What are the objectives of land reforms?
29. What is food security?
30. What are MNC's?

Section-C (5 X 6 = 30 Marks)

Answer All Questions
31. a) Explain the importance of Agricultural Economics.   or
  b) Examine Agricultural policy and Rural development.
32. a) State the trends in agricultural production and productivity.   or
  b) Briefly explain farm size and land productivity.
33. a) Narrate the need and scope for land reforms.   or
  b) Give the details of tenancy and crop sharing.
34. a) Differentiate the marketable and marketed surplus.   or
  b) What are the objectives of Agricultural Price Policies?
35. a) Discuss the role of MNC's in Indian Agriculture.   or
  b) Write a short note on WTO in Indian Agriculture.

Section-D (3 X 10 = 30 Marks)

Answer any THREE Questions

36. Analyze the relationship between agriculture and non agricultural sectors.
37. Bring out different cost concepts and income measures in Agricultural sector.
38. Analyse the problems of marginal and small farmers.
39. Examine the working of Public Distribution System in India.
40. Discuss the role of public investment and capital formation in Indian Agriculture.

Subject Elective Paper-1
WELFARE ECONOMICS
Objectives
1. To evaluate the normative significance of economic events and issues from the framework of welfare economics.
2. To analyse the applied branches of economics such as public finance, cost-benefit analysis, industrial economics and economics of government policy using welfare economic criteria as their foundation.
3. To enable students to develop a basic understanding of main topics in the economics of welfare State in democratic market economies.

Module 1: Pre-Paretian Welfare Economics-I
Benthamite Approach to Aggregate Welfare; Optimum Resource Allocation and Welfare

Maximization, Assumption of Uniform Income — Utility Function of Individuals; - Income Distribution; Issue of Interpersonal Comparisons of Utility;

Module 2: Pre-Paretian Welfare Economics-II

Marshallian Welfare Economics; Consumer's Surplus; Measurement of Consumer's Surplus — Difficulties involved, Criticism; Principle of Compensating Variation; Hicks's Four Consumer's Surpluses; Consumer's Surplus and Tax-Bounty Analysis

Module 3: Paretian Welfare Economics I

Pareto optimality — Optimum exchange conditions, The production optimum, The consumption

optimum; Concept of contract curve; Top level optimum; Infinite number of non-comparable optima vs. unique social optimum; Compensation criteria — Contributions of Barone, Kaldor and Hicks;

Module 4: Paretian Welfare Economics II

The Scitovsky double criterion; Concept of community indifference map, Samuelson's utility possibility curve; Value judgements and welfare economics; Bergson's social welfare function, Arrow's impossibility theorem.

Module 5: Recent Developments in Welfare Economics

Divergence between private and social costs; Problems of non-market interdependence; Externalities of production and consumption; External economies and diseconomies; Problem of public goods; Pigovian welfare economics; Second-best optima; Marginal cost pricing; Cost-benefit analysis; Interdependent utilities; Attempts to develop dynamic welfare analysis.

BASIC READING LIST

1. Arrow, K.J. (1951), Social Choice and Individual Values, Yale University Press, New Haven,
2. Baumol, W.J. (1965), Welfare Economics and the Theory of the State (Second Edition),
   Longmans, London.
3. Baumol, W.J. (ed.) (2001), Welfare Economics, Edward Elgar Publishing Ltd. U.K.
4. Broadway, R.W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, Oxford. Duesenberry, J.S. (1949), Income, Saving and the Theory of Consumer Behaviour, Harvard University Press, Cambridge, Mass.
5. Feldman, A.M. (1980), Welfare Economics and Social Choice Theory, Martinus Nijhoff, Boston.
6. Graaff J. de V. (1957), Theoretical Welfare Economics, Cambridge University Press,
   Cambridge.
7. Little, I.M.D. (1939), A Critique of Welfare Economics (2nd Edition), Oxford University Press, Oxford.
8. Marshall, A. (1946), Principles of Economics, Macmillan, London.
9. Myint, H. (1948), Theories of Welfare Economics, Longmans, London.
10. Ng Y.K. (1979), Welfare Economics, Macmillan, London.

11. Nicholas, B. (Ed.) (2001), Economic Theory and the Welfare State, Edward Elgar Publishing Ltd., U.K.
12. Pigou, A.C. (1962), The Economics of Welfare (4th Edition), Macmillan.
13. Quirk, J. and R. Saposnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.
14. Samuelson, P.A. (1947), Foundations of Economic Analysis, Harvard University Press, Cambridge, Mass.

Model Question Paper
Welfare Economics

Time: Three Hours   **Max. Mark: 75**

Section- A   **(5×1=5 Marks)**

Answer ALL questions.

1. The first fundamental theorem of Welfare Economics requires
   a) producers and consumers to be price takers
   b) that there be an efficient market for every commodity
   c) that the economy operate at some point on the utility possibility curve
   d) all the above

2. Points on the Utility Possibility Frontier are
   a) inefficient   b) points of incomplete preferences
   c) not producible   d) Pareto efficient

3. Which method can help in obtaining a welfare improvement if externalities exist?
   a) Pigouvian taxes   b) Regulation
   c) Assigning property rights and permitting bargaining   d) All of the above

4. Movement from an inefficient allocation to an efficient allocation in the Edgeworth Box will
   a) increase the utility of all individuals
   b) increase the utility of at least one individual, but may decrease the level of utility of another person
   c) increase the utility of one individual, but cannot decrease the utility of any individual
   d) decrease the utility of all individuals

5. In a public goods context, it is difficult to measure impact on real income because
   a) public goods are generally free to the public
   b) they make up a small percentage of total GDP
   c) it is hard to measure how people value the public good.
   d) inflation decreases the value of the good

Section-B   **(5×2=10 Marks)**

Answer ALL questions.

6. Define welfare.
7. What do you mean by consumer's surplus?
8. What is meant by contract curve?
9. What is indifference map?
10. What do you understand by social cost?

<div align="center">**Section-C**   **(5×6=30 Marks)**</div>

Answer ALL questions, choosing either (a) or (b)

11. (a) Discuss the Benthamite Approach to Aggregate Welfare   or
   (b). Explain the Utility function.
12. (a) Mention the difficulties in consumer surplus.   or
   (b) Briefly explain the Bounty Analysis.
13. (a) Narrate the Pareto optimality.   or
   (b) Analyse the concept of contract curve.
14. (a) Explain the value judgement in economics.   or
   (b) Give a brief note on Bergson's social welfare function.
15. (a) Differentiate private and social cost   or
   (b) Examine the principle of marginal cost pricing.

<div align="center">**Section- D**   **(3×10=30 Marks)**</div>

Answer any THREE questions.

16. Critically examine the concept optimum resource allocation and welfare maximization.
17. Explain the Hicks's Four Consumer's Surpluses.
18. Anlayse the contributions of Hicks to welfare economics.
19. Evaluate the Arrow's impossibility theorem.
20. Discuss in detail the Cost-benefit analysis.

<div align="center">**Non-Subject Elective Paper -1**</div>

<div align="center">**ECONOMICS OF INSURANCE**</div>

Objectives:

1) to enable the students the need and importance of insurance in today's life

2) to create awareness about the risk factors involved in the availability of insurance services.

Unit I Introduction

Role and Definition of Insurance – Meaning, Nature, functions of Insurance, Principles and important classifications of Insurance – Evaluation and kinds of insurance organization in India – Elements of an Insurance contract.

Unit II Fundamentals of Risk and Risk Management

Classification of Risk – Pure risk and speculative risk - Concepts of Risk Management – Essential of Risk Management – Expected utility & demand for the insurance – Moral hazard and insurance demand – Elements of Risk Management – Risk Assessment – Risk control – Risk financing – Concepts of Re-insurance – Types of Re-insurance – Re-insurance Markets.

Unit III Life Insurance

Nature of Life Insurance contract – classification of policies – Annuity – classification and identification of risk – Measurement of risk and Mortality Table – Calculation of premium – Treatment of sub standard risks – policy condition – surrender value – valuation and surplus – The reserve and investment of funds.

Unit IV General Insurance (Fire and Miscellaneous Insurance)

Fire Insurance – concept and evolution – Nature of fire insurance contract – Types of fire policies – fire insurance claims – Reinsurance – Miscellaneous insurance – Motor vehicle insurance – Health insurance – Engineering insurance.

Unit V Insurance in India

Rural insurance – Personal property, cattle and livestock, crop and species – Urban non-traditional insurance – Insurance Regulatory and Development Authority (IRDA) – Objectives and functions of IRDA – Insurance intermediaries- Insurance legislation in India – Insurance Act, 1938 – Life insurance act 1956 and Marine insurance Act 1963 – Role of LIC and GIC in India – Privatisation of insurance industry in India.

Reference Books

1. M.N. Mishra, Modern Concepts of Insurance, S. Chand and Co. New Delhi, 2004
2. N. Pramavathy, Principles and practice of Insurance, Sri Vishnu Publication, Chennai, 2006
3. P. Periasamy, Principles and practice of Insurance, Himalaya Publishing House, Mumbai 2007
4. B. Benjamin, General Insurance, Heinemann, London
5. Williams, Jr. C.A.M.L. Smith and PC Young, Risk Management and Insurance, McGraw Hill, New York
6. Dionne G and S E Herring bone, Foundation of Insurance Economics, Kluwer Academic Publishers, Boston.
7. Bailey, R. (Ed.) (1999), Underwriting in Life and Insurance, LOMA, Atlanta, Ga.
8. Bhole, L. M. (1990), the Indian Financial System, Tata McGraw Bickelhaupt, D. L. (1992), General Insurance, Irwin Inc., Burr. Ridge, III.
9. Black, K. Jr. and H. D. Skipper Jr. (2000), Life and Health Insurance, Prentice Hall, Upper Saddle River, New Jersey.
10. Finsinger, J. and M. V. Pauly (Eds.) (1986), The Economics of Insurance Regulation: A Cross National Study, Macmillan, London.
11. Graves, E. E. and L. Hayes (Eds.) (1994), McGill's Life Insurance, The American College Blyn Mawr, Pa.
12. Head, G. L. and S. Horn II (1991), Essentials of Risk Management, Volume I, Insurance Institute of America, Malvern, Pa.
13. Skipper, Jr. H. D. (Ed.) (1998), International Risk and Insurance: An Environmental Managerial Approach, Irwin McGraw Hill, Boston.

14. Tachimo, K.B. and D.A.Linic, 1993, Planning for Retirement needs, The Americal college, Bryn Mawa pa

15. Palande, P.S., Shah, R.S. and Lunawal, M.L., 1983 Insurance in India, Changing policies and emerging opportunities, Response Books, A division of Sage Publications India.

MODEL QUESTION PAPER

ECONOMICS OF INSURANCE

Time: 3 Hours   **Max. Marks: 75**

PART A: ANSWER ALL QUESTIONS   (5 X 1 = 5MARKS)

1. When was LIC of India established?
2. When was General Insurance Company Act passed in India?
3. Risk is the chance of Loss or Injury (True/False).
4. Vehicle Insurance may additionally offer financial protection against theft of the vehicle, and against damage to the vehicle sustained from events other than ----------
5. Fire Insurance covers a policyholder against --------

PART B: ANWER ALL QUESTIONS   (5 X 2 = 10MARKS)

6. What is replacement cost?
7. What is the difference between whole life and term life insurance?
8. What is Surrender value?
9. Give any two functions of IRDA.
10. Define Health Insurance.

PART C: ANSWER ALL QUESTIONS   (5 X 6 = 30 MARKS)

11. Explain Pure risk and Speculative risks.   or
    Explain Fundamental and Particular risk.
12. What are the elements of an Insurance Contract?   or
    Explain the Role of Insurance.
13. How is risk in Life Insurance measured?   or
    How is premium in Life Insurance calculated?
14. Explain Motor Vehicle Insurance.   or
    Write a note on Fire Insurance
15. What are the objectives of IRDA?   or
    How is Rural Insurance useful in India?

PART D: ANSWER ANY THREE QUESTIONS   3 X 10 = 30 MARKS

16. Explain the types of Reinsurance
17. Discuss the role of LIC and GIC in India.
18. Evaluate the various kinds of Insurance Organization in India
19. Explain the types of Fire Insurance policies and Fire Insurance Claims
20. Describe the impact of privatization of Insurance Industry in India.

Non-Major Elective Paper-1

BEHAVIOURAL ECONOMICS

Objectives

- to explain the principles and methods of behavioral economics
- to provide an understanding of the policy implications of behavioral approaches through case studies.

Unit I: Introduction to Behavioural Economics

Nature of Behavioural economics -Methodological approach: Theory and evidence -Origins of behavioural economics- Neo-classical and behavioural approaches to studying economics- Relationship with other disciplines- Application: Case studies on Loss aversion, Money Illusion, Altruism.

Unit II: Fundamentals of Behavioural Economics

Values, Preferences and Choices: The standard model- Axioms, assumptions and definitions- The neuro- scientific basis of utility- Application: Case studies on Abstention, Environmental Protection and Drug Addiction.

Decision making under risk and uncertainty: Prospect theory- Reference points- Loss Aversion- Shape of utility function- Decision weighting- Application: Case studies on Endowment Effect and Loss Aversion.

Unit III: Inter Temporal Choice

The Discounted Utility Model: Origin and features of Discounted Utility Model (DUM)- Methodology- Anomalies in DUM- Alternative Inter temporal Choice Models: Time preference- Time inconsistent preferences- Hyperbolic discounting- Application: Case study on the savings problem and Desire for rising consumption profiles.

Unit IV: Behavioural game theory

Nature of behavioural game theory- Mixed strategies- Bargaining- Iterated games- Signaling- Learning- Application: Case studies on Market entry in Monopoly and Impasses in bargaining and self-serving bias.

Unit V: Social Preferences

The standard model- Nature of social preferences- Factors affecting social preferences- Modelling social preferences- Inequality aversion models- Reciprocity models- Application: Case studies on Public goods and free riding.

Text Books

Nick Wilkinson and Matthias Hales, "An Introduction to Behavioral Economics", 2nd Edition, Palgrave Macmillan 2012.

Reference Books

1. Edward Cartwright, Behavioural Economics, Routledge 2011.
2. Erik Angner, A Course in Behavioral Economics, Palgrave Macmillan 2012.
3. Dan Ariely, "Predictably Irrational: The Hidden Forces that Shape Our Decisions", Harper Collins 2009,
4. Richard Thaler and Carl Sunstein, "Nudge: Improving Decisions about Health, Wealth and Happiness", Penguin UK 2009.
5. Kahneman, Daniel and Amos Tversky. Choices, Values and Frames, New York: Russell, Sage Foundation; Cambridge, U.K.; New York: Cambridge University Press, 2000.
6. Camerer, Colin, Loewenstein, George, and Rabin, Matthew (eds.), Advances in Behavioral Economics, Russell Sage Foundation and Princeton University Press, 2003.
7. Colin Camerer, Behavioral game theory: experiments in strategic interaction, Princeton University Press, 2003.
8. Diamond, P. and H. Vartianen, Behavioral Economics and Its Applications, Princeton University Press, 2007.
9. David Laibson, The Psychology of Savings and Investment; A series of three talks at the London School of Economics and Political Science, Nov 19–21, 2007.
10. David Laibson, "Golden Eggs and Hyperbolic Discounting" (1997), Quarterly Journal of Economics.
11. Raj Chetty, Consumption Commitments and Habit Formation, NBER Working Paper 10970, 2014.

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Model Question Paper
Behavioural Economics

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Time: Three Hours   **Max. Mark: 75**

<div align="center">

Section- A   (5×1=5 Marks)
Answer ALL questions.

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1. From your understanding of behavioural economics, which of the following sets of words best describe the reflective mode of thinking?

    a) Uncontrolled, effortless, slow, conscious, associative

    b) Controlled, effortful, slow, conscious, deductive

    c) Uncontrolled, effortless, fast, unconscious, associative

    d) Controlled, effortless, slow, unconscious, deductive

2. The satisfaction of human want is called

    a) Consumption   b) Production   c) Distribution   d) None of these

3. Standard normative economic models include

    a) utility maximization   b) prospect theory

    c) satisficing procedure   d) all of the above.

4. In game theory, a choice that is optimal for a firm no matter what its competitors do is referred to as

      a) the dominant strategy.   b)the game-winning choice.

      c)super optimal   d) a gonzo selection

5. The provision of public goods requires

      a)competition among firms in the market   b) lobbying

      c) trade protection   d) none of the above

Section-B   **(5×2=10 Marks)**

Answer ALL questions.

6. Define Behavioural Economics.

7. State standard model.

8. What is time Hyperbolic discounting?

9. Describe monoploy.

10. What are public goods?

Section-C   **(5×6=30 Marks)**

Answer ALL questions, choosing either (a) or (b)

11. (a) What are all the characteristics of behavioural economics.   or

(b). Discuss the term money illusion.

12. (a) Write a short note on environmental protection.   or

    (b) Examine the importance and implications of Prospect theory.

13. (aDeliberatefeatures of Alternative Inter Temporal Choice models.   or

    (b) What is time inconsistent preference? Narrate.

14. (a) Explain briefly the mixed strategy.   or

    (b) Elucidatevarious types of market.

15. (a) Examine the factors affecting social preferences.   or

    (b) Analyse the features of public goods.

Section- D   **(3×10=30 Marks)**

Answer any THREE questions.

16. Discuss the methodological approaches to behavioural economics.

17. Critically evaluatethe case studies on endowment effect.

18. Describe briefly about the origin, feature, importance and implications of Discounted Utility Model.

19. Evaluate Game theory.

20. Examine the application of Inequality aversion model and Reciprocity model in social preferences.

Core Paper- 4

MICRO ECONOMIC ANALYSIS II

Objectives

1) to enable the students to understand the neo- classical theories of pricing, distribution theories and general equilibrium model.
2) to understand the economies of risk and uncertainity.

Unit I Theories of the firm

Marginalist Theory- Profit Maximization Theory- Hall and Hitch Theory of Full cost Pricing- Andreu's version of full cost Pricing. Theories of Limit Pricing: Bain's Model- Sylo-Labini Model – Modigliani Model –Baumol Theory of contestable markets. The Behavioural model of Cyert and March. Critical evaluation of Limit Pricing.

Unit II Distribution Theories

Neo- classical approach – Marginal productivity theory. Product exhaustion theorem. Elasticity of technical substitution, technical progress and factor shares. Modern theory of Distribution. Rent: Ricardian Theory and Modern theory. Wage: Marginal Productivity Theory and Modern theory. Interest: Keynes's Liquidity Preference Theory- Hicks-Hanson Synthesis. Profit: Dynamic, Innovation, Risk and uncertainty theories. Macro theories of distribution: Marxian, Kalecki and Kaldor.

Unit III General Equilibrium

Partial and general equilibrium, Walrasian excess demand and Input –output approaches to general equilibrium. Existence, Stability and Uniqueness of equilibrium and general equilibrium, Coalitions and monopolies. Production without consumption: one sector model, homogeneous functions, two sector model, Stopler-Samuelson theorem, Rybczynski Theorem, Relationship between output mix and real factor prices.

Unit IV Economics of Risks

Individual behaviour towards risk, expected utility and certainty equivalence approaches, risk and risk aversion: Sensitivity analysis, gambling and insurance, the economics of Insurance, cost and risk pooling and risk spreading. Asset Portfolio selection.

Unit V Economics of Uncertainty

Optimal consumption under uncertainty – competitive firm under uncertainty- factor demand under price uncertainty – Economics of search: The efficient market hypotheses. Stochastic models of Inventory demand. Market with incomplete information- Search and Transaction costs. The economics of information.

Reference Books

14. Ahuja, H.L., "Modern Micro Economics: Theory and Applications", Thirteenth Edition, S. Chand& Company Ltd., New Delhi, 2006**.**
15. Alfred Marshall., "Principles of Economics", Eighth Edition, Macmillan& Co. Ltd., London.1962.
16. Baumol, W.J., "Economic Theory and Operations Analysis", Fourth Edition, Prentice-Hall of India, New Delhi, 2003.

17. Cauhan, S.P.S "Micro Economics- An Advanced Treatise", PHI Learning Private Limited, New Delhi, 2009.
18. Dewett, K.K Modern Economic Theory" S. Chand& Company Ltd., New Delhi, 2005**.**
19. Gupta, K.R., "Micro Economics", Second Edition, Atlantic Publishers and Distributers (P) Ltd., Delhi, 2009.
20. Jhingam, M.L., Macro Economic Theory", Vrinda Publications Private Ltd., New Delhi, 2010.
21. KOutsoyiannis, A., "Modern Micro Economics", Second Edition, Mc Millan, London,2004.
22. Maddala,G.S and Miller,E " Micro Economics-Theory and Applications", Tata Mc Graw- Hill Publishing Company Limited, New Delhi,2005.
23. Pindyck, R.S and Rubinfeld, D.L "Micro Economics", Prentice Hall of India Pr5ivate Limited, New Delhi, 2008.
24. Salvatore, D "Principles of Micro Economics", Fifth Edition, Oxford University Press New Delhi, 2009.
25. Salvatore, D Micro Economics- Theory and Applications", Fourth Edition, Oxford University Press New Delhi, 2003.
26. Varian Hal, R., "Micro Economic Analysis", Third Edition, Vinod Vasishtha for Viva Book (P) Ltd, Delhi 2010.

Model Question Paper
Micro Economic Analysis –II

Time: Three Hours   **Max. Mark: 75**
                                        Section-A   **(5X1=5 Marks)**

Answer All Questions

41. In Full –Cost Pricing
    c) **P = AVC=AFC+PM**   b) P = AVC - AFC+PM
    c)   P = AVC + AFC-PM   d) P = AFC - AVC-PM
42. Interest is the reward for
    f)   Labour   b) **Capital**   **c)** Land   d) Organization
43. Which one of the following is not the basic assumption of General Equilibrium Analysis?
    f)   All Markets are perfectly competitive.
    g)   Maximization of Profit
    h)   Goods are produced under increasing returns to scale.
    i)   Everyone has perfect knowledge about the market.
44. Avoidance of consumption involving risk is called
    c)   All Markets are perfectly competitive.
    d)   Maximization of Profit.
    e)   Goods are produced under increasing returns to scale.
    f)   Everyone has perfect knowledge about the market.

45. A market is which asset prices reflect the true intrinsic value of those assets is called
   c) **Efficient Market hypothesis**   b) Rational expectation Hypothesis
   c) Economics of search   d) All the above

Section-B   (5X2=10 Marks)

Answer All Questions

46. Define 'Full Cost'.
47. Comprehend the term 'Elasticity of technical substitution'
48. What is meant by homogeneous production function?
49. Apprehend the term 'Risk Pooling'.
50. Define 'Uncertainty.'

Section-C   (5X7=35 Marks)

Answer All Questions

51. a) Analyse the Baumol's Theory of contestable Markets.   or
   b) Discuss the Behavioural model of Cyert and March.
52. a) Write a note on Product exhaustion theorem.   or
   b) Describe the Innovation theory of Profit.
53. a) Explain the Stoplers-Samuelson Theorem.   or
   b) Analyse the Rybezynski Theorem
54. a) Elucidate the asset portfolio selection   or
   b) Describe the Individual behaviour towards risk.
55. a) Analyse the competitive firm under uncertainty   or.
   b) Discuss the Efficient Market Hypothesis.

Section-D   (3X10=30 Marks)

Answer THREE Questions

56. Explain the Hall and Hitch Theory of Full Cost Pricing.
57. Discuss the Keynes' Liquidity preference Theory of Interest.
58. Evaluate the Walrasian General Equilibrium Model.
59. Analyse the concepts of risk pooling and risk spreading.
60. Describe the stochastic models of inventory demand.

Core paper-5

MACRO ECONOMIC ANALYSIS - II

Objectives

1) To understand various theories at macro level
2) To have knowledge in macroeconomic policies.

UNIT:I

Macro Economics in an open Economy - Balance of payments: Meaning and Components - Mundell-Flemming model - Asset Markets, Expectations and Exchange ratio : Monetary Approach to Balance of payments.

UNIT:II

Inflation - Theories of Inflation - Inflationary Gap - Demand pull Vs Cost push Inflation - Causes of Inflation - Measures to control Inflation - Phillips curve.

UNIT:III

New Classical Macro Economics - The New Classical critique of Micro foundations ,-the New classical approach ; policy implications of new classical approach - embirical evidence.

UNIT:IV

Stabilisation policies and issue lags in fiscal policy - Adaptive Expectation - Rational Expectations -Implications of (Ratex) . Supply side economics - Monetarism Versus Keynesianism.

UNIT:V

Macroeconomic policies - monetary policy views on : classical, Keynesian and Modern Theory. fiscal policy instrument - Budgetary fiscal Policy - Contracyclical Fiscal Policy implications.

Reference Books

Culbertson, J.M. (1968), Macroeconomic Theory and Stabilization Policy, McGraw Hill. Kogenkosh, Tokyo.

Duesenberry, J.S. (1949), Income, Saving and the Theory of Consumer Behaviour. Harvard University Press, Harvard.

Edey, M. and A.T. Peacock (1967), National Income and Social Accounts, Hutchinson University Library, London.

Friedman, M. (1956), Studies in the Quantity Theory of Money, The University of Chicago Press, Chicago.

Friedman, M. (1957), The Theory of Consumption Function, Princeton University Press, Princeton.

Gupta, S.B. (1995), Monetary Planning in India, Oxford University Press, New Delhi.

Hicks, J.R. (1974), The Crisis in Keynesian Economics, Oxford University Press, New Delhi.

Keynes, J.M. (1936), The General Theory of Employment, Interest and Money, Macmillan, London.

Mankiw, N.G. and D. Romer (Eds.) (1991), New Keynesian Economics, (2 Vols.), MIT Press, Cambridge.

Sheffrin, S.M. (1996), Rational Expectations, Cambridge University Press, Cambridge.

Turnovsky, S.J. (1977), Macroeconomics Analysis and Stabilization Policy, Cambridge University Press, Cambridge.

Model Question Paper
Macro Economic Analysis - II

Time: Three Hours   **Max. Mark: 75**

Section- A   (5×1=5 Marks)
Answer ALL questions.

1. Country's prosperity in international trade depends on
      (a) how much it exports   (b) favorable balance of trade
      (c) favourable balance of payments   (d) trading with many countries

2. Demand pull inflation occurs if
      (a) it is accompanied by an increase in real income
      (b) it is accompanied by an increase in unemployment
      (c) there is stagflation
      (d) there is hyper inflation

3. The policy implications of new classical macro economics are
      (a) a policy change must come as a surprise to the people
      (b) discretionary changes in policies must be avoided
      (c) both (a) and (b)
      (d) neither (a) nor (b)

4. Rational expectations theory was developed by
      (a) Milton Friedman   (b) Robert Lucas   (c) James Tobin   (d) Arthur Okun

5. Monetary policy may be defined as
      (a) control of financial institutions   (b) control of activities of commercial banks
      (c) management of public enterprises (d) management of central banking activity

Section-B   (5×2=10 Marks)
Answer ALL questions.

6. What do you mean by balance of payments?
7. What is an inflationary gap?
8. Point out the basic principles of the new classical macro economics.
9. Explain the adaptive expectation.
10. What is monetary policy?

Section-C   (5×6=30 Marks)
Answer ALL questions, choosing either (a) or (b)

11. (a) Explain the components of balance of payments.   or
    (b) Give the details of monetary approach to balance of payment.
12. (a) Illustrate the demand pull inflation   or
    (b) Suggest measures to control inflation.
13. (a) Discuss policy implications of new classical macro economics.   or
    (b) List out the criticisms of new classical macro economics.
14.(a) Elaborate the issue lags in fiscal policy.   or
    (b) Mention the criticism of supply side economics.
15. (a) State the instruments of monetary policy.   or
    (b) Explain budgetary fiscal policy.

Section- D   (3×10=30 Marks)
Answer any THREE questions.

16. Explain Mundell- Fleming model.
17. How does the Phillips curve explain the trade-off between unemployment and inflation?
18. Explain the views of new classical macroeconomics. What are the criticisms against their views?
19. Discuss Monetarism versus Keynesianism.
20. Analyse why the Keynesian approach differs from the monetarist approach?

Core Paper-6
BASIC ECONOMETRICS

Objective of the Course:

This course provides a comprehensive introduction to basic econometric concepts and techniques. It covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models. The course also covers the consequences of and tests for misspecification of regression models.

Outcome of the Course:

This course provides for

- Illustrating the main ideas underlying the linear regression model and derive the simplest numerical and statistical properties of the OLS estimator.
- Understanding and reporting regression output.
- Critically assessing regression models on the basis of assumptions of the classical linear regression model and examine the ways these assumptions can be modified and with what effects.
- Translating an economic argument into a formal testable hypothesis within a multiple regression model and carry out the appropriate testing procedure.

- Applying the econometric tools to conduct an empirical analysis using an econometric/statistical software package.
- Enabling the students to read, write and appreciate econometric models used in professional journal articles.

Course Outline:

Unit 1. Introduction to Econometrics and basic statistical concepts relevant to econometrics
Meaning, Goals, Nature and Scope of Econometrics - Stages in Econometric Methodology, Econometrics is a separate discipline- Why? - Role of Stochastic disturbance term.

Unit 2. Simple and Multiple Linear Regression Models
Estimation of model by method of ordinary least squares for simple regression Models; properties of estimators; Gauss-Markov theorem; Estimation of parameters- Normal distribution, Chi-square, t and F- distributions; confidence intervals; forecasting - Interpreting and reporting regression models - Multiple Linear Regression Models: partial regression coefficients and its relevance to economics – Interpretation of coefficients - R^2 and adjusted R^2 - tests of hypotheses with single coefficients and multiple coefficients – Applications of Chi-Square- t & F distribution – Normal Distribution.

Unit 3. Violations of Classical Assumptions: Consequences, Detection and Remedies
Multicollinearity; heteroscedasticity; serial correlation and Specification error.

Unit 4. Dynamic and Qualitative Regression Models: Meaning and Types of Dynamic Models - Auto regressive and Distributed lag models –Koyck's Distributed Lag Model – Theoretical Justification: Partial Adjustment and Adoptive Expectations Hypotheses - Regression with Qualitative (dummy) variables: Meaning Types of Qualitative Variables Models – Features and Applications: ANOVA, ANCOVA, Logit and Probit Models.

Unit 5. **Multivariate Analysis:** Introduction to Multivariate analysis (other than Regression Models) – Types: Dependence and Interdependence Analysis – MANOVA & Factorial ANOVA – Cluster and Factor analysis

Readings

1. Gujarati Damodar N., Basic Econometrics, McGraw-Hill Book Company, 1988.
2. Kmenta, Jan, Elements of Econometrics, The Macmillan Company, New York, 1986.
3. Econometrics - Bruce E. Hansen 2017
4. Maddala G. S., Kajal Lahiri, Introduction to econometrics - 2009
5. Peter Kennedy, A guide to econometrics - 2008
6. Stock James H., Mark W. Watson, Introduction to econometrics - 2015
7. Pindyck, R.S. and D.L. Rubinfeld, Econometric Models and Econometric Forecasts, 2nd Ed., McGraw-Hill Book Company, New York, 1981.

Books for Reference:

1. Jay L. Devore, Probability and Statistics for Engineers, Cengage Learning, 2010.
2. John E. Freund, Mathematical Statistics, Prentice Hall, 1992.
3. Richard J. Larsen and Morris L. Marx, An Introduction to Mathematical Statistics and its Applications, Prentice Hall, 2011.
4. D. N. Gujarati and D.C. Porter, Essentials of Econometrics, McGraw Hill, 4th edition, International Edition, 2009.
5. Christopher Dougherty, Introduction to Econometrics, Oxford University Press, 3rd edition, Indian edition, 2007.
6. Jan Kmenta, Elements of Econometrics, Indian Reprint, Khosla Publishing House, 2nd Edition, 2008.

Assessment

Examination: three-hour end-of-course examination (75% of final grade for course)

Coursework: test, assignment and seminar (25% of final grade for course)

Video:

- Top YouTube Channels to Learn Econometrics & Economics at https://inomics.com/insight/top-youtube-channels-to-learn-econometrics-economics-49279

Online Material Sources for Econometrics
- www.economicsnetwork.ac.up/subjects/econometrics
- The Economics Networks: Links for Econometrics
- Global.oup.com (OXFORD)
- https://ocw.mit.edu/courses/economics/14-382-econometrics-spring-2017/
- https://ocw.mit.edu/courses/economics/14-32-econometrics-spring-2007/

Blogs

- The Society for Financial Econometrics (SoFiE): http://www.sofieblog.com/
- Econometrics Beat: Dave Giles' Blog: http://davegiles.blogspot.com.au/
- No Hesitations: Francis X. Diebold: http://www.fxdiebold.blogspot.com.au/
- Econometric Sense: http://econometricsense.blogspot.com.au/
- Hyndsight: A blog by Rob J Hyndman: http://robjhyndman.com/hyndsight/gefcom2014/

Model Question Paper

BASIC ECONOMETRICS

Time: 3 Hours   Maximum: 75 Marks

PART – A   (5 x 1 = 5 marks)

Answer ALL Questions in TWO or THREE sentences.
Each question carries TWO marks.

1. State any two features of econometrics.
2. Mention any two of the limitations of econometrics.
3. What are the criteria on which the estimated model is to be evaluated?
4. What is level of significance?

PART- B   (5 x 2 = 10 marks)

5. Distinguish between $Y=b_0+b_1X_1$ and $Y = b_0+b_1X_1+U$
6. If $\hat{b} = 8.4$ $S.E._{\hat{b}} = 2.2$ obtain confidence interval for parameter at 95% level when n 100 and $\hat{b}$ is slope estimator in Simple Linear Regression Model.
7. Define Autocorrelation.
8. What is specification bias?
9. What is an autoregression model?
10. Define a Probit Model

PART – C   (5 x 6 = 30 marks)

Answer either (a) or (b) in each question in not exceeding TWO page.
Each question carries FIVE marks.

11. a. Elucidate the scope of Econometrics with suitable example.
    b. Explain the nature and use of economic models.
12. a. Elucidate the statistical test of significance of the least square estimates.
    b. Explain briefly the connection between tests of hypotheses and statistical estimation by confidence limits.
13. a. Estimate the model $Y_i = \beta_0 + \beta_1X_i + U_i$ for the given data. $\sum X = 100$; $\sum Y = 415$;

    $\sum x^2 = 54.91$; $\sum xy = -55.57$; $N = 11$ where, $x = X - \bar{X}$ and $y = Y - \bar{Y}$
    b. The relationship between nominal exchange rate and relative prices from the annual observations from 1980 to 1994, the following regression results were obtained where Y = exchange rate of the German mark to the U.S. dollar and X = ratio of U.S. consumer price index to the German consumer price index; that is, X represents the relative prices in the two countries. (Standard Errors in the Brackets)

    $\hat{Y}_t = 6.682 – 4.318 X_t$ $R^2 = 0.528$
    S.E. (1.22)   (1.333)

    (i) Interpret the above regression.
    (ii) What does the negative value of X_t mean? What is the underlying economic theory?
14. a. Discuss the consequences of heteroscedasticity.
    b. Illustrate the types of specification error.
15. a. Briefly Explain the Multivariate Model

b. Write a Note on i. Cluster Analysis   ii. MONOVA Model.

<center>PART – D   (3 x 10 = 30 marks)</center>

<center>Answer any THREE questions in not exceeding THREE pages.</center>
<center>Each question carries TEN marks.</center>

16. Discuss the methodology of econometric research and desirable properties of an econometric model.
17. State the principle of least squares and derive the OLS estimators of two variable model.
18. Assume that you are in charge of the central monetary authority in a mythical country. You are given the following historical data on the quantity of money and national income (both in millions of dollars):

Year	Quantity of money	National income
1963	2.0	5.0
1964	2.5	5.5
1965	3.2	6.0
1966	3.6	7.0
1967	3.3	7.2
1968	4.0	7.7
1969	4.2	8.4
1970	4.6	9.0
1971	4.8	9.7
1972	5.0	10.0

(a)   Estimate the regression of national income Y on the quantity of money X.
(b)   How do you interpret the intercept and slope of the regression line?

19. Write a short notes on
(a) Errors in variables   (b) Lag Models
(c) Multicollinearity   (d) Dummy Variables

20. Write an Essay on Koyck's Model.

<center>**Subject Elective Paper-2**</center>
<center>**INDUSTRIAL ECONOMICS**</center>

Objectives:
   1) to enable the students to understand the framework and problems of industrial economics
   2) to teach the students to familiarize the Indian industrial growth, problems and pattern, industrial finance, labour etc.

Unit – I Framework and Problems of Industrial Economics

Concept and organization of a firm - Ownership, control and objectives of the firm; Passive and active behaviour of the firm.

Unit – II Market Structure, Conduct and Performance

Sellers' concentration; Product differentiation; Entry conditions; Economies of scale; Market structure and profitability; Market structure and innovation; Theories of industrial location - Weber and Sargent Florence; Factors affecting location.

Product pricing - Theories and evidence; Investment expenditure - Methods of evaluating investment expenditure; Theories and empirical evidence on Mergers and acquisitions (M & As) and diversification.

Growth of the firm - Size and growth of a firm; Growth and profitability of the firm; Constraints on growth; Productivity, efficiency and capacity utilization - Concept and measurement, Indian situation.

Unit – III Indian industrial Growth, Problems and Pattern

Classification of Industries; Industrial policy in India - Role of Public and Private sectors; Recent trends in Indian industrial growth; MNCs and transfer of technology; Liberalization and Privatization; Regional industrial growth in India; Industrial economic concentration and remedial measures; Issues in industrial proliferation and environmental preservation; Pollution control policies.

Iron and Steel; Cotton textiles; Jute; Sugar; Coal; Cement and engineering goods; Development of small-scale and cottage industries in India.

Unit – IV Industrial Finance

Owned, external and other components of funds; Role, nature, volume and types of institutional finance - IDBI, IFCI, SFCs, SIDC, commercial banks, Financial statement - Balance sheet, Profit and Loss Account; assessment of financial soundness, ratio analysis.

Unit – V Industrial Labour

Structure of Industrial labour; Employment dimensions of Indian industry; Industrial legislation, Industrial relations; Exit policy and social security; Wages and problem of bonus - labour market reforms.

Reference Books:

- Ahluwalia, I.J. (1985). Industrial Growth in India, Oxford University Press, New Delhi,
- Barthwall, R.R (1985), Industrial Economics, Wiley Eastern Ltd., New Delhi.
- Cherunilam, F. (1994), Industrial Economics: Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
- Desai, B. (1999), Industrial Economy in India (3rd Edition), Himalaya Publishing House, Mumbai.

- Kirkpatrick, C.M., N. Lee and E.I. Nixon (1984), Industrial Structure and Policy in Less Development Countries, ELBS/George Allen and Unwin, London.
- Mamoria and Mamoria (2000), Dynamics of Industrial Relations in India (15th Edition), Himalaya Publishing House, Mumbai.
  - Khan, M.Y (1981) Indian Financial Systems, Allied Publishers, New Delhi.

Model Question Paper
Industrial Economics

Time: Three Hours   **Max. Mark: 75**

Section- A   (5×1=5 Marks)
Answer ALL questions.

1. In the long term a firm will produce provided the revenue covers
   a) Fixed costs   b) Variable costs   c) Total costs   d) Sales

2. If the marginal revenue is less than the marginal cost then to profit maximize a firm should
   a) Reduce output   b) Increase output
   c) Leave output where it is   d) Increase costs

3. Considering industrial structures, economies whose majority of people belongs to agricultural business are classified as
   a) emerging economies   b) industrial economies
   c) raw material exporting economies   d) subsistence economies

4. Which theory of profit holds that profit will be higher in industries characterized by a high degree of variability in their revenues or their costs?
   a) Risk-bearing theory   b) Frictional theory
   c) Monopoly theory   d) Managerial efficiency theory

5. The first Factories Act was enacted in
   a)1881   b)1895   c)1897   d)1885

Section-B   (5×2=10 Marks)
Answer ALL questions.

6. Define the concept of firm.
7. What do you mean by economies of scale?
8. Define Liberalization.
9. What is a balance sheet?
10. Give the meaning for the term 'bonus'.

Section-C   (5×6=30 Marks)
Answer ALL questions, choosing either (a) or (b)

11. (a) Explain the various concepts of organization of a firm   or
    (b). State the active behavior of the firm.
12. (a) Discuss the various methods of evaluating investment expenditure.   or
    (b) Analyse the various constraints on growth of firm.
13. (a) Discuss the recent Industrial Policy in India.   or

(b) Evaluate the pollution control policies in India.

14. (a) Write a short note on IDBI.   or

    (b) Bring out the ratio analysis in Industrial finance.

15. (a) Narrate the problems of bonus system in Indian industry.   or

    (b) Describe the labour market reforms in India.

Section- D   **(3×10=30 Marks)**

Answer any THREE questions.

16. Explain the objectives of firm.
17. Discuss the theories of industrial location.
18. Describe the role of privatization in Industry.
19. Write a note on IFCI to promote Industrial finance.
20. Analyse the employment dimension of Indian industry.

Subject Elective Paper-2

HUMAN RESOURCE DEVELOPMENT ECONOMICS

Objectives:

1) to enable the students to familiarize with the concepts of HRD, employment and compensation.
2) to understand the labour welfare measures and economics related to education and health.

Unit I : Concepts of HRD

Definition, Meaning of HRD, Human capital Vs. Physical capital – Components of human capital – Investment in human resources – Intersectoral linkages – Education – Public health – Nutrition – Housing – Policy and issues in HRD.

Unit II: Employment and Compensation

Nature and Characteristics of labour markets in developing economies like India-Classical and new classical – Analysis of demand and supply forces – Demand for labour.

Unemployment – Concepts, Measurement and causes- Issues relating employment and technological change and modernization – Rural unemployment and educated unemployment – Evaluation of employment policy in India – Wages – Classical, neo-classical and bargaining theories of wage determination – various concepts of wages – fair, living and minimum – Problems of implementation of minimum wages – Wages, inflation and productivity.

Unit III: Labour Welfare and Labour Management Relations

Industrial disputes – Determinants. Steps to achieve industrial peace – Methods of settlement of industrial disputes – Collective bargaining, conciliation, arbitration – Labour participation in Management – Trade union movement in India – Various social security and labour welfare measures adopted by Government.

Unit IV: Economics of Education

Economics of education and economic growth – Approaches to educational planning – social demands – Rate of returns and manpower balances, approaches – The case for universal free primary education – The problems of financing of higher education in India. The New education policy and HRD.

Unit V: Economics of Health

Welfare Economics of medical care – Health as an investment – Indicators of health – Similarities and differences between education and health as forms of human capital – Measuring capital formation through care – Planning of health care – locational aspects – Measuring the effectiveness of public and Medical care systems – concept and types of environmental pollution – air, water, land and noise pollution – effects of pollution on human health – Measurement of cost.

Reference Books

1. Mconnell C.R. and S.K. Brull, Contemporary Labour Economics, McGraw Hill, New York.
2. T.N. Bharathwal, Economics of Labour and Industrial Relations, Sthiya Bhavan Agra.
3. B.N. Datar, Labour Economics, Altied Publishers, New York.
4. D.R. Agarwal, Labour Problems, Social Welfare and Security, King Books, New Delhi.
5. Baru, R.V. Private Health Care in India, Social Characteristics and Trends, Sage Publications, New Delhi.
6. Klaraman, H.E., The Economics of Health, Columbia University Press, New York.
7. Panchamukhi, P.R. Economics of Health, LA Trend Report in ICSSR, A Survey of Research in Economics, Allied Publishers, New Delhi.
8. Cohn. E. and T. Hague, Economics of Education, Pergamon Press. London.
9. Blaug, M., An Introduction of Economics of Education, Cambridge University Press, Cambridge.

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Model Question Paper
Human Resource Development Economics

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Time: Three Hours   **Max. Mark: 75**

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Section- A   (5×1=5 Marks)
Answer ALL questions.

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1. Human capital investment consists of
   a)any activity that enhances the quality of labour
   b)expenditures for formal schooling only
   c)expenditures for on-the-job training only
   d)any activity that leads to the substitution of physical capital for labor

2. If people are made unemployed because of a fall in aggregate demand, this is known as:
    a) Frictional unemployment   b) Seasonal unemployment
    c) Cyclical unemployment   d) Structural unemployment

3.The Trade Unions Act came into operation from
    a) 1st June, 1927   b) 1st May, 1926   c) 1st June, 1926   d) None of the above

4. ICT stands for
    a) International Communication Technology   b) Intera Common Terminology
    c) Information and Communication Technology   c) Inter connected Terminals

5. Natural source of pollution is
    a) rain forest   b) mining for minerals   c) forest fire   d) falling of meteoroids

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Section-B   **(5×2=10 Marks)**
Answer ALL questions.

</div>

6. Define Human Resource Development.

7. State the characteristics of disguised unemployment.

8. What is collective bargaining?

9. Describe man power.

10. Mention any two impacts of noise pollution.

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Section-C   **(5×6=30 Marks)**
Answer ALL questions, choosing either (a) or (b)

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11. (a) Differentiate human capital and physical capital.   or
   (b). Discuss the determinants of good health.

12. (a) Write a short note on the characteristics of labour markets in developing economies. or
   (b) Deliberate different types of unemployment.

13. (a) State the various steps to achieve industrial peace.   or
   (b) Examine the trade union movement in India.

14. (a) Explain briefly the approaches to educational planning.   or
   (b) Elucidate the rate of returns and manpower balances.

15. (a) What are all the basic indicators of health? Explain. or
   (b) Analyse the measuring the effectiveness of public medical care systems.

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Section- D   **(3×10=30 Marks)**
Answer any THREE questions.

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16. Write a brief note on meaning, concepts, importance, policy and issues in HRD.

17. Critically evaluate classical, neo-classical and bargaining theories of wage determination.

18. Describe briefly about the social security and labour welfare measures adopted by Government of India.

19. Evaluate the problems of financing of higher education in India.

20. Examine the concept, different types of pollution and the possible measures to control pollution.

Non-Subject Elective Paper-2

ECONOMICS OF INFRASTRUCTURE

Objective: to enable the students to understand the concept of economic infrastructure and their uses.

Unit I: Introduction

Infrastructure and Economic Development - Infrastructure as a Public Good - Social and Physical Infrastructure - Special Characteristics of Public Utilities – The Peak - Load - off – Load Problem –-Free Prices, Equity and Efficiency.

Unit II: Transport

Structure and various types of Transport Cost – Location of Economics Activities - Demand for Transport – Models of Freight and Passengers Demand – Model Choice - Cost Functions in the Transport Sector .

Unit III: Communication

Communication - Rate making in Telephone Utilities, Public and Private – principles of decreasing costs in the telephone industry - Characteristics of Postal Services – Criteria for Fixation of Postal Rates – measurement of standards of services in the Telephone and Postal Utilities.

Unit IV: Energy

Energy and Economic Development – Sources of Energy, Renewable and non-renewable, conventional and non- conventional - Factors Determining Demand for Energy – Effects of Energy Shortages – Energy Conservation –Energy Scenario in Indian Context - Bulk Supply and Pricing of Electricity - Relative Economics of Thermal, Hydro and Nuclear Power Plants - Urban and Rural Water Supply- The Exploitation of Natural Gas – Pricing Problem.

Unit V: Social Infrastructure

Education and Economic Growth – Approaches to Educational Planning – Structure of Primary and Higher Education in India – Health Dimensions of Development– Determinants of Health – Economic Dimensions of Health Care – Demand and Supply of Heath Care - Financing of Health Care and Resource Constraints- Inequalities of Health – Class and Gender Perspectives.

REFERENCE BOOKS:

1. Economics of Infrastructure, Indian Council of Social Sciences Research (ICSSR), New Delhi.
2. India Infrastructure Report Policy Implications for Growth and Welfare, NCAER, New Delhi.
3. Paribh, K.S. (Ed), Indian Development Report–1999–2000, Oxford, New Delhi.
4. Turvey, R. (Ed), Public Enterprises, Penguin, Harmonds Worth.
5. Crew, M.A. and P.R. Kleindorfer, Public Utility Economics, Macmilan,London.
6. Nelson,J.R ,Marginal Cost Pricing in Practice, Prentice- Hall, Englewood-Cliff.
7. Munty,D. (Ed),Transport: Selected Readings,Penguin,Harmondsworth.
8. McCrakis,M.S. . (Ed), Energy: Demand Conservation and Institution Problems, Macmilan,London.
9. Eckstein,O.Water Resource Development, Harvard University Press,Cambridge.

Model Question Paper
Economics of Infrastructure

Time: Three Hours   **Max. Mark: 75**

Section- A   (5×1=5 Marks)
Answer ALL questions.

1. Which type of infrastructure meets the basic needs of the society?
a) Economic   b) Social   c) Private   d) Public
2. The most important infrastructural service is
a) Energy   b) Communication   c) Transport   d) All the above
3. Major problems faced by energy sector
a) Rising oil prices   b) Failure of monsoon
c) sick state electricity boards   d) All the above
4. India's electricity requirements are largely met by
a) nuclear power station b) hydel power   c) thermal energy   d) wind energy
5. Human development means
a) progress in education and public health   b) Reducing death rate
c) organizing schools   d) Increasing infrastructure

Section-B   (5 × 2 = 10 Marks)
Answer ALL questions.

6. What is meant by infrastructure?
7. What is public utility?
8. Define communication.
9. What do you mean by energy?
10. Define health.

Section-C   (5×6=30 Marks)
Answer ALL questions, choosing either (a) or (b)

11. (a) Explain the concept of infrastructure and economic development.   or
    (b). What are the characteristics of public utilities?

12. (a) Enumerate the structure of transport cost.   or
    (b) List out the cost functions in the transport sector.
13. (a) State the features of postal services.   or
    (b) What are the services reduced by telephone industry?
14. (a) Distinguish between renewable and non-renewable sources of energy. or
    (b) What are the factors determining the demand for energy?
15. (a) Explain the determinants of health.   or
    (b) Analyse the role of Primary Health Centers in promoting health.

Section- D   **(3 × 10 = 30 Marks)**
Answer any THREE questions.
Discuss the role of infrastructure in economic development.
17. Explain the economic and noneconomic effects of transport.
18. Analyse the measurement of standards of services rendered in the telephone industry.
19. Bring out the sources of generation of Electricity.
20. Describe the structure of primary and higher education in India.

Non-Subject Elective Paper-2
RURAL DEVELOPMENT ECONOMICS

Objectives:
* To enable the students to understand Rural Environment.
* To enrich the students about components of the Rural Economy.
* To enable the students to understand occupational structure.

Module I : Introduction to Rural Economics

Nature and Scope of Rural Economics, Inter-disciplinary approach of Rural Economics – Components-Structure and Characteristics -Pre and Post-independence.

Module II : Rural Resources Management in India

Rural Resources –Nature-Types and Magnitude - Rural Resources Management and Development, Application of Technology in Rural Development – Problems and prospects.

Module III : Rural Demography

Population Size - Sex and Age Composition- Density of Population - Population Problems and Challenges – Family Welfare Measures in Rural India.

Module IV : Rural Occupational Structure

Nature of Rural Occupations - Occupational Distribution in Rural India – The Concept of Work Participation Rates.

Module V : Rural Poverty and Unemployment

Rural Poverty-Meaning, Estimates, Causes and Consequences. Unemployment - Meaning, Types, Magnitude of Rural Unemployment - Causes and Consequences.

References:

1. Vasant Desai: Rural Development in India, Himalaya Publishing House, Mumbai, 2012.

2. Dutt and Sundaram- Indian Economy, S.Chand Publications, New Delhi, 2013-07-02.

3. Mishra,S.K. and PuriV.K. - Economics of Development and Planning, Himalaya Publishing House, Mumbai, 2012.

4. Mukundan,N.-Rural Development and Poverty eradication in India.

5. Katar Singh -Rural Development –Principles, Policies and Management.

Model Question Paper
Rural Development Economics

Time: Three Hours   **Max. Mark: 75**

                Section- A   (5×1=5 Marks)

                Answer ALL questions.

1. Which one of the following was launched with the objective of helping the poor in rural areas to become self-employed?

      a) DPAP   b) IRDP   c) TRYSEM   d) DDP

2. Which of the following organizations looks after the credit needs of agriculture and rural development in India?

      a) FCI   b) IDBI   c) NABARD   d) ICAR

3. PURA scheme is related to

      a) Eliminating pollution from Indian clusters   b) PPP project utilization

      c) Providing Urban Amenities in Rural Areas   d)None

4. National Rural Development Institute is situated at

      a)Delhi   b)Shimla   c)Hyderabad   d)Mumbai

5. Which media have a greater effect than the impersonal ones in the rural marketing context?

      a) Personal   b) Impersonal   c) Direct   d) Indirect

                Section-B   (5×2=10 Marks)

                Answer ALL questions.

6. What do you mean rural economics?

7. Describe rural resource management.

8. Define work participation rate.

9. What are all rural occupations?

10. Mention any two causes of poverty.

Section-C   **(5×6=30 Marks)**
Answer ALL questions, choosing either (a) or (b)
11. (a) Evaluate the Inter-disciplinary approach to Rural Economics.   or
   (b). Explain the scope of Rural Economics.
12. (a) Write a short note on rural resources.   or
   (b) Evaluate the application of Technology in Rural Development.
13. (a) State the demographic features of Indian population.   or

   (b) Examine the family welfare measures in Rural India.
14. (a) Explain briefly the types of rural occupation.   or
   (b) Elucidate the occupational distribution in Rural India.
15. (a) Bring out the impacts of rural poverty.   or
   (b) Analyse the different types of unemployment in India.

Section- D   **(3×10=30 Marks)**
Answer any THREE questions.
16. Evaluate the rural economy of India during Pre and Post-independence.
17. Explain the nature, importance, ways and problems of natural resource management.
18. Analyse the problems of population pressure on under developed countries.
19. Describe the concept of work participation rates.
20. Examine the concept, estimates, causes and consequences of rural poverty.

Core Paper-7
ECONOMICS OF GROWTH AND DEVELOPMENT

Objectives
   1) to make the students to understand the concepts of growth and development and their implication on the economy
   2) to equip the students with planning techniques and approaches to development.

Unit I: Theories of Development

    Adam Smith's Theory –Ricardo Theory- Schumpeter Theory - Marxian Theory – Keynesian Theory – Rostow's Stages of Economic Growth.

Unit II: Growth Models

    Harrod – Domar Model - Dynamic Theory - Kaldor Model of Distribution – Solow Model – Joan Robinson Model – Meade' Model - Mahalanobis Model.

Unit III: Determinants and Indicators of Economic Development

    Meaning of Economic Development, Economic Growth and Sustainable Development – Differences between Economic Growth and Development – Measurement of Economic Development - Human Development Index (HDI) – Physical Quality of Life Index (PQLI) – Gender related Development Index (GDI) – Factors determining Economic Growth – Obstacles to Economic Development.

Unit IV: Techniques of Planning

Capital Formation: Meaning – Importance – Capital-Output Ratio – Factors determining Capital-Output Ratio – Investment Criteria: Capital Turnover Criterion – Time-Series Criterion – Shadow Prices- Meaning of Project Evaluation – Cost Benefit Analysis – Uses of Cost Benefit Analysis in Developing Countries- Choice of Techniques.

Unit IV: Approaches to Development

Lewis' Theory of Unlimited Supply of Labour – Critical Minimum Effort Theory - Nelson's Low Level of Equilibrium Trap - Big Push theory – Balanced Growth – Unbalanced Growth Theory.

REFERENCE BOOKS:

1. Agarwal R.C., Economics of Development and Planning, Lakshmi Narain Agarwal Educational Publishers, Agra.

2. Jhingan M.L, The Economics of Development and Planning, Vrinda Publications, New Delhi.

3. MishraS.K and Puri V.K., Economics of Development and Planning, Himalaya Publishing House, New Delhi.

4. Somashekar N.T., Development Economics, New Age International Publishers, New Delhi.

5. Adelman,I,Theories of Economics Growth and Development, Stanford University Press,Stanford.

6. Behrman,S and T.N.Srinivasan, Handbook of Development Economics, Vol.3, Elsevier, Amsterdam.

7. Kindleberger,C.P. Economic Development, McGraw Hil, New York

8. Thirwal,A.P.Growth and Development,Macmillan,U.K.

Model Question Paper
Economics of Growth and Development

Time: Three Hours   **Max. Mark: 75**

Section- A   **(5 × 1 = 5 Marks)**

Answer ALL questions.

1. Economic development can be measured with the help of
      a) increase in GNP   (b) increase in percapita income at current prices
      (c) increase in NNP   (d) increase in percapita income at constant prices

2. The terms 'growth' and 'development' have been differentiated by
     (a) Adam Smith   (b) Keynes   (c) Schumpeter   (d) Rostow

3.Harrod –Domar model of economic growth are based on the experience of
     (a) developing countries   (b) developed countries
     (c) underdeveloped countries   (d) none of these

4. One of the indicators of human development index is
     (a) birth rate   (b) percapita income   (c) life expectancy   (d) GDP

5. The rate of turnover criterion is also known as ------- criterion.
     (a) minimum capital output ratio   (b) social marginal productivity
     (c) time series   (d) marginal growth contribution .

Section-B   (5 × 2 = 10 Marks)
Answer ALL questions.

6. What is meant by innovation?

7. Mention the four sectors of Mahalanobis model.

8. What is economic development?

9. Define capital formation.

10. What is meant by human development?

Section-C   (5×6=30 Marks)
Answer ALL questions, choosing either (a) or (b)

11.(a) Explain the Adam Smith theory   or
  (b) Discuss the Marxian theory.

12.(a) What are the assumptions of Harrod –Domar model? .   or
  (b) Explain the Solow model.

13. (a) Differentiate economic growth and economic development. or
  (b) What are the factors determining economic growth?

14.(a) Bring out the importance of capital formation.   or
  (b) Mention the advantages of labour intensive techniques.

15.(a) Analyse the theory of balanced growth   or
  (b) Explicate the Critical Minimum Effort theory.

Section- D   (3×10=30 Marks)
Answer any THREE questions.

16. Explain Rostow's stages of economic growth.

17. Discuss the Joan Robinson's model of growth.

18. Analyse the different measurements of economic development.

19. Examine the cost benefit analysis.

20. Discuss the Big-Push theory of growth.

Core Paper-8

PUBLIC ECONOMICS

Objectives:

The learning objective of this paper Public Economics is to acquaint the students with the vast array of fiscal institutions like tax systems, expenditure programmes, budgetary

procedures, stabilization instruments, debt issues, levels of government, etc., which raise a spectrum of issues arising from the operation of these institutions in general and Indian experience in particular.

Unit I

Role of Government - Allocation, distribution and stabilization functions; Changing role of government – Government as an agent for economic planning and development; Government as a tool for operational the planning process; Public goods, Private goods, Merit goods and Mixed goods; Market failure – imperfections, decreasing costs, externalities, public goods; uncertainty and non existence of future markets; Informational asymmetry – Theory of second best.

Unit II

Public Expenditure and *Taxation*– Wagner's law of increasing state activities; Wiseman–Peacock hypothesis; Pure theory of public expenditure; Structure and growth of public expenditure; Criteria for public investment; Social cost-benefit analysis – Project evaluation and estimation of costs. *Taxation*- Theory of incidence; Alternative concepts of incidence and effects of taxation – Allocative and equity aspects of individual taxes; Benefit and ability to pay approaches; types and measurement of taxable capacity; Theory of optimal taxation; Excess burden of taxes; Trade-off between equity and efficiency, Theory of measurement of deadweight losses; The problem of double taxation.

Unit III

Public Debt and Fiscal Policy - Classical views of public debt; Compensatory aspect of debt policy; Burden of public debt; Sources of public debt; Debt through created money; Public borrowings and price level; crowding out of private investment and activity; Principles of debt management and repayment. *Fiscal Policy* - Objectives and functions of fiscal policy; Interdependence between fiscal policy and monetary policy; Fiscal policy for stabilization – automatic Vs discretionary stabilization. Budget–Stages involved in the preparation, presentation and execution of government budget; Budgetary deficit and its implications; Zero-based budgeting, Balanced budget and multiplier; Corrective measures; Fiscal Responsibility and Budget Management Act (FRBM Act) and Expenditure Review Committee (ERC).

Unit IV

Fiscal Federalism–Principles of multi-level finance; Indian fiscal federalism; Assignment of functions, sources of revenue and devolution of resources and grants; Vertical and horizontal imbalance; Resource transfer from Union to states and to local bodies; Finance commissions and NITI Aayog - functions, objectives and role; Local finance - Decentralization of local self governments; functions and problems of local finance; Trends in Indian public finance, Fiscal reforms.

Unit V

Indian Public Finance – Indian tax system; Revenue of the Union, States and Local Bodies; Major Taxes in India – Direct and Indirect taxes, taxation of agriculture, expenditure tax; Reforms in Direct and Indirect taxes, taxes on services; Non-tax revenue of Centre, State and Local Bodies; Analysis of Central and State government budgets; Fiscal sector reforms in India – Chelliah Committee and Kelkar Committee Recommendations; Recent trends – Direct Tax Code; Incidence of major taxes in India – VAT, CENVAT, and GST.

References
1. R.A Musgrave & P.B.V. Musgrave, Public Finance in Theory and Practice, Tata Mcgraw Hill, New Delhi, 2008
2. DietmarWellisch, Theory of Public Finance in a Federal State, Cambridge University Press, 2004.
3. SudiptoMundle, Public Finance Policy Issues for India, Oxford University Press, 1998.
4. Sury.M.M, Finance Commissins of India, New Century Publications, 2015.
5. Nitya Tax Associates, Basics of GST, Taxmann Publications, 2016.
6. Mithani D.M., Principles of Public Finance and Fiscal Policy, Himalaya Publishing House, New Delhi, 1993.
7. Rajesh K. Jha, Public Finance, Pearson Publication, New Delhi, 2012.
8. Srivastava, D.K., Fiscal Federalism in India, HarAnand Publishers, New Delhi, 2000.

MODEL QUESTION PAPER
PUBLIC ECONOMICS

Duration: 3 Hours.   Max.: 75 Marks

Section -A   (5 X 1 = 5 marks)

Choose the correct answer. Answer all questions. Each question carries equal marks.

1. The main function of the government is
    a) allocation   b) distribution   c) stabilisation   d) All of these

2. The amount spent by the government on collective needs and wants is
    a) public expenditure b) public taxation   c) public debt   d) public cost

3. Which budgeting is a method of budgeting in which all expenses must be justified for each new period?
    a) Capital   b) Revenue   c) Zero-based   d) zero-closed

4. If the government is a multi-tiered, it is said to be which set up?
    a) federal   b) constituent   c) political   d) social

5. Major types of taxes are of _____ in number.
    a) one   b) two   c) three   d) four

Section - B

Write short answer. Answer all questions.   (5 X 2 = 10 marks)

6. Give one example for public good, private good, merit good and mixed good.
7. What is incidence of taxes?

8. Define public debt.
9. What is meant by fiscal federalism?
10. What do you understand by direct tax?

Section - C (5 X 6 = 30 marks)

Answer all questions. Answer should not exceed two pages.

11. a) Describe the role of externalities in the determination of scope of government activities.

(or)

b) Write short note on information asymmetrics.

12. a) What do you understand by Wagner's law of increasing state activities?

(or)

b) Explain various forms of shifting of incidenceof taxes.

13. a) What are the fiscal policies for stabilisation?

(or)

b) Writea short note on FRBM Act, 2003.

14. a) Distinguish between finance commission and NITI Aayog.

(or)

b) Explain the basic principles for efficient multi-level finance.

15. a) Explain goods and services tax.

(or)

b) Analyse the various sources of tax revenue in India.

Section - D (3 X 10 =30 marks)

Answer any three questions. Answer should not exceed three pages.

16. "The role of government as an agent for formulating economic planning and operationalising it varies from one kind of economic planning to the other" - Elaborate.

17. Describe the cannons of expenditure.

18. Describe the importance of public debt in accelerating economic development.

19. Discuss the nature, merits and demerits of resource transfers through tax sharing, grants and loans.

20. Write the views and recommendations of Tax Reform Committee for Indian fiscal sector.

CORE PAPERE-9

RESEARCH METHODOLOGY

Objective: To make the students understand the methods and steps of doing research in social sciences.

Unit I: Concepts in Research

Meaning – Nature and Scope - Objectives – Characteristics of Social Research – Types of Research Method – Criteria of Good Research – Importance and Limitations of Research - Problems of Research in Social Sciences.

Unit II: Research Methods and Research Design

Methods of Research – Classification of Research Methods – Historical Method- Case Study Method – Survey Method- Census and Sampling Survey – Sampling Method-

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Methods of Data Collection - Methods of Collecting Primary Data– Questionnaire and Schedule - Construction of Schedules and Questionnaire - Sources of Secondary Data - Meaning of Research Design – Criteria of a Good Research Design – Types of Research Designs – Steps involved in preparing a Research Design.

Unit III: Formulation and Testing of Hypothesis

Research Problem: Meaning – Sources – Criteria of a Good Research Problem - Identification of Research Problem– Statement of the Research Problem –Hypotheses: Meaning – Types – Sources – Functions – Characteristics of a Valid Hypothesis - Formulation and Verification of Hypothesis – Testing of Hypothesis – Uses of Hypothesis.

Unit IV: Tools of Analysis

Data Analysis – Coefficient of Variation – Univariate, Bivariate and Multivariate Analysis -- Correlation – Simple and Multiple Linear Regression Analysis - Inequality Measures (Gini Coefficient and Lorenz Curve) – Trend Analysis (Linear, Quadratic and Exponential) – $R2^-$ Analysis of Qualitative Data (Garrett and Guilford Methods – Rank Correlation) – Factor Analysis and Discriminate Analysis.

Unit V: Report Writing

Steps in Report Writing - Structure and General Format of a Research Report - Components of a Report – Foot Note – Tables – Diagrams – Quotations – Bibliography- Appendix - Steps in Organization – Prerequisites of Thesis writing – Mechanics of Thesis Writing.

REFERENCE BOOKS

1. Albaugh, R. W.   Thesis writing
                                        A Guide to Scholarly Style, Paterson,
                                        New Jersy, Little, Field, Adam.
2. Young P. V.   Scientific Social Surveys, Prentice
                                        Hall of India.
3. Goode, W J and P. F. Hatt   Methods in Social Research, Mc Graw
                                        Hill Book Company
4. Anderson et.al.,   Thesis and Assignment Writing,
                                        Willey Eastern Ltd.,
5. Madge, John   Tools of Social Science Longmans,
                                        Green and Co. Inc.
6. Wilkinson and Bandarkar   Methodology and Techniques of
                                        Social Research
7. C.R. Kothari   Research Methodology
                                        Wishwa Prakashan New Delhi.
8. Koutsoyannis, A.   Theory of Econometrics, Macmillan
                                        Education Ltd.,
9. Damondar N. Gujarathi   Basic Econometrics Mc Graw Hill
                                        International Edition

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Model Question Paper
Research Methodology

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Time: Three Hours   **Max. Mark: 75**

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Section- A   **(5×1=5 Marks)**
Answer ALL questions.

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1. A search for facts is called
    a) business   b) research   c) process   d) investigation
2. An intensive investigation of the study is known as
    a) case study   b) survey
    c) field study   d) analytical study
3. A tentative proposition formulated for empirical testing is called
    a) Research   b) Hypothesis
    c) Conceptual model   d) Research problem
4. The plan for drawing a sample from a population is
    a) sample design   b) research problem
    c) sampling   d) all the above
5. One of the sources of hypothesis is
    a) data collection   b) observation   c) interview   d) questionnaire

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Section-B   **(5×2=10 Marks)**
Answer ALL questions.

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6. Define Research.
7. What is meant by research design?
8. What is a foot note?
9. Define hypothesis?
10. What are the types of reports?

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Section-C   **(5×6=30 Marks)**
Answer ALL questions, choosing either (a) or (b)

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11. (a) What are the objectives of research?   or
   (b). List out the limitations of research.
12. (a) Write down the steps involved in preparing a research design.   or
   (b) Explain the different methods of data collection.
13. (a) Enumerate the criteria of a good research problem.   or
   (b) Mention the sources of hypothesis.
14. (a) What are the purposes of statistical analysis of research data?   or
   (b) Bring out the uses of multiple correlation and multiple regression.
15. (a) Explain the different components of a research report   or
   (b) What are the prerequisites of thesis writing?

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Section- D   **(3×10=30 Marks)**
Answer any THREE questions.

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16. Explain the different types of research method.
17. Discuss the merits and demerits of systematic sampling method.

18. Elaborate the types of hypothesis.
19. Explicate the principal component method of factor analysis.
20. Describe the steps involved in report writing.

Subject Elective-3

HEALTH ECONOMICS

Objectives

To enable the students to

1.   gain knowledge about health and health economics
2.   understand the demand for and supply of health care industry
3.   know the Production Cost , Health Policy and Health Programme

Unit-I Health Economics

Health: Meaning- definition-importance of health economics-Essential features of Health Economics-**Indicators of   health**- Health Care- Health care Services-Birth rate, Fertility rate, Death rate, IMR, CMR, MMR, Morbidity rate (Acute and Chronic), Disability Adjusted Life Year (DALY), Quality Adjusted Life Year (QUALY), Sex Ratio.

Unit-II Demand for Supply of Health and Medical Care and Health Care Industry
Demand for health care: Meaning – Demand for medical care- Purpose of demand analysis in medical care- Demand for medical care derived from the demand for health-Determinants of demand for medical care- Patient's factors and Physician factors- **Supply of health care:** Primary health centres **-Measures of health status**: Meaning - Determinants of health status-Demography factors-Economic factors- environmental factor- genetic factors.

Unit- III Health Production Cost and Market Failure
Health Care: Meaning- Health care Industry **-Short-run production function**: Production function of the representative firms- factors affecting the positions of the short-run cost curves. **Long run costs of Production**: Long run cost curves- long run cost minimization – the indivisibility of fixed inputs-**Market Failure:** Asymmetric information –Imperfect information

Unit–IV Cost –Benefit Analysis and health care systems

Cost identification analysis- economic efficiency –principle of cost- benefit analysis – use of cost- benefit analysis to make health care decisions- the value of life- the cost and benefits of medical technology –cost effectiveness analysis -**Health Expenditure** – Public & Private – Direct and Indirect – **Health Insurance** – Meaning – Concept of User Cost - types of insurance: Economics of Scale-blue cross-blue shield cost advantages.

Unit-V Health Policy and Health Care Programme

Health Policy of WHO- International Health care Plans: Core Plans, Outpatient plans, Maternity plans, Dental Plans, Repatriation plan- National Health Policy – NRHM, Health

as a State Subject- Tenth and Eleventh five year plans -Health Programme - National Rural Health Mission (NRHM). National Urban Health Mission (NUHM). Health for all by 2000 A.D. - Health for all in the 21st Century

Reference Books

1. Anand.N.K. and Shikha Goel., "Health Economics", Aitbs Publishers, India, 2012.
2. Barry, S.G., Bronowski, J., Fisher, J and Huxley, S.J., "Health and Economics", Doubleday&Company Inc., New York, 1965.
3. Feldestein, P.j., "Economics of Health Care", Cengage Learning India Private Limited, New Delhi, 2009.
4. Folland,Goodman and stano, "The Economics of Health and Health Care" Person Seventh Edition, Prentice Hall, New Delhi,2012.
5. Henderson,W.J.," health Economics and Policy", Third Edition, Thomson south-western, Mansan,.2007.
6. Santerre, E.r and Stephen P.N., "Health Economics: Theories, Insights and Industry studies", Fourth Edition, Thomson south-western, Mansan,2007.
7. Sharma, D.K. and Goyal, R.C., "Hospital Administartion and Human Resource Management", PHI Learning Private Limited, New Delhi, 2010.
8. Sroaff and Merra. "Child Health care Profreamms: Goals for New Millenium", First Edition, Adhyayan Publishers and Distributers, New Delhi, 2004.

Model Question Paper
Health Economics

Time: Three Hours   **Max. Mark: 75**
Section-A   (5 x 1 = 5 Marks)
Answer All Questions

1. Which one of the following way our body functions?
   d) **Mental Health**   b) Physical Health
   c) Social Health   d) Environmental Health
2. A public service providing medical care is called
   g) Health   b) Supply of Health
   b) Demand for health   d) **Health services**

3. People traveling to a country other than their own to obtain treatment is called
   j) Cultural tourism   b) Business tourism
   c) Medical tourism   d) Eco-tourism
4. Medical output in the short run production process is based on
   g) **Micro economics**   b) Macro economics
   c) Health economics   d) Indian economics
5. Which one of the following insurance covers the cost of individual's medical expenses?
   d) Life insurance   b) **Health insurance**
   c) Fire insurance   d) General insurance

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Section-B   **(5X2=10 Marks)**

Answer All Questions
6. Define 'Health Economics'.
7. What do you mean by health care?
8. Comprehend the term' mortality'.
9. Define 'production function'.
10. Apprehend the term 'Blue cross'.

Section-C   **(5X7=35 Marks)**

Answer All Questions
11. a) Discuss the determinants of health among non- elderly adults.   or
    b) Analyze the subject matter of health economics.

12. a) Describe the different segments of health care industry.   or
    b) Elucidate the limitations of health care administration.
13. a) Write a note on the functions of primary health centres.   or
    b) Elucidate the determinants of demand for medical care
14. a) Explain the production function of the representative firms   or
    b) Discuss the factors affecting the position of short –run cost curves of the
       representative firms.
15. a) Describe the structures of health insurance.   or
    b) Elucidate the principle of cost-benefit analysis of health care.

Section-D
Answer THREE Questions

(3X10=30 Marks)

16. Explain the objectives and functions of National Rural Health Mission.
17. Discuss the health care functions provided by the state and central governments.
18. Analyse the determinants of health status.
19. Describe the short run cost curves of the representative firms.
20. Write an essay on the cost and benefits of medical technology.

Subject Elective-3

HISTORY OF MODERN ECONOMIC ANALYSIS

Objectives
- to make a critical study of the economic theories of the past and economic ideas of
  the great economic thinkers.
- to understanding and appreciating the many controversial questions in the history of
  economic ideas and development of social thought.
- to study the history of economic analysis or history of economic thought, covering
  the analysis of economic ideas from Mercantilism to Keynesianism.

- to make the student of economics acquainted with the ideas and works of economists and thinkers who received Nobel Memorial Prize in Economics.

Module 1: Theory of Value, General Equilibrium, Game Theory, Welfare

Samuelson, Paul A- Hicks, John R - Arrow, Kenneth J. - Debreu, Gerard G. - Allais, Maurice

Coase, Ronald H. - Nash, John F. - Harsanyi, John C. - Selten, Reinhard

Module 2: Statics, Dynamics, Macro models, Econometrics

Frisch, Ragner - Tinbergen, Jan - Klein, Lawrence R. - Haavelmo, Trygve.

Quantitative Economic History: North, Douglas C. - Fogel, Robert W.

Module 3: Macroeconomics, Monetary Economics and Financial Economics

Friedman, Milton - Tobin, James - Modigliani, Franco - Markowitz, Harry M. - Sharpe, William F. - Miller, Merton H. - Scholes, Myron - Merton, Robert C.

Simon, Herbert A.- Decision-making within Economic organizations, Stigler, George J. - Industrial Economics, Buchanan, James M. - Theory of Public Choice, Backer, Gary S. - Extension of Economic Rationality to sister social sciences, Lucas, Robert J. - Rational Expectations Approach to Macro economics, Vickery, William J. - Asymmetric Information and Auction Theory, Mirrlees, James - Asymmetric Information and Tax Theory, Sen, Amartya K. - Applied Welfare Economics

Module 4: Economic Development and Economic Growth

Kuznets, Simon - Schultz, Theodore W. - Lewis, Sir W. Arthur - Solow, Robert M – Eliner Ostrom – Richard Thaler.

Module 5: Input-Output Analysis, Programming, Social Accounts, Economic and Social Systems

Leontief, Wassily W. - Kantorovich, Leonid - Koopmans C. Tjalling - Stone, Sir Richard - Hayek, Fredriech - Myrdal, Gunnar.

International Trade and Capital Movement: Meade, James E. - Ohlin, Bertil - Mundell, Robert A.

Other References

1. Eric Roll (1973), A History of Economic Thought, Faber & Faber Limited, London
2. Harry Landreth& David C. Colander (2001), History of Economic Thought, (4th Edition) Houghton Mifflin Company, Boston.
3. Hunt, E.K and Mark Lautzenheiser (2011), History of Economic Thought A Critical Perspective, M.E. Sharpe, England
4. Kumarappa, J.C (1951), Gandhian Economic Thought, SarvaSevaSanghPrakashan, Varanasi.
5. Lindbeck, A. (Ed.) (1992), Economic Sciences : Nobel Lectures, World Scientific.
6. Weintraiub, S. (Ed.) (1970), Modern Economic Thought, University of Pennsylvania.

Model Question Paper
History of Modern Economic Analysis

Time: Three Hours   **Max. Mark: 75**

Section- A   (5×1=5 Marks)
Answer ALL questions.

1. According to Walras, the ceteris paribus assumption
       a) keeps only the demand constant when we analyze the supply
       b) eliminates the interactions among markets that characterize real market processes
       c) characterizes general equilibrium
       d) is a necessary evil

2. Both Schumpeter and _____ believed change was endogenous to the economic system.
       a) Walras   b) Jevons   c) Marx   d)Marshall

3. _____ methods assume that what has occurred in the past will continue to occur in the future.
       a) Time series   b) Regression   c) Quantitative   d) Qualitative

4. Asymmetric information refers to circumstances in which
       a) both parties to a transaction have identical amounts of information.
       b) neither party to a transaction has any relevant information.
       c) one party to a transaction has more information than the other party.
       d) the riskiness of a transaction is greater than its expected return.

5. Function uses fixed proportion of inputs having no substitutability between them
       a) Leontief Production Function   b) Cobb-Douglas Production Function
       c) CES Production Function   d) VES Production function

Section-B   (5×2=10 Marks)
Answer ALL questions.

6. What do you mean by equilbrium?
7. Point out any two significance of Samuelson contributions to economics.
8. Define tax.
9. State Cobb-Douglas Production function.
10. Mention any two points of significance of international trade.

Section-C   (5×6=30 Marks)
Answer ALL questions, choosing either (a) or (b)

11. (a) What are the basic assumptions of Hicks's theory of economic history?   or
    (b). Explain the Golden Age concept of Kenneth J Arrow.

12. (a) Write a short note on the uses of econometrics.   or

    (b) Evaluate the role of kinship allocating domestic and social resources.

13. (a) State the criticisms against Lawrence. R theory of economic history.   or
    (b) Examine the contribution of Robert W to economics.

14. (a) Explain briefly the importance of economic organizations.   or
    (b) Elucidate the theory of Public Choice.

15. (a) Bring out the differences between economic development and economic growth.   or
    (b) Analyse the concept social accounting.

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Section- D   (3×10=30 Marks)
Answer any THREE questions.
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16. Critically evaluate the Game theory in economics.
17. Explain the role of quantitative models in economics.
18. Analyse the Asymmetric Information and Tax Theory.
19. Describe briefly about the Solow model of economic growth.
20. Discuss in detail Input- Output analysis.

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Non-Subject Elective-3

ECONOMICS OF TOURISM
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Objectives
1) To understand the scope, nature and tourism policy of India
2) To know the level of business in tourism sector.

Unit I: The Travel and Tourism Industry
        The nature and characteristics of travel and tourism industry – definition of tourism – types of tourism – issues of industry – tourist motivation – tour operation- planning travel and tourism – marketing in travel and tourism-society and culture – transport for travel and tourism.

Unit II: **Tourism policy of India**
        Investment in Indian tourism – Eco-tourism policy – Growth of tourism – sector in India – national tourism policy

Unit: III Tourism and Economic Development
        Economics of tourism – environmental management of tourism development – economic effects of tourism – economic impact analysis – Direct and Indirect effects of tourism earnings.

Unit: IV Travel and Tourism customer
        Internal and external customers – needs and wants of different customers – providing effective customer skills – interpersonal skills – communication skills – product knowledge – meeting different customer needs.

Unit: V Business in Travel and Tourism

        Marketing mix and business tourism – business travel management – benefits of business travel and tourism of destination – origin of business travel and tourism – Hotel staff management – nature of services – customer services in hospitality industry.

References Books:

1. Tourism, Travel, Hotel and Hospitality
   Author: Yaduraj Choudhary
   Random Publications, New Delhi
   ISBN 978 – 93 - 8631- 430 -7
2. New Facets of Tourism Management
   Author: Varinder Rama
   Random Publications, New Delhi
   ISBN 978 – 93 – 5111 – 942 – 5
3. Travel & Tourism
   Authors: Lindsey Taylor, Ray Barkar, Nicki Stephenson
   Colhins, London
   ISBN 978 – 000 – 71 – 9809 – 2
4. Travel and Tourism
   Author: Richard Sharplay
   Sage Publication, New Delhi
   ISBN 978 – 1 – 4129 – 2294 - 4

MODEL QUESTION PAPER

ECONOMICS OF TOURISM

TIME: 3 HOURS   **MAX MARKS 75**

PART A: ANSWER ALL QUESTIONS.   **5X1 = 5 MARKS**

1. When was India Tourism Development Corporation established?
2. The rich diversity in the flora and fauna with a blessing of the beautiful natural attraction has encouraged ----- Tourism.
3. India's Travel & Tourism sector ranks ----- in the world in terms of its total contribution in the country's GDP.
4. According to the India's statistical data Travel & Tourism generated -----% of India's GDP
5. Which type of tourism occupies first in Indian Tourism Market?

PART B : ANSWER ALL QUESTIONS   **5 X 2 = 10 MARKS**

6. Define Tourism.
7. Give any two objectives of Tourism.
8. Explain the term hospitality
9. Mention any five types of tourism
10. Differentiates Internal and External customers of tourism

PART C: ANSWER ALL QUESTIONS   5 X 6 = 30 MARKS

11. Bring out the different modes of transport employed in Tourism.
                              (or)
    Explain the nature and significance of tourism.
12. Describe the skills required to manage conflicts.
                              (or)
    Explain the process of communication in a modern service organization
13. Discuss the Elements of Tourism operations
                              (or)
    Analyse the nature and significance of quality management in tourism
14. What are the Direct and Indirect effects of tourism earnings?
                              (or)
    Examine the Environmental Management of Tourism Development.
15. Bring out the organization's of Hospitality operations in Tourism Management.
                              (or)
    Elucidate the food and beverage operations in Travel Management

PART D : ANSWER ANY THREE QUESTIONS.   10 X 3 = 30MARKS

16. Bring out the trends in the progress of Tourism in India.
17. Explain the economic and social implications of tourism.
18. Examine the impact of Globalisation on Organizational and multicultural communication.
19. Narrate the issues in managing tour programme successfully.
20. Discuss the procedure of establishing a tour operation company.

Non-Subject Elective-3

ECONOMICS OF GENDER AND DEVELOPMENT

Objectives

- to understand the gender biases in societal practices and development policies ; their impact on persistent gender inequalities.
- to realize the mitigating techniques of such inequalities and enhancing women's capabilities and entitlements.
- to provide students an understanding of the nature of the economic role of women and their contribution to the national economy on the basis of a scientific and non-sexist analysis.
- to provide an analysis of issues at the theoretical level and also with regard to specificity of issues prevailing in the Indian context.

Module 1: Introduction to Gender Studies

Importance and concepts of women studies - Women in patriarchal and matriarchal societies and structures, patrilineal and matrilineal systems and relevance to present day society in India; Economic basis and functioning of patriarchy in developed and LDCs, particularly India; Gender bias in the theories of value, distribution, and population.

Demography of female population: Age structure, mortality rates, and sex ratio - Causes of declining sex ratios and fertility rates in LDCs and particularly India - Theories and measurement of fertility and its control; Women and their access to nutrition, health, education, and social and community resources, and their impact on female mortality and fertility, economic status, and in work participation rate.

Module 2: Women in Decision Making

Factors affecting decision making by women; property rights, access to and control over economic resources, assets; Power of decision making at household, class, community level; Economic status of women and its effect on work-participation rate, income level, health, and education in developing countries and India; Role of kinship in allocating domestic and social resources.

Conceptualization of Women's Work: Concept and analysis of women's work: Valuation of productive and unproductive work; visible and invisible work; paid and unpaid work; economically productive and socially productive work - Economic status, private property, and participation of women in pre-industrial and industrial societies - Female contribution to National Income.

Module 3: Women and Labour Markets

Factors affecting female entry in labour market; Supply and demand for female labour in developed and developing countries, particularly India; Studies of female work participation in agriculture, non-agricultural rural activities, informal sector, cottage and small-scale industries, organized industry, and services sector; Wage differentials in female activities; Determinants of wage differentials; gender, education, skill, productivity, efficiency, opportunity; Structures of wages across regions and economic sectors.

Module 4: Women, Technology and Environment

Impact of technological development and modernization on women's work participation in general and in various sectors such as agriculture, non-agriculture rural activities, small and cottage industries and organized industry - Female activities and ecological and environmental concerns: the two way relationship - Role of new technologies for helping women - Provision of information and training for simple harvesting of economic services.

Module 5: Social Security and Social Protection for Women

Social security of women: entitlements, ensuring economic independence and risk coverage, access to credit and insurance markets; Role of voluntary organizations, self help groups in providing social security; Labour market biases and gender discrimination; effectiveness of collective bargaining; Review of legislation for women's entitlements, protection of property rights, social security - Schemes for safety net for women; Need for female labour unions; affirmative action for women and improvement in their economic and social status.

Gender Planning, Development Policies and Governance: Gender and development indices; Mainstreaming gender into development policies; Gender planning techniques; Gender sensitive governance; Paradigm shifts from women's well being to women's empowerment; Democratic decentralization (panchayats) and women's empowerment in India.

Reference Books

1. Boserup E. (1970), Women's Role in Economic Development, George Allen and Unwin, London.
2.Desai, N. and M.K. Raj. (Eds.) (1979), Women and Society in India, Research Centre for Women Studies, SNDT University, Bombay.
3.Government of India (1974), Towards Equality — Report of the Committee on the Status of Women in India, Department of Social Welfare, Ministry of Education and Social Welfare,
New Delhi.
4.Krishnaraj, M., R.M. Sudarshan and A. Shariff (1999), Gender, Population and Development,Oxford University Press, New Delhi.
5.Seth, M. (2000), Women and Development : The Indian Experience, Sage Publications, NewDelhi.
6. Srinivasan K. and A. Shroff (1998), India : Towards Population and Development Goals, Oxford University Press, New Delhi.
7.Venkateswaran, S. (1995), Environment, Development and the Gender Gap, Sage Publications, New Delhi.
8.Wazir, R. (2000), The Gender Gap in Basic Education : NGOs as Change Agents, Sage Publications, New Delhi.

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Model Question Paper
Economics of Gender and Development

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Time: Three Hours   **Max. Mark: 75**

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Section- A   **(5×1=5 Marks)**
Answer ALL questions.

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1. Gender roles refer to
   a) the rights, responsibilities, expectations, and relationships of women and men.
   b) the subordination of women based on the assumption of superiority of men.
   c) chromosomal and hormonal differences in the behaviour of men and women.
   d) None of the above.

2. Men currently outnumber women in _____ programs.
    a) doctoral   b) education   c) allied health field
    d)psychology

3. Women are over-represented in _____ work because it often provides greater flexibility to meet family responsibilities.
    a) private sector   b)semiskilled   c) public sector
    d)contingent

4. The _____ perspective combines the exploitation of women by capitalism with patriarchy in the home in its analysis of gender inequality. [Hint]
    a)democratic feminist   b) radical feminist
      c)socialist feminist   d) liberal feminist

5. In which year did the amendment act come into force?
    a) 1991   b) 1961   c) 1998   d) 1976

Section-B   **(5×2=10 Marks)**
Answer ALL questions.

6. What is meant by sex ratio?
7. Describe work participation rate.
8. Define Labour market.
9. What do you mean by cottage industries?
10. Mention the importance of trade union.

Section-C   **(5×6=30 Marks)**
Answer ALL questions, choosing either (a) or (b)

11. (a) Explain the concept and importance of women studies.   or
  (b). What are the causes of declining sex ratios?

12. (a) Write a short note on property rights of women in India.   or
  (b) Evaluate the role of kinship allocating domestic and social resources.

13. (a) State the factors affecting female entry in labour market.   or
  (b) Examine the female work participation in informal sector.

14. (a) Explain briefly the impact of technological development and modernization on women's work participation.   or
  (b) What is the role of women in Indian agriculture?

15. (a) Elucidate labour market biases and gender discrimination. or
  (b) Explain the role of SHGs in promoting the economic condition of women.

Section- D   **(3×10=30 Marks)**
Answer any THREE questions.

16. Discuss the economic basis and functioning of patriarchy in developed and LDCs.
17. Explain the role of women in contributing national income.
18. Analyse the concept of wage differentials in female activities.
19. Examine the Female activities in the ecological and environmental concerns.
20. Critically evaluate the role of panchayats in the empowerment of women in India.

Core Paper-10
INTERNATIONAL ECONOMICS

Objectives

1. To provide a deep understanding about the broad principles and theories, which tend to govern the free flow of trade in goods, services and capital - both short-term and long-term- at the global level.

2. To prepare the students about the relevance and limitations of these principles, the contents of the paper spread over different modules, lay stress on the theory and nature of the subject which, in turn, will greatly help them to examine the impact of the trade policies followed both at the national and international levels as also their welfare implications at macro level and the distribution of gains from trade to North and South with particular reference to India.

3. To train the students about the likely consequences on income, employment and social standards and possible policy solutions.

Module 1: Theory of International Trade

The pure theory of international trade — Theories of absolute advantage, comparative advantage
and opportunity costs, modern theory of international trade; Theorem of factor price equalization; Empirical testing of theory of absolute cost and comparative cost — Heckscher-Ohlin theory of trade. Kravis and Linder theory of trade, Role of dynamic factors, i.e., changes in tastes, technology and factor endowments in explaining the emergence of trade; The Rybczynski theorem —Leontief Paradox.

Module 2: Measurement of Gains and Theory of Interventions

Measurement of gains from trade and their distribution; Concepts of terms of trade, their uses and limitations; Hypothesis of secular deterioration of terms of trade, its empirical relevance and policy implications for less developed countries; Trade as an engine of economic growth; Welfare implications — Empirical evidence and policy issues; The Theory of Interventions (Tariffs, Quotas and non-tariff barriers); Economic effects of tariffs and quotas on national income, output, employment, terms of trade, income distribution; Balance of payments on trading partners both in partial and general equilibrium analysis. The political economy of non-tariff barriers and their implications; nominal, effective and optimum rates of tariffs — their measurement, impact and welfare implications; Trade under imperfectly competitive market.

Module 3: Balance of Payments

Meaning and components of balance of payments; Equilibrium and disequilibrium in the balance
of payments; The process of adjustment under systems of gold standard, fixed exchange rates
and flexible exchange rates; Expenditure-reducing and expenditure-switching policies and direct

controls for adjustment; Policies for achieving internal and external equilibrium simultaneously
under alternative exchange rate regimes; A critical review of the monetary approach to the theory
of balance of payments adjustment; Foreign trade multiplier with and without foreign repercussions and determination of national income and output; Relative merits and demerits of fixed and flexible exchange rates in the context of growth and development in developing countries.

Module 4: The Theory of Regional Blocs

Forms of economic cooperation; Reforms for the emergence of trading blocks at the global level;
Static and Dynamic effects of a customs union and free trade areas; Rationale and economic progress of SAARC/SAPTA and ASEAN regions. Problems and prospects of forming a customs
union in the Asian region. Regionalism (EU, NAFTA); Multilateralism and WTO; Rise and fall of gold standard and Bretton-woods system; Need, adequacy and determinants of international
reserves; Conditionality clause of IMF; Emerging International Monetary System with special
reference to Post-Maastrishit developments and developing countries; Reform of the International Monetary System, India and developing countries; Theory of short-term capital movements and East-Asian Crisis and lessons for developing countries; International trade and financial institutions-Functions of GATT/WTO (TRIPS, TRIMS), UNCTAD, IMF, World Bank and Asian Development Bank — Their achievements and failures; WTO and World Bank from the point of view of India.

Module 5: Trade Policies in India

Trade problems and trade policies in India during the last five decades; Recent changes in the
direction and composition of trade and their implications; Rationale and impact of trade reforms
since 1991 on balance of payments, employment and growth. Problems of India's international debt; Working and regulations of MNCs in India; Instruments of export promotion and recent import and export policies and agenda for future.

BASIC READING LIST

1. Bhagwati, J. (Ed.) (1981), International Trade, Selected Readings, Cambridge, University Press, Massachusetts.
2. Carbough, R.J. (1999), International Economics, International Thompson Publishing, New York.
3. Chacholiades, M. (1990), International Trade : Theory and Policy, McGraw Hill, Kogakusha,Japan.
4. Dana, M.S. (2000), International Economics : Study, Guide and Work Book, (5th Edition),Routledge Publishers, London.
5. Dunn, R.M. and J.H. Mutti (2000), International Economics, Routledge, London.

6. Kenen, P.B. (1994), The International Economy, Cambridge University Press, London.
7. Kindleberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.
8. King, P.G. (1995), International Economics and International Economic Policy : A Reader,McGraw Hill International, Singapore.
9. Krugman, P.R. and M. Obstfeld (1994), International Economics : Theory and Policy, Glenview,Foresman.
10. Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J., New York.
11. Soderston, Bo (1991), International Economics, The Macmillan Press Ltd., London.

Model Question Paper
International Economics

Time: Three Hours   **Max. Marks: 75**

Section- A   **(5×1=5 Marks)**
Answer ALL questions.

1. Which theory holds that nations should produce those goods for which it has the greatest relative advantage?

     a) The factor endowment theory   b) The theory of relative advantage

     c) The theory of absolute advantage   d) Balance of payments theory

2. Which of the following holds that a government can improve the economic well-being of a country by encouraging exports and discouraging imports without a reliance on previous metals?

     a) Neo-mercantilism   b) The Leontief paradox

     c) Quotas   d) mercantilism

3. A tariff is

a) A restriction on the number of export firms   b) Limit on the amount of imported goodsc) Tax and imports   d) (b) and (c) of above

4. Government policy about exports and imports is called

     a) Monetary policy   b) Fiscal policy

     c) Commercial policy   d) Finance policy

5. The number of countries in the SAARC region is

     a) 5   b) 6   c) 7   d) 8

Section-B   **(5×2=10 Marks)**
Answer ALL questions.

6. State factor endowment theorem.
7. What do you mean by quotas?
8. What is Balance of Payments?
9. Define accelerator.
10. What is international debt?

Answer ALL questions, choosing either (a) or (b)
11. (a) Discuss the theory of absolute advantage   or
     (b). Explain the Kravis and Linder theory of trade.
12. (a) Give a brief account on terms of trade.   or
     (b) Briefly explain theory of intervention.
13. (a) Narrate the equilibrium and disequilibrium in the balanceof payments.   or
     (b) Analyse the critical review of the monetary approach to the theory of balance of
payments adjustment.
14. (a) Evaluate the functions of SAARC.   or
     (b) Give a brief note on 'international trade and financial institutions'.
15. (a) Describe the trade problems in India during the last five decades.   or
     (b) Examine the instruments of export promotion.
Section- D   (3×10=30 Marks)
Answer any THREE questions.
16. Critically examine the Heckscher-Ohlin theory of trade.
17. Examine the economic effects of tariffs and quotas.
18. Explain the expenditure-reducing and expenditure-switching policies.
19. Evaluate the functions, working achievements and failures of IMF.
20. Write a brief note on trade policies in India.
Core Paper-11

MONETARY ECONOMICS

Objectives

- to enable the students to learn the basic concepts in Monetary economics
- to make the students to understand the demand for money , supply of money,
  financial market and monetary policy

Unit I **Money, Interest and Income**

Heterogeneity of Interest Rate Determination – Neo-Classical, Keynesian and IS-LM
curve Approach – Rate of interest and investment, Income and output – Administered
Interest Rates and Market Determined Interest Rates – Interest rates and Demand for Money
– Implications for Monetary Management.

Unit II **Demand for Money**

Analysis of the demand for money – transactions demand for money – Baumol's
asset demand for money – Keynes speculative demand for money – Friedman's restatement
– Gurley and Shaw thesis (Inside and Outside Money)

Unit III **The Nature of Money Supply**

Money Supply – Approaches to the definition of money supply, Components of money supply – The H theory of money supply, Money multiplier process, determinants of money multiplier; Keynes' income theory of money; Neo-classical theory of money

Unit IV **Financial Market**

Nature and Functions of financial market – Money market – Meaning, characteristics and constituents, functions, structure and institutions of money market – Bankers – Weakness of Indian money market – measures for improvement – recent concepts and instruments of financial market – capital market – Sensex and Nifty – SEBI and its role.

Unit V **Monetary Policy**

Introduction – Goals – Targets – Indicators and Instruments – Limitations of Monetary Policy - The Time Lag in the Monetary Policy – Efficiency of Monetary Policy – Monetary Policy with informal Financial Markets – Fiscal Co-ordination – Significance, Opportunities and challenges – The IMF, A World Central Bank.

Reference Books
1. Gupta, S.B. 2001, Monetary Economics, S. Chand and co. Ltd. New Delhi
2. Burton, Maureen and Bruce Brown, The Financial System and the Economy Principles of Money and Banking, Prentice Hall of India, New Delhi.
3. Mishkin, F. 2007, Monetary Policy Strategy, Prentice Hall of India, New Delhi
4. Hajala T.N. (1998) Monetary Economics, Kanark Publishes Pvt. Limited, New Delhi
5. Suraj B. Gupta (2004) Monetary Economics; Institutions, Theory and Policy, S. Chand & Company Limited, New Delhi.
6. Bhole, L.M. 2002 Financial Institutions and Markets, Tata McGraw Hill&Co. New Delhi
7. Miskin, F. 2003, The Economics of Money: Banking and Financial Markets, Addison Wesley Longmate, New York.
8. Robbinson, R.I 1981 Financial Markets, McGraw Hill, ondon
9. Thomas, M.et. al 1984 Money, Banking and the Economy, W.W. Norton and Company, New York.
10. Hagger, A.J. 1977 Inflation Theory and Policy, London: The Macmillan Press Ltd
11. Shubik Martin "The Theory of Money and Financial Institutions: (1999) Volume I and II Cambridge, the MIT Press

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MODEL QUESTION PAPER

MONETARY ECONOMICS

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TIME 3 HOURS   **MAX MARKS 75**

**PART A: CHOOSE THE CORRECT ANSWER. ANSWER ALL QUESTIONS.
5X1 = 5MARKS**

1. Which of the following would not be considerED as near-money?

a) Time Deposits   b) Saving and Loans

    c) Treasury bills   d) Demand deposits

2. 'High-powered' money is

    a) Only banks' reserves with the Central Bank   b) All bank loans

    c) Loan and security of banks   d) Rupee held as legal bank reserves

3.

4. Bank Rate policy is one of the quantitative credit control methods. True/False

5. Inflation is a situation is which the -------- consistently rises.

6. ------- is a Bankers' Bank.

PART B: SHORT ANSWER QUESTIONS. ANWER ALL QUESTIONS.

5 X 2 = 10MARKS

7. What is meant by Value of Money?
8. Name any of the four term financing institution in India.
9. What is meant by minimum reserve system?
10. Define money supply.
11. What are the salient features of Paper Standard?

PART C: ONE PAGE QUESTIONS. ANSWER ALL QUESTIONS.

5 X 6 = 30 MARKS

12. What are the various systems of note issues?   (or)
    Examine Gold standard.
13. Examine the evolution of Indian currency system.   (or)
    Compare the objectives and methods of monetary policy.
14. Examine the static and dynamic functions of money supply.   (or)
    Give an account of the determinants of money supply
15. Explain Sensex and Nifty.   (or)
    Discuss the functions of stock market.
16. How can inflation be controlled?   (or)
    Examine IS-LM curve approach.

PART D: ESSAY QUESTIONS. ANSWER ANY THREE QUESTIONS.
10 X 3 = 30MARKS

17. What is Money? Describe the role of money.
18. Explain the process of evolution of currency system in India.
19. Discuss Friedman's restatement of the Quantity theory.
20. Explain Keynes' income theory of Money.
21. Discuss the Characteristics, constituents, functions and structure of money market.

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Core paper-12
COMPUTER APPLICATION IN ECONOMICS

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Objectives of the Course:

The objective is to provide students with new skills that they can immediately use in their studies and that are fundamental to enter the job market: to structure, process, analyze data and effectively communicate information in order to solve managerial problems and support decision-making processes.

UNIT 1: Introduction to Computers and Operating System

Computers and components: Hardware and Software – Basic hardware components: Input/Output Devices – Essential Software Components: Operating System Vs Application softwares - Graphical User Interface(GUI) based Operating Systems(OS) – Features and Merits of Windows XP – Uses and applications of Windows Explorer.

UNIT 2: Word Processing in MS Word

Introduction to Word Processors- Uses and Features – Merits of MS Word - Parts of MS Word Window – MS Word Menus and Toolbars - MS Word Documents: Creation, Saving, – Font, Paragraph, Page and document settings – Different Views and Uses: Print Layout, Full Screen Reading, Web Layout, Outline and Draft Views of Window – Reference and Review Features - Tables, Equations and Pictures: Creation and Formatting (Equation creation with fieldcodes only).

UNIT 3: Matrix Algebra, and Meaning & applications of Data base Concepts in MS Excel

Introduction to Spreadsheets – Uses and Features – Merits of MS Excel- Parts of Excel Window – Menus and Toolbars of MS Excel – Different Mouse Pointers used MS Excel – Entries in Cells and Formatting numbers in cells - Referencing – Elementary Statistical functions in MS Excel (Sum, Average, Standard Deviation, Log and Antilog only).

Matrix Algebra: Define objects – using Matrix Array functions: Matrix Addition, Matrix Subtraction, Matrix Multiplication, Transposition, Determinants, Matrix Inversion – solving system of equations with matrix array functions: matrix inversion method and Cramer's rule.

Concept of data, record and file - Data structures and Data Matrix - Elementary Data Creation using data forms - Data tools: Data Validation, Sorting, Filtering & Removing Duplicates.

UNIT 4: Statistical Analysis using SPSS / EViews

Introduction to SPSS – Different SPSS Windows : Data Editor Window and Output viewer Window – Data Editor Window: data and variable views - Creating SPSS data files -

Creating the data and meta data - Variable types, names and labels – Data, Transform ad Analyze Menus in SPSS – Basic data analysis tools in SPSS : Frequency tables and descriptive tables (univariate) .

Introduction to EViews – Data Creation in E-Views – Application to Regression Analysis - Estimation of Consumption Functions, Production Functions and Cost Functions.

UNIT 5: Internet Applications

Definition and uses of Internet – Salient features – Accessing Economics journals, Economic working papers and other Resources of Economics in the internet. Data search from important Government Websites - Data sources - www.gov.ac.in, www.rbi.org and www.mospi.nic.in/ - Using Open source Economic materials - Economics Newsgroups / Listserv groups and Blogs for economists – Important institutional and government websites.

Reference

1. Lipschultz, M.M. and S. Lipschultz (1982), **Theory and Problems of Data Processing**, Schum's Outline Series, McGraw Hill, New York. (Module II)

2. Mishra, S K and J C Binwal (1991). **Computer Applications in Social Science Research**, Vikas, Delhi.

3. Rajaraman V., **Introduction to Computers**, PrenticeHall India, 1991. (Module I)

4. Saxena S., **A First course in Computers 2003 Edition**, Vikas Publishing House Pvt. Ltd., 2009.

5. Vincent Kiernan, **Writing your Dissertation with Microsoft Word: A step by Step Guide**, Alexandria: Quality Books, 2005

SUPPLEMENTARY INSTRUCTIONAL MATERIALS:

Software: Office 2010: MS WORD, MS EXCEL, Mozilla Firefox, SPSS and EViews.

Video

- Explore Researcher in Microsoft Word
    - https://www.youtube.com/watch?v=3BWEyN3G56c
- Creating Research and Scientific Documents Using Microsoft Word
    - https://www.youtube.com/watch?v=kIPOH30xuVU
- How to write a research paper with MS WORD Office
    - https://www.youtube.com/watch?v=FATPiVziLY8
    - https://www.youtube.com/watch?v=2wrBW2ixI-s

Email List

- SPSSX-L@LISTSERV.UGA.EDU

Model Question Paper

COMPUTER APPLICATIONS IN ECONOMICS

Duration: 3 Hours   Total: 75 Marks

PART – A   (5 x 1 = 5marks)

Answer ALL Questions. Pick up the correct answer from the option given.

1. Which one the following is considered the input devices in a computer.
   (a) Type writer (b) Monitor (c) Mouse (d) Printer
2. Identify the hardware in the computer
   (a) Search Engine (b) Windows Explorer (c) Operating System (d) Keyboard
3. Which one the following is not an Operating System?
   (a) Linux (b) Apple Mac (c) Google Chrome (d) Ubuntu
4. What is the disadvantage of MS Word over the typewriters?
   (a) User can make changes without retyping the entire document.
   (b) User can easily correct typing mistakes.
   (c) User can easily delete text from document.
   (d) High chance of technical snag.
5. Which one of the following is not a word processing software
   (a) WordStar (b) WordPerfect (c) Microsoft Word (d) Microsoft Excel

PART- B   (5 x 2 = 10 marks)

6. What is spread sheet?
7. State any two types of windows.
8. What do you mean by SPSS?
9. What are the types of search engines?
10. Define internet.

PART – C   (5 x 6 = 30 marks)

Answer either (a) or (b) in each question in not exceeding TWO page.

Each question carries FIVE marks.

11. a. What is Hardware in a computer? Illustrate with examples.
    b. Draw the windows explorer and mark its various components
12. a. Explain the feature of MS Windows in short.
    b. What is an operating system? Briefly explain about different operating systems you know.
13. a. Draw the MS Word Window? Explain the various components
    b. Explain the Equation fieldcode system in MS Word.
14. a. Briefly explain the functions and formula option available in MS Excel.
    b. Describe various mouse pointers found in MS Excel.
15. a. Write a short note on components of Internet
    b. Write briefly about the Search Engines.

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PART – D   (3 x 10 = 30 marks)

Answer any THREE questions in not exceeding THREE pages.

Each question carries TEN marks.

16.   Write a note on the following items
      a. CPU   b. Input and Output devices
      c. Storage devices   d. Software
17.   Write an essay on Operating Systems.
18.   Explain the Tools bar in MS Word? Explain the buttons in Formatting tool bar.
19.   Draw the MS Excel Window. Explain the Standard tool bar in MS Excel.
20.   Discuss the uses of internet in general and in economics.

Subject Elective-4
ENVIRONMENTAL ECONOMICS

Objectives
   1. To provide some insight into the application of economic theory in the design and implementation of public policy related to the management of environment;
   2. To apply economic theories to solve the environmental social issues.

Unit I: Introduction and Concepts
Meaning and Definition - Scope of Environmental Economics – Eco-system – Nexus between Economics and Environment – The Principle of Material Balance –Market Failure- Private versus Social Cost – Entropy – Ecological balance – Trade-Off between Economic Growth and Environment- Sustainable development – Externalities.- Environmental Quality as a Public Good

Unit II: Measurement of Environmental Values
Use values; Option values and non-use values; Valuation methods -Methods based on observed market behaviour; Hedonic property values and household production models (travel cost method and household health production function), Methods based on response to hypothetical markets, contingent valuation methods.

Unit III: The Theory of Environmental Policy
Environmental externalities -Pigouvian taxes and subsidies, marketable pollution permits and
mixed instruments (the charges and standards approach), Coase's bargaining solution and collective action; Informal regulation and the new model of pollution control, Monitoring and enforcement of environmental regulation, Environmental institutions and grass root movements; Global environmental externalities and climatic change- Tradable pollution permits and international carbon tax, Trade and environment in WTO regime.

Unit IV: Economics of Natural Resource Management and Sustainable Development
Theories of optimal use of exhaustible and renewable resources; Environmental and development trade off and the concept of sustainable development; Integrated environmental and economic accounting and the measurement of environmentally corrected GDP; Macroeconomic policies and environment.

Unit V: Environmental and Natural Resource Problems in India

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

REFERENCE

* Baumol, W.J. and W.E. Oates (1988), The Theory of Environmental Policy, (2nd Edition), Cambridge University Press, Cambridge.
* Bromely, D.W. (Ed.) (1995), Handbook of Environmental Economics, Blackwell, London.
* Fisher, A.C. (1981), Resource and Environmental Economics, Cambridge University Press, Cambridge.
* Hanley, N., J.F. Shogern and B. White (1997), Environmental Economics in Theory and Practice, Macmillan.
* Hussen, A.M. (1999), Principles of Environmental Economics, Routledge, London.
* Jeroen, C.J.M. van den Bergh (1999), Handbook of Environmental and Resource Economics,Edward Elgar Publishing Ltd., U.K.
* Kolstad, C.D. (1999), Environmental Economics, Oxford University Press, New Delhi.
* Pearce, D.W. and R. Turner (1991), Economics of Natural Resource Use and Environment,John Hopkins University Press, Baltimore.
* Perman, R. Ma and J. McGilvary (1996), Natural Resource and Environmental Economics,Longman, London.
* Sankar, U. (Ed.) (2001), Environmental Economics, Oxford University Press, New Delhi.
* Tietenberg, T. (1994), Environmental Economics and Policy, Harper Collins, New York.
* Eugine T. (2005): "Environmental Economics", Vrinda Publications, Pvt. Ltd, New Delhi.
* M. Karpagam (2000) „Environmental Economics" Sterling Publisher Pvt.Lyd. New Delhi

Model Question Paper
Environmental Economics

Time: Three Hours   **Max. Mark: 75**

Section- A   (5×1=5 Marks)
Answer ALL questions.

1. The word 'Environment' was derived from
   a) Latin word   b) French word   c) American word   d) London word
2. Environmental degradation is due to
   a) Human beings   b) climate change
   c) excess use of environmental goods   d) all of three
3. The divergence between the private cost and social cost is called as

a) externality   b) impact   c) incidence   d) market failure

4. Coal and petroleum are classified as
    a) exhaustible renewable resources   b) exhaustible non-renewable resources
    c) inexhaustible resources   d) national resources.

5. The greatest happiness of the greatest number is
    a) optimality condition   b) Pigou's optimality
    c) Pareto optimality   d) point of bliss

Section-B   (5×2=10 Marks)
Answer ALL questions.

6. Define the term 'environment'.
7. Define the concept of ecosystem.
8. What is externality?
9. What do you mean by optimal use of exhaustible and renewable resources?
10. Write a short note on People's participation in the management of common and forest lands.

Section-C   (5×6=30 Marks)
Answer ALL questions, choosing either (a) or (b)

11. (a) Discuss the functions of ecosystem   or
    (b).Explain the principle of material balance.
12. (a) Give a brief account on Option values and non-use values.   or
    (b) Briefly explain hypothetical markets?
13. (a) Narrate type of externalities.   or
    (b) Analyze the Contingent Valuation approach of valuing environmental benefits.
14. (a) Evaluate the theories of optimal use of exhaustible and renewable resources.   or
    (b) Explain the causes of environmental degradation.
15. (a) Describe the mechanism for environment regulation in India.   or
    (b) Suggest the policies and tools for controlling pollution.

Section- D   (3×10=30 Marks)
Answer any THREE questions.

16. Enumerate the meaning, evolution and the nature of sustainable development.
17. Critically examine the Hedonic pricing method of property values.
18. Discuss the various types of pollution controlling measures used in India.
19. Briefly explain trade and environment in WTO regime.
20. Analyse the various laws enacted in India to protect the environment.

Subject Elective-4
DEMOGRAPHY

Objectives
- to make the students aware of the importance of population in economic development and the various theories that explain the growth of population in a country.
- to enlighten the student on the quantitative and the qualitative aspects and characteristics of the population through various demographic techniques.

- to acquire a knowledge in gender characteristics of the population.
- to understand the dynamics of the change in migration and urbanization.
- to expose the students to sources of population and related characteristics as also to the rationale, need and evolution of population policy.

Module 1: Population and Development

Meaning and scope of demography; Components of population growth and their inter-dependence; Measures of population change; Structure, distribution and sources of population data; Theories of population - Malthus, Optimum theory of population; Theory of demographic transition - Views of Medows, Enke and Simon; Population and development.

Module 2: Structure of Population

Population trends in the twentieth century; Population explosion - Threatened or real, distant or imminent; International aspects of population growth and distribution; Pattern of age and sex structure in more developed and less developed countries; Determinants of age and sex structure; Demographic effects of sex and age structure, economic and social implications; Age pyramids and projections - Individual aging and population aging.

Module 3: Fertility, Nuptiality and Mortality

Importance of study of fertility - Total fertility rate, Gross reproduction rate and net reproduction rate; Levels and trends of fertility in more and less developed countries; Factors affecting fertility - Socio-economic factors, economic status, health, education, nutrition, caste, religion, race, region, rural-urban and status of husband and wife; Nuptiality - Concept and analysis of marital status, single mean age at marriage; Synthetic cohort methods; Trends in age at marriage; Mortality -Death rates, crude and age-specific; Mortality at birth and infant mortality rate; Levels and trends in more and less developed countries; Sex and age pattern of mortality; Factors for decline in mortality in recent past; Life table - Construction and uses; Concepts of stable population; Methods of population projection.

Demographic Data Base in India: Study of census in India-Methodology and characteristics of census; Nature of information collected in 1971, 1981, 1991, 2001 and 2011 census in India National Family Health Survey 1, 2,3 and 4 and Rapid Household Survey; Changing characteristics of population in India; Population growth rates, trends and regional variations in sex ratio; Age structure of population, foetal, infant and child mortality rates; Maternal mortality rates; Life expectancy; Appraisal of Kerala model;

Module 4: Migration and Urbanization

Concept and types - Temporary, internal and international; International migration - Its effect on population growth; Factors affecting migration; Theories of migration related to internal migration; Urbanization - Growth and distribution of rural-urban population in developed and developing countries.

Module 5: Population and Development with Reference to India

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

Population Policy in India: Evolution of population policy in India - The shift in policy from population control to family welfare, to women empowerment; Family planning strategies and their outcomes; Reproductive health, maternal nutrition and child health policies;

Population and strategies for human development of different social groups; Social impact of new reproductive technologies and their regulation; The new population policy; Tasks before the National Population Commission.

Reference Books

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2. Bose, A. (1996), India's Basic Demographic Statistics, B.R. Publishing Corporation, New Delhi
3. Bogue, D.J. (1971), Principles of Demography, John Wiley, New York
4. Chenery H. and T.N. Srinivasan (Eds.) (1989), Hand Book of Development Economics, Vol.1 & 2 Elsevier, Amsterdam.
5. Choubey, P.K. (2000), Population Policy in India, Kanishka Publications, New Delhi.
6. Coale A.J. and E.M. Hoover (1958), Population Growth and Economic Development in Low Income Countries: A Case Study of India's Prospects, Princeton University Press, Princeton.
7. Gulati, S.C. (1988), Fertility in India: An Econometric Study of a Metropolis, Sage, New Delhi.
8. Simon, J.L. (1992), Population and Development in Poor Countries, Princeton University Press.
9. Srinivasan, K. (1998), Basic Demographic Techniques and Applications, Sage, New Delhi
10. Srinivasan, K. and A. Shariff (1998), India: Towards Population and Demographic Goals, Oxford University Press, New Delhi
11. Sryrock, H. et. al (1973), The Methods and Materials of Demography, US Department of Commerce, Washington, D.C.
12. United Nations (1973), The Determinants and Consequences of Population Trends, Vol. 1,UNO Publications, New York
13. .Jhingan, M.L. Bhatt B.K., Desai J.N. Demography,Vrinda Publications Pvt.Ltd, Delhi – 2011.
14. Asha, A.Bhende, Tara Kanitkar, Principles of Population Studies, Himalaya Publishing House, Mumbai, 2010.
15. Jennifer Hickes Lundquist, Douglas L.Anderton, David Yaukey, Demography Study of Human Population, Waveland, 2015.

16. Dudley L. Poston, Jr., Leon F. Bouvier, Population and Society: An Introduction to Demography, Cambridge University Press, 2010.

Model Question Paper
Demography

Time: Three Hours   **Max. Mark: 75**
                                   Section- A   **(5×1=5 Marks)**
                          Answer ALL questions.

1. Mortality rate decline due to
        (a) Birth rate   (b) Density rate   (c) Modern medicine (d) Modern medicine
2. Which one of the following is the Malthusian concept?
        (a) Rent   (b) Profit   (c) Loanable fund (d)optimum population

3. The word 'migration' refers to
    (a) efficiency enhancement   (b) knowledge sharing
    (c) profit earning   (d) moving from a place to another
place

4. The word "Exploitation" was highlighted by
    (a) Adam Smith   (b) Fisher   (c) Robinson   (d) Karl Marx

5. The world population is
    (a) increaseing   (b) stable   (c) decreasing   (d) None of these.

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Section-B   **(5 × 2 = 10 Marks)**
Answer ALL questions.

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6. What is Demography?
7. Define the growth rate of population.
8. What is fertility?
9. What is meant by internal migration?
10. Give any two causes for population growth.

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Section-C   **(5 × 6 = 30 Marks)**
Answer ALL questions, choosing either (a) or (b)

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11. (a) Explain the scope of demography.   or
    (b) Discuss the trend in mortality in India
12. (a) Explain the superiority of Optimum theory over Malthusian theory.   or
    (b) Point out the criticisms of Malthusian theory.
13. (a) Describe the types of migration.   or
    (b) Explain the optimum theory of population.
14. (a) Write a note on Brain Drain.   or
    (b) Explain the patterns of migration in India.
15. (a) Narrate the effects of population growth on economic development.   or
    (b) Bring out the reasons for unequal distribution of world population.

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Section- D   **(3×10=30 Marks)**
Answer any THREE questions.

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16. Explicate the importance of demography.
17. Enumerate the causes for the decline in mortality rate in India.
18. Explain the Karl Marxian surplus theory of population.
19. Write down the measures to reduce Brain Drain.
20. Explain the trends of world population.

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Non-Major Elective-4

LABOUR ECONOMICS

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Objectives:

1) to understand the structure and potential of labour markets
2) to know the labour relations in a liberalised economic system.

Unit – I Labour Markets

Nature and characteristics of labour markets in developing countries like India; Paradigms of labour market analysis - Classical, neo-classical and dualistic economy; Demand for labour in relation to size pattern of investment; Choice of technologies and labour policies; Supply of labour in relation to growth of labour force; Labour market policies; Mobility and productivity of labour; Rationalization; Methods of recruitment and placement; Employment service organization in India.

Unit – II Employment

Employment and development relationship - Poverty and unemployment in developing countries; Unemployment - Concept, Types, and Measurement, particularly in India; Impact of rationalization, technological change and modernization on employment in organized private industry, Public sector and employment in agricultural sector; Analysis of educated unemployment; Employment policy in Five Year Plans and its evaluation.

Unit – III Wage Determination

Classical, neo-classical and bargaining theories of wage determination, concepts of minimum wage, living wage and fair wage in theory and practice, Discrimination in labour markets; Wage determination in various sectors - rural, urban, organized, unorganized and in informal sectors; Non-wage component of labour remuneration; Inflation-wage relationship at micro and macro levels; Productivity and wage relationship; Analysis of rigidity in labour markets; Asymmetric information and efficiency of labour markets in wage determination; National wage policy; Wages and wage Boards in India; Bonus system and profit sharing.

Unit – IV Industrial Relations

Theories of labour movement - Growth, pattern and structure of labour unions in India, Achievements of labour unions; Causes of industrial disputes and their settlement and prevention mechanism; Role of tripartism; Current trends in collective bargaining; Role of judicial activism; Labour legislation in India; Indian labour laws and practices in relation to international labour standards.

Unit – V State and Labour

State and social security of labour - Concept of social security and its evolution; Social assistance and social insurance; Review and appraisal of states policies with respect to social security and labour welfare in India; Special problems of labour; child labour, female labour, discrimination and gender bias in treatment of labour; Labour market reforms - Exit policy, need for safety nets, measures imparting flexibility in labour markets; Second National Commission on Labour; Globalization and labour markets.

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- Tyagi B.P (2011) Labour Economics and Social welfare publishers, JaiprakashNath&co Gandhi Ashram,ChaurdhaGarh Road, meerut (U.P) India.
- Datt, G. (1996), Bargaining Power, Wages and Employment; An Analysis of Agricultural Labour Markets in India, Sage Publications, New Delhi.
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Model Question Paper
Labour Economics

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Time: Three Hours   **Max. Mark: 75**

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Section- A   **(5 × 1 = 5 Marks)**
Answer ALL questions.

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1. The demand for labour is a

    a) final demand   b) primary demand   c) tertiary demand   d) derived demand

2. The downward sloping marginal physical product of labour is the firm's

    a) supply of labour   b) short-run demand curve for labour

    c) marginal cost of labour   d) marginal revenue product of labour

3. The functional distribution of income shows how national income is divided between

    a) employees   b) the population

    c) the factors of production   d) the working population

4. Where a minimum wage is set above the market equilibrium, this will lead to

    a) excess demand of labour

    b) excess supply of labour over demand for labour

    c) no change as wages are determined by trade unions

    d) higher employment

5. Assuming a perfectly competitive industry with equilibrium in the labour market, a negative shift in labour demand is likely to
  a) increase the real wages paid to workers
  b) reduce the real wages paid to workers
  c) increase the number of workers employed
  d) Both a and c

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Section-B   (5×2=10 Marks)
Answer ALL questions.
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6. Define labour.
7. What do you mean by seasonal unemployment?
8. Define the concept of minimum wage.
9. What is collective bargaining?
10. Give the meaning of social security.

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Section-C   (5 × 6 = 30 Marks)
Answer ALL questions, choosing either (a) or (b)
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11.(a) Discuss the characteristics of labour.   or
 (b) Analysis the employment service organization in India.
12. (a) Narrate the types of unemployment.   or
 (b) State the impact of rationalization.
13. (a) Explain the causes for wage discrimination.   or
 (b) Describe the bargaining theories of wage determination
14. (a) Explain the causes for industrial disputes.   or
 (b) Write a short note on labour unions in India.
15. (a) Evaluate the globalization and labour markets in India.   or
 (b) Analyze the concept of social security.

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Section- D   (3 × 10 = 30 Marks)
Answer any THREE questions.
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16. Examine the various methods of recruitment in labour markets.
17. Discuss the role of public sector and employment in agricultural sector.
18. Explain the National wage policy in India.
19. Evaluate the achievements and failures of labour unions in India.
20. Analyze the various social security measures in India.

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Non-Major Elective-4:

Project Work
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Each student is required to select a topic for the analysis, interpretation and report-writing. Every student will be allotted a teacher guide to get supervision and guidance to do the project work.